

The measurement of patients' expectations for health care: a review and psychometric testing of a measure of patients' expectations

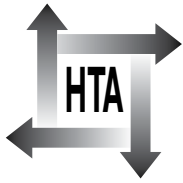
A Bowling, G Rowe, N Lambert, M Waddington, KR Mahtani, C Kenten, A Howe and SA Francis



July 2012
10.3310/hta16300

Health Technology Assessment
NIHR HTA programme
www.hta.ac.uk





How to obtain copies of this and other HTA programme reports

An electronic version of this title, in Adobe Acrobat format, is available for downloading free of charge for personal use from the HTA website (www.hta.ac.uk). A fully searchable DVD is also available (see below).

Printed copies of HTA journal series issues cost £20 each (post and packing free in the UK) to both public **and** private sector purchasers from our despatch agents.

Non-UK purchasers will have to pay a small fee for post and packing. For European countries the cost is £2 per issue and for the rest of the world £3 per issue.

How to order:

- fax (with **credit card details**)
- post (with **credit card details** or **cheque**)
- phone during office hours (**credit card** only).

Additionally the HTA website allows you to either print out your order or download a blank order form.

Contact details are as follows:

Synergie UK (HTA Department)
Digital House, The Loddon Centre
Wade Road
Basingstoke
Hants RG24 8QW

Email: orders@hta.ac.uk

Tel: 0845 812 4000 – ask for ‘HTA Payment Services’
(out-of-hours answer-phone service)

Fax: 0845 812 4001 – put ‘HTA Order’ on the fax header

Payment methods

Paying by cheque

If you pay by cheque, the cheque must be in **pounds sterling**, made payable to *University of Southampton* and drawn on a bank with a UK address.

Paying by credit card

You can order using your credit card by phone, fax or post.

Subscriptions

NHS libraries can subscribe free of charge. Public libraries can subscribe at a reduced cost of £100 for each volume (normally comprising 40–50 titles). The commercial subscription rate is £400 per volume (addresses within the UK) and £600 per volume (addresses outside the UK). Please see our website for details. Subscriptions can be purchased only for the current or forthcoming volume.

How do I get a copy of HTA on DVD?

Please use the form on the HTA website (www.hta.ac.uk/htacd/index.shtml). *HTA on DVD* is currently free of charge worldwide.

The website also provides information about the HTA programme and lists the membership of the various committees.

The measurement of patients' expectations for health care: a review and psychometric testing of a measure of patients' expectations

A Bowling,^{1*} G Rowe,² N Lambert,² M Waddington,³
KR Mahtani,⁴ C Kenten,² A Howe⁵ and SA Francis⁶

¹Faculty of Health Sciences, University of Southampton, Southampton, UK

²Consumer Science, Institute of Food Research, BBSRC, Norwich, UK

³Library, Royal Free and University College London Medical School, London, UK

⁴Department of Primary Health Care, University of Oxford, Oxford, UK

⁵School of Medicine, Health Policy and Practice, University of East Anglia,
Norwich, UK

⁶Department of Practice and Policy, School of Pharmacy, University of London,
London, UK

*Corresponding author

Declared competing interests of authors: none

Published July 2012

DOI: 10.3310/hta16300

This report should be referenced as follows:

Bowling A, Rowe G, Lambert N, Waddington M, Mahtani KR, Kenten C, *et al.* The measurement of patients' expectations for health care: a review and psychometric testing of a measure of patients' expectations. *Health Technol Assess* 2012;**16**(30).

Health Technology Assessment is indexed and abstracted in *Index Medicus/MEDLINE*, *Excerpta Medica/EMBASE*, *Science Citation Index Expanded (SciSearch®)* and *Current Contents®/Clinical Medicine*.

The Health Technology Assessment (HTA) programme, part of the National Institute for Health Research (NIHR), was set up in 1993. It produces high-quality research information on the effectiveness, costs and broader impact of health technologies for those who use, manage and provide care in the NHS. 'Health technologies' are broadly defined as all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care.

The research findings from the HTA programme directly influence decision-making bodies such as the National Institute for Health and Clinical Excellence (NICE) and the National Screening Committee (NSC). HTA findings also help to improve the quality of clinical practice in the NHS indirectly in that they form a key component of the 'National Knowledge Service'.

The HTA programme is needs led in that it fills gaps in the evidence needed by the NHS. There are three routes to the start of projects.

First is the commissioned route. Suggestions for research are actively sought from people working in the NHS, from the public and consumer groups and from professional bodies such as royal colleges and NHS trusts. These suggestions are carefully prioritised by panels of independent experts (including NHS service users). The HTA programme then commissions the research by competitive tender.

Second, the HTA programme provides grants for clinical trials for researchers who identify research questions. These are assessed for importance to patients and the NHS, and scientific rigour.

Third, through its Technology Assessment Report (TAR) call-off contract, the HTA programme commissions bespoke reports, principally for NICE, but also for other policy-makers. TARs bring together evidence on the value of specific technologies.

Some HTA research projects, including TARs, may take only months, others need several years. They can cost from as little as £40,000 to over £1 million, and may involve synthesising existing evidence, undertaking a trial, or other research collecting new data to answer a research problem.

The final reports from HTA projects are peer reviewed by a number of independent expert referees before publication in the widely read journal series *Health Technology Assessment*.

Criteria for inclusion in the HTA journal series

Reports are published in the HTA journal series if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the referees and editors.

Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search, appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

The research reported in this issue of the journal was commissioned by the National Coordinating Centre for Research Methodology (NCCRM), and was formally transferred to the HTA programme in April 2007 under the newly established NIHR Methodology Panel. The HTA programme project number is 07/58/01. The contractual start date was in November 2007. The draft report began editorial review in March 2011 and was accepted for publication in December 2011. The commissioning brief was devised by the NCCRM who specified the research question and study design. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the referees for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

The views expressed in this publication are those of the authors and not necessarily those of the HTA programme or the Department of Health.

Editor-in-Chief: Professor Tom Walley CBE
 Series Editors: Dr Martin Ashton-Key, Professor Aileen Clarke, Dr Peter Davidson, Dr Tom Marshall, Professor John Powell, Dr Rob Riemsma and Professor Ken Stein
 Editorial Contact: edit@southampton.ac.uk

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

ISSN 2046-4932 (DVD)

© Queen's Printer and Controller of HMSO 2012. This work was produced by Bowling *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (<http://www.publicationethics.org/>).

This journal may be freely reproduced for the purposes of private research and study and may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NETSCC, Health Technology Assessment, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk), on behalf of NETSCC, HTA.

Printed on acid-free paper in the UK by Charlesworth Press.

Abstract

The measurement of patients' expectations for health care: a review and psychometric testing of a measure of patients' expectations

A Bowling,^{1*} G Rowe,² N Lambert,² M Waddington,³ KR Mahtani,⁴ C Kenten,² A Howe⁵ and SA Francis⁶

¹Faculty of Health Sciences, University of Southampton, Southampton, UK

²Consumer Science, Institute of Food Research, BBSRC, Norwich, UK

³Library, Royal Free and University College London Medical School, London, UK

⁴Department of Primary Health Care, University of Oxford, Oxford, UK

⁵School of Medicine, Health Policy and Practice University of East Anglia, Norwich, UK

⁶Department of Practice and Policy, School of Pharmacy, University of London, London, UK

*Corresponding author

Background: There is recognition of the importance of measuring patients' experiences, expectations and satisfaction.

Objectives: To assess the literature on the concept and measurement of patients' expectations for health care, and to develop and test a measure of patients' expectations, using adult patients in community, general practice and hospital outpatient departments in Greater London, Norwich and Essex, UK.

Data sources: Major electronic databases including the British Nursing Index, EMBASE, MEDLINE, PsycINFO and the Applied Social Sciences Index and Abstracts were searched between 2000 and 2009.

Review methods: Narrative review, semi-structured exploratory study and surveys of GP patients and hospital outpatients immediately before and after their surgery/clinic visit to measure their pre-visit expectations for their health care and their post-visit experiences (expectations met and satisfaction with visit) (site specific).

Results: A total of 20,439 titles and 266 abstracts were identified, of which 211 were included in the review. Most research designs were weak, with small or selected samples, and a theoretical frame of reference was rarely stated. The origin of questions about expectations was often absent, questions were frequently untested and those with reported reliability or validity data had generally mixed results. In the survey data the expectations measures met acceptability criteria for reliability; all exceeded the threshold of $\alpha=0.70$, in each mode of administration and sample type. Items and subscales also correlated at least moderately with those variables that they were expected to be associated with, supporting their validity. The item means within subscales were generally similar between samples and all-item-total correlations exceeded the acceptability threshold. Descriptive findings revealed that most patients ideally expected cleanliness, information about where to go, convenient and punctual appointments and helpful reception staff, the doctor to be knowledgeable, clear and easy to understand, to be involved in treatment decisions and to experience a reduction in symptoms/problems. Expectations least likely to be met included being seen on time and choice of hospital/doctor (items requested by the ethics committee). Other items that had low met expectations included helpfulness of reception

staff, doctor being respectful and treating with dignity (hospital sample), doctor knowledgeable (hospital), being given reassurance, receiving advice about health/condition, information about cause and management of condition and information about benefits/side effects of treatment, being given an opportunity to discuss problems, and the three items on outcome expectancies. Previous consultations/experiences of health services and health-care staff/professionals most commonly influenced expectations. Overall, pre-visit realistic expectations were lower than patients' ideals or hopes. Most post-visit experiences indicated some unmet expectations (e.g. cause and management of health/condition, benefits/side effects of treatments) and some expectations that were exceeded. Generally, GP patients reported higher pre-visit expectations and post-visit met expectations. Correlations between subscale domains were strongest between the structure and process of health care, doctor-patient communication style and doctor's approach to giving information, all common indicators of the quality of health care, supporting the validity of the measures. The post-visit experiences subscale significantly predicted single-item summary ratings of overall met expectations and satisfaction. GP rather than hospital patients were also independently predictive of expectations met. Other predictors were having no/little anxiety/depression, older age (satisfaction) and fewer effects of health on quality of life (met expectations).

Limitations: The surveys in clinics were based on convenience, not random sampling methods.

Conclusions: These findings have implications for establishing the quality of health services and informing their improvement. Awareness of the patient's met and unmet expectations should enable staff to understand the patient's perspective and improve communication. This study examined the perspective of the patient only; it is not possible to examine the extent to which any expectations might have been unrealistically too high or too low. This is a challenge for future research.

Funding: The National Institute for Health Research Health Technology Assessment programme and the National Co-ordinating Centre for Research Methodology (NCCRM).

Contents

List of abbreviations	vii
Executive summary	ix
1. Introduction	1
2. Conceptual overview and narrative review	3
Theoretical background on patient expectations	3
Patients' expectations of health care: a narrative review of the literature	8
3. The exploratory study	21
Results from semi-structured interviews about expectations for health care with 20 GP and 20 cardiology clinic patients in Norwich	21
Structure of this chapter	22
Research design and methods	22
Results	28
Discussion	76
4. Survey aims, methods and response rates	79
Aims	79
Methods	79
Response rates	84
5. Psychometric properties and factor analysis of expectations questionnaires by mode of administration	89
Research questions	89
Psychometric testing	89
Questionnaire burden	89
Item non-response	90
Pre- and post-visit reliability statistics	90
Pre-visit questionnaire	91
Item-total correlations and Cronbach's alphas if item deleted	112
Mode of administration	112
Total sample	112
GP patient sample	112
Hospital patient sample	122
Summary	122
6. Psychometric properties by patient type and exploratory factor analysis	123
Research questions	123
Reliability statistics: pre- and post-visit questionnaires	123
Reliability statistics: subscales	132
Intersubscale reliability	149
Summed subscale domain reliability	150
Exploratory factor analysis	151
Summary	158

7. Survey results: pre- and post-visit expectations	159
Research questions	159
Patients' expectations for health care by sample site	159
Patients' expectations for health care by age and sex	165
Expectation subscale score distributions by sample	169
Domains of expectations	171
Global expectations, influences and health service use by site	178
Reasons for consultation, health and self-management	179
Summary	179
8. Survey results: overall satisfaction with visit	181
Research question	181
Interactions between mode of questionnaire administration and site and various characteristics potentially related to expectations	181
Post-visit overall satisfaction, expectations and perceptions of consultation	182
Multivariable predictors of pre-visit ideal and realistic expectations and post-visit experiences and of overall expectations and satisfaction with visit	186
Pre-visit ideal and realistic expectations and post-visit experiences (met expectations)	187
Overall expectations and satisfaction with visit	187
Summary	192
9. Discussion	193
The aims of the research	193
Key findings	193
Further research	195
10. Conclusions	197
The narrative review	197
The exploratory study	197
The surveys of patients' expectations for health care	197
Summary	199
Acknowledgements	201
References	203
Appendix 1 Copy of the project application form and research protocol	225
Appendix 2 Literature review search strategy (<i>Chapter 2</i>)	265
Appendix 3 Narrative review of patients' expectations for health care: summary of evidence (<i>Chapter 2</i>)	269
Appendix 4 Questionnaire for patients' expectations of health care – pre-visit questionnaire	487
Appendix 5 Questionnaire for patients' expectations of health care – post-visit questionnaire	503
Health Technology Assessment programme	511

List of abbreviations

AMED	Allied and Complementary Medicine Database
ASSIA	Applied Social Sciences Index and Abstracts
BNI	British Nursing Index
CINAHL	Cumulative Index to Nursing and Allied Health Literature
HTA	<i>Health Technology Assessment</i>
MeSH	medical subject headings
NCCRM	National Co-ordinating Centre for Research Methodology
RGA	repertory grid analysis
SF-36	Short Form questionnaire-36 items
SD	standard deviation
SIGLE	System for Information on Grey Literature in Europe

All abbreviations that have been used in this report are listed here unless the abbreviation is well known (e.g. NHS), or it has been used only once, or it is a non-standard abbreviation used only in figures/tables/appendices, in which case the abbreviation is defined in the figure legend or in the notes at the end of the table.

Executive summary

Background

There is widespread recognition of the importance of evaluating services from consumer perspectives. What people expect from their health care compared with their experiences may influence their satisfaction with it. There is also some evidence that patients who receive the health care they expect may recover better than patients who do not.

However, there are many definitions of what patients expect from health services, relating, for example, to different types of expectations (e.g. desires, predictions) and health-care structures (e.g. buildings, equipment, staff), processes (e.g. waiting lists, the way that staff and patients interact) and health outcomes (e.g. the effects of the health service on patients' health, including patients' assessments of their health) and different visit types/episodes. There is also no well-tested, multidimensional questionnaire to measure these different expectations.

Objectives

We aimed to examine existing models and definitions of patient expectations in the literature, to explore expectations with patients and to develop and test an expectations questionnaire, informed by both approaches.

The study aimed to address multiple research questions, summarised below:

- How do expectations for different health-care settings compare?
- What are the most common types of met and unmet expectations expressed by patients, and do these vary by health-care setting?
- Are expectations influenced by respondents' characteristics, behaviours and circumstances?
- What are the psychometric properties of the developed expectations questionnaire (in different health-care settings)?
- How does mode of questionnaire administration (face-to-face interview or self-administration) affect the expectations elicited?
- How does pre-visit expectation type affect post-visit met expectations and patient satisfaction?

Methods

The narrative review

A comprehensive search was run on the following databases: AMED (Allied and Complementary Medicine Database), British Nursing Index (BNI), CINAHL (Cumulative Index to Nursing and Allied Health Literature), EMBASE, MEDLINE, PsycINFO, ASSIA (Applied Social Sciences Index and Abstracts), The Cochrane Library, Intute, Sociological Abstracts, Web of Science as part of Web of Knowledge and the HTA (*Health Technology Assessment*) reports. We searched for any type of literature published or written between 2000 and 2009, and for reasons of practicality we searched only for publications in the English language. In the following databases, the term 'patient expectation OR patient expectations' was searched: ASSIA, The Cochrane Library, Intute (Social Sciences and Medicine), Sociological Abstracts, Web of Knowledge. In the remaining

databases a number of terms, synonyms and subject headings for 'patient expectations' and 'health care' were used. The following databases were also searched to retrieve any unpublished or grey literature: Index to Theses, Dissertations & Theses and OpenSIGLE (System for Information on Grey Literature in Europe). A data extraction form was used and the approach was a narrative review.

A total of 211 papers were included in the review from a total of 20,439 titles and 266 abstracts identified. Most research designs were weak with small or selected samples. A theoretical frame of reference was rarely stated. In terms of measurement, the origin of questions about expectations was often absent, questions were frequently untested and those with reported reliability or validity data had generally mixed results. Little attempt was made to examine expectations in detail or present findings in terms of contribution to existing knowledge.

The studies of patients

We first conducted semi-structured interviews with 20 GP patients and 20 cardiology clinic patients in Norwich, UK, to ascertain patterns in expectations. These results, together with the literature review, informed the development of an expectations questionnaire that aimed to measure pre-visit ideal and realistic expectations and post-visit experiences (met expectations). This was piloted on a small number of patients, refined and then field tested on 833 people in Norwich, Essex and Greater London, UK, before and after their consultations in general practice and hospital outpatient departments. The data also provided information on whether expectations between GP and hospital outpatient populations varied, and whether pre-visit ideal and/or realistic expectations predicted post-visit experiences (met expectations) and patient satisfaction. Caution is needed as the samples of patients were not randomly sampled. This is acceptable for the psychometric testing, but the survey distributions may not be generalisable.

Results

The expectations measures met acceptability criteria for reliability (internal consistency); items and subscales also correlated at least moderately with those variables with which they would be expected to be associated with, supporting their validity. The Cronbach's alphas for the 27 items each forming the pre-visit ideal and realistic subscales and the post-visit experiences (expectations met) subscale all exceeded the threshold of 0.70 in each mode of administration and sample type.

The total sample and self-administration samples met the threshold criteria adequately for item-total correlations within the subscales, although a small number of item-total correlations in the smaller pre-visit interview samples failed to reach 0.3. Most item-item correlations reached or exceeded the threshold for acceptability. Overall, patients' pre-visit expectations of what would happen in reality were lower than their ideals or hopes about what would happen. Most of their post-visit experiences (met expectations) fell in-between, indicating some unmet expectations (e.g. on being given advice about health/condition, cause of condition, how to manage condition; benefits/side effects of treatments) and some exceeded expectations. GP patients had higher pre-visit expectations than hospital patients, and they had higher post-visit met expectations. The results indicate higher ideal expectations and support the validity of the measures, as ideals are anticipated to be higher than real life. Post-visit expectations (met) were lower than pre-visit ideals, but similar to, or slightly worse, than pre-visit realistic expectations. Correlations between ideal and met expectations were lower than those between realistic and met expectations, supporting their validity, although patients' pre-visit ideal and realistic expectations were only modestly associated with their post-visit experiences at best (as might be expected, reflecting the uncertainty inherent in expectations being delivered because of various factors outside of the patients' control).

The highest ideal expectations, particularly among the GP sample, included expectations about cleanliness, information about where to go, having convenient appointments, being seen on time, helpfulness of reception staff, knowledge of the doctor, having a clear and easy to understand doctor, involvement in treatment decisions, and reduction in symptoms/problems. The lowest ideal expectations related to the five clinical procedures (physical examination, tests/investigations, diagnosis, prescription and referral on) and being given the opportunity to discuss problems in life.

The lowest met expectations, particularly among the hospital sample, included being seen on time and the two items requested by the ethics committee: being given a choice of hospitals if referred and doctors to consult (not included in scaling as not applicable to all patients). Other items that had low met expectations were helpfulness of reception staff, doctor being respectful and treating with dignity (hospital sample), doctor knowledgeable about condition (hospital), being given reassurance, advice about health/condition, information about cause of condition and how to manage it, information about benefits/side effects of treatment and an opportunity to discuss problems in life, and the three items on outcome expectancies. Some of these (relatively) unmet expectations are understandable, as they refer to unpredictable outcomes, but others suggest some disappointments regarding information provision and doctor empathy/reassurance.

Overall, GP patients reported higher pre-visit expectations and post-visit met expectations, particularly for items relating to structure of health care and doctor–patient communication style. Spearman's rank-order correlations between subscale domains were strongest overall between the structure and process of health care, doctor–patient communication style and doctor's approach to giving information. These are all common indicators of the quality of health care, supporting the validity of the measures.

About three-quarters of the total sample stated that their ideal hopes were 'very important' to them overall, and over half felt that they deserved these to be realised in reality 'a lot'. The most common influences on expectations were seen to be their previous consultations/experiences of health services and health-care staff/professionals. There were few associations between expectations and other characteristics.

The item means within expectation-type subscales were again generally similar between samples. The item–total correlations all well exceeded the acceptability threshold. Cronbach's alpha was not improved, or more than slightly improved (e.g. item 27 pre-visit realistic expectations), by item removal. None of the item–item correlations approached or exceeded the 0.75 threshold for item redundancy. Cronbach's alphas (internal consistency) were not improved overall by item removal. In summary, the reliability of the expectations measures for GP and hospital patients met criteria of acceptability.

The pre-visit ideal and realistic expectations subscales were not independently associated with single-item summary ratings of overall satisfaction or overall expectations met, although the post-visit experiences (expectations met) subscale was a significant predictor of both (as would be expected). GP rather than hospital patients were also independently predictive of expectations met, which might be due to the greater experience that people have with attending GPs than with attending hospital clinics, and hence a greater ability to calibrate expectations appropriately (i.e. form realistic expectations that are subsequently met). Other predictors were having no/little anxiety/depression and older age (satisfaction) and fewer effects of health on quality of life (met expectations). Differences due to age deserve future study to ascertain whether these arise from unrealistic expectations (perhaps because of expectations being formed under different health-care or personal environments) or a failure of health-care staff to deliver the particular needs of elderly patients.

Conclusions

A fully integrated model of expectations needs to be dynamic, multidimensional and able to identify its determinants, including sociocognitive components. Furthermore, it needs to be able to model potential causal pathways between expectations, attitudes, behaviours and patient-based health outcomes. Past research has generally failed to propose such a model. It is hoped that the current research, particularly following the further development and utilisation of the expectations instrument developed here, may aid in such model development. However, the initial results of the patient surveys found that there were relatively few independent predictor variables of ideal, realistic or met expectations, indicating the complexity of the topic.

The descriptive findings revealed that most patients ideally expected site cleanliness, information about where to go, convenient appointments, to be seen on time, helpfulness of reception staff and a knowledgeable doctor, a clear and easy to understand doctor, involvement in treatment decisions and a reduction in symptoms/problems. However, the expectations least likely to be met, particularly among the hospital sample, included being seen on time and the two items requested by the ethics committee: being given a choice of hospitals if referred and doctors to consult (not included in scaling as not applicable to all patients). Other items that had low met expectations were helpfulness of reception staff, doctor being respectful and treating with dignity (hospital sample), doctor knowledgeable about condition (hospital), being given reassurance, advice about health/condition, information about cause of condition and how to manage it, information about benefits/side effects of treatment and an opportunity to discuss problems in life, and the three items on outcome expectancies. These all have implications for the quality of health services and their improvement. Awareness of patients' expectations, and unmet expectations, among health service staff should enable staff to understand the patients' perspective and improve communication – and met expectations. This study examined the perspective of the patient only. As there were no observations of consultations in this study, or questioning of health service staff, it is not possible to examine the extent to which any expectations might have been unrealistic, or inappropriate, at that time in a dynamic process (e.g. being given a diagnosis or other procedures).

Recommendations for research

Areas of further research that could inform policy and practice include:

- investigation of patient expectations in other specialities, regions and samples and across different modes of administration (including, potentially, a self-administered questionnaire)
- longer-term follow-up to assess any effects of met or unmet expectations on recovery and on future expectations – as part of longitudinal studies to ascertain the kinds of factors that influence expectation formation and change
- examination of unrealistic expectations and associations with health-care need and demand, and the development of appropriate health-care strategies, whether these involve communication about the health-care process, the better training of NHS staff or the renovation of administrative or logistic health policies.

Funding

Funding for this study was provided by the Health Technology Assessment Programme of the National Institute for Health Research and the National Co-ordinating Centre for Research Methodology (NCCRM).

Chapter 1

Introduction

There is widespread recognition in health policy of the importance of evaluating health services from a wide range of perspectives, including those of patients, or consumers. This was given impetus in the late 1980s and 1990s with the growing emphasis on accountability and the continuing emphasis on consumerism since the 1970s. Consumer evaluations of their health care are now an established component of quality assessment, mainly through surveys of patient satisfaction and experience and patient-based health outcome studies (e.g. health status and health-related quality of life). It is generally acknowledged that planners need to understand the expectations underlying patients' views in order to interpret their feedback. Understanding how expectations are formed is, in theory, crucial for furthering knowledge on a range of health topics from health and illness behaviour to patient-assessed outcomes, that is, understanding what people 'hope for', 'anticipate' or 'expect' from health care is important given the likely influence of these 'beliefs' on their health-care outcomes. However, there is conceptual and methodological uncertainty regarding what is an 'expectation' and how it should be measured. There is also little information on whether expectations can be modified, although one argument is that high expectations should be encouraged and be used as a catalyst for improving health care. Moreover, scant attention has been paid to the generally high patient satisfaction levels among older people, despite their increased likelihood of experiencing delays in specialist referral and treatment. This may reflect lower expectations of health care in older age, but this remains to be fully investigated.

The literature on patient expectations in health care appears to be characterised by diversity, lack of integration and a theoretical paucity of approach to both conceptualisation and measurement. This fragmentation and lack of research integration partly reflects the multidimensionality of the concept, a characteristic shared with the concept of patient satisfaction. The largest body of literature on expectations appears to relate to patient satisfaction, reflecting the latter's alleged underpinning of this concept. It is often argued that an excess of perceived delivery (e.g. of health care) over what is *hoped for*, *anticipated* or *expected* leads to increased satisfaction and, conversely, that unmet expectations lead to increased dissatisfaction (see later review).

Terminology is a significant issue in expectation studies, with a range of ambiguous terms being used to address different *types* of expectations. As will be shown later, taxonomies include *expectancy probability* (judgements about the likelihood of an event occurring, e.g. based on past experience, self-confidence, perceived difficulty of the goal), *value expectations* (hopes or desires concerning an event, expressed as wants or needs), *process expectations* (expectations about forthcoming processes such as medical attention, health information, pleasant surroundings) and *outcome expectations* (expectations concerning the consequences of treatment, such as ability to return to work/previous way of life, physical fitness). These different types of expectancy will differ in various ways, for example expectancies of processes of care will differ from treatment outcome expectancies as the latter are less certain and involve weighing up risks and benefits and thus will be influenced by the person's attitude towards risk-taking. Others have used different definitions of expectations, including: *needs*, *requests* or *desires*; *hopes* or *idealised expectations*; *wants* (equating with needs) and *predictions*; or anticipations distinct from hopes, about how they will be helped (i.e. during the health-care encounter or episode). Moreover, given the evidence that expectations of care are associated with recent experiences of health care, it is important to distinguish *informed expectations* (in which people have received sufficient, timely information

to reach an informed judgement) from *subjective expectations*. This indicates the importance of longitudinal analysis of the process of expectation development, including precipitating factors, prior understanding, the formulation of expectations, and cognitive processing throughout.

In summary, the investigation of expectations needs to be considered in relation to influences on how expectations are formed; how this relates to patients' characteristics and their experiences of health care; how this is influenced by the structure, process and outcome of care and, more specifically, the definitional orientation of expectations, the specificity of expectations, their content category, the specific occurrences included, the type of setting, the type of visit and the timing of the data collection (e.g. pre-, intra-, post-visit/longitudinal nature of design); and the mode and structure of the measurement instrument. There is also a need for empirical evidence on the structure and content of patient expectations in a range of health-care settings and visit/episode types, and on the extent to which expectations influence related attitudes (e.g. patient satisfaction), behaviours (e.g. health and illness behaviour, including delay in seeking professional help and adherence to therapy) and health outcomes (e.g. health status and health-related quality of life). Few studies have assessed patients' pre-existing expectancies. Another major gap in this area is that no standardised, well-validated instrument exists for measuring patients' expectations.

This report systematically examines existing models and definitions of patient expectations in the literature. It reports on an exploratory study of patients' expectations and the development of an expectations questionnaire (informed by both the literature and the exploratory study). Thereafter, it reports the testing of the questionnaire in larger-scale surveys.

For reference, the agreed research protocol is included as *Appendix 1*.

Chapter 2

Conceptual overview and narrative review

Theoretical background on patient expectations

Theories of patients' expectations

Health policy has long emphasised the importance of evaluating health services from a wide range of perspectives, including those of consumers. Since the 1970s consumerism has been a central theme of evaluation; in the late 1980s and 1990s, accountability also received prominence.¹ Consumer evaluation of health care is now an established element of quality assessment, mainly through patient satisfaction and patient-based health outcome studies (e.g. health status and health-related quality of life).²⁻⁴

Awareness of patient expectations for their care, and formation of expectations, are potentially important aspects of policy development and service provision. For example, if health-care providers are aware of their patients' expectations for care they can plan to address them in a timely way to better meet the patients' needs and, in turn, aim to increase patient satisfaction.

Limited evidence suggests that health professionals should take into account patients' expectations when making clinical decisions and planning treatment.⁵ A narrative review of the literature solely in primary care settings on patient pre-consultation expectations confirmed that unmet/met expectations with health care affected patient satisfaction.⁶ Associations were often weak, however, and expectations explained a relatively small proportion of the variance in satisfaction.^{7,8}

Although the concepts and measurement of patient satisfaction and health-related quality of life outcomes have been linked to the concept of patient expectations, there has been little attempt to support these links with conceptual development or a theoretical model. Rarely have these concepts been adequately defined.^{2-4,9,10} For example, patient satisfaction has often been measured superficially with generalised satisfaction questions, which largely tap concepts of adequacy, acceptability and appropriateness, with little attempt at theoretical justification. These general questions also elicit higher than expected proportions of satisfied responses than open-ended questions.¹¹ The greater validity of specific, over general, patient satisfaction questions has long been reported [i.e. asking about specific details of patient care, rather than general satisfaction questions – accessibility and availability of services and providers, choice and continuity, communication (including information), financial arrangements, interpersonal aspects of care, outcomes of care (i.e. satisfaction with one's health status, ability and outcome), technical quality of care, time spent with providers].¹² There has been some evidence to show that specific questions, compared with general questions, provide more valuable data to inform health policy.^{13,14}

It is generally acknowledged that planners need to understand the expectations underlying patients' views in order to interpret their feedback. Understanding how expectations are formed is, in theory, crucial for furthering knowledge on a range of health topics from health and illness behaviour to patient-assessed outcomes. Indeed, the GP contract in the UK mentions the measurement of patients' experiences as an area for measuring quality of care.¹⁵ Little information exists on whether or not expectations can be modified, although it has been argued

that high expectations should be encouraged and be used as a catalyst for improving health care.¹⁶ Moreover, scant attention has been paid to the generally high patient satisfaction levels among older people, despite their increased likelihood of experiencing delays in specialist referral and treatment. This may reflect lower expectations of health care in older age.¹⁷

Expectations are complex. The literature on patient expectations in health care appears to be characterised by diversity, lack of integration and a theoretical paucity of approach to both conceptualisation and measurement. This fragmentation and limited assimilation of research partly reflects the multidimensionality of expectations, a characteristic shared with the concept of patient satisfaction.¹⁸ Empirical evidence in support of one type of expectation over another is unconvincing, and is largely based on small-scale or qualitative studies.

Expectancy theory

Controversy surrounds the definition and measurement of expectations and their components. Expectancy theory in psychology proposes that the difference between that which is received and what one expects or wants to receive determines satisfaction. The term 'expectancy' is used in psychology as a general concept, in contrast to the health literature, which refers to 'expectations' in the real world.¹⁹ A patient 'expectation' has been defined as the anticipation that given events are likely to occur during, or as an outcome of, health care. Thus, what people anticipate, or expect to receive, from their health care, compared with their perceptions of what they receive in practice, are potentially important in predicting patient satisfaction and dissatisfaction with their care, treatment and health outcomes.

Psychological theory holds that expectations are complex beliefs, or values, resulting from cognitive processes,²⁰ which are modified by previous experiences.²¹ Beliefs make up an attitude towards a particular phenomenon.²² Expectations are a type of belief, or perception, about future events, and as such are not static.

Attitude theories are mainly based on expectancy-value theory, whereby attitudes (disposition to respond favourably or unfavourably towards an object) are related to beliefs (expectancies) that the object possesses certain attributes, and evaluations of those attributes.²³ Expectancy theory is regarded as particularly important in theories of behaviour. Role theory, for example, posits that human behaviour is guided by expectations, although there has been little analysis of their construction.

Expectations are also dependent on experience and social learning, and this may add further information to the schema.^{24,25} Rotter,²⁴ using social learning theory, distinguished between generalised and specific expectations (generalised expectations are held in situations in which a person has little or no previous experience, whereas specific expectations develop out of previous experience of a particular situation). Ideal expectations might be most prevalent for those without previous experience. Patients who have unformed expectations have no idea what to expect, whereas those with previous experience are more likely to have predicted than unformed expectations based on previous encounters. Rotter²⁶ extended the theory to incorporate a measure of generalised expectancy – the locus of control. Feather²⁷ suggested that, with expectancy-value theory, potential outcomes can be perceived negatively, positively or both, and expectations encompass beliefs about whether a particular action can be performed to achieve a successful outcome; he extended his theory to include values, as well as needs, in influencing individual's perceptions.

Expectancy values, such as the worth that people place on processes and outcomes, have been used to explain relationships between attitudes and behaviour,²⁸ although empirical evidence is limited.²⁹ Outcome expectancy and perceived competence to perform particular behaviours

(self-efficacy) are believed to be important predictors of behaviour.³⁰ Some studies have reported that expectations are directly linked to health beliefs,³¹ self-efficacy,³² locus of control,^{24,33,34} attitudes^{35,36} and schemata.³⁷

An expectation can include wants, hopes and desires and anticipations. What is expected and what is desired in real life are distinct beliefs. Swan and Trawick³⁸ divided expectations into predictive (i.e. realistic) and desired (i.e. ideal or wanted) – the latter being necessary for the achievement of satisfaction. Some define expectations in terms of what is deserved. For example, Miller³⁹ divided expectations into ideal, expected, what is deserved and the minimum tolerable. However, there is little evidence on how abstract theories such as these might be used in empirical research in real-life patient settings.^{7,19}

Taxonomies of expectancies

The early literature reveals many types of expectations.^{40–42} However, a number of studies of expectations have been ambiguous in their use of terminology or have focused on different types of expectations. For example, in 1995, Thompson and Sunol⁴² identified four types of expectation in relation to satisfaction: *ideal* (desires, preferred outcomes), *normative* (what should happen), *predicted* (expected outcomes) and *unformed* (unarticulated). This framework builds on other examples of less integrated models.^{41,43–45}

Additional taxonomies have included *expectancy probability* (judgements about the likelihood of an event occurring, e.g. based on past experience, self-confidence, perceived difficulty of the goal), *process expectations* (e.g. medical attention, health information, pleasant surroundings) and *outcome expectations* (e.g. ability to return to work/previous way of life, physical fitness).⁴⁶

Value expectancies: ideals, desires and hopes

A great deal of inconsistency exists in the area of value expectancies: not all investigators define their terms or make distinctions between its components. Some focus on what patients think will happen (probability or realistic expectations) and others on what patients would like to happen (value or ideal expectations). Kravitz⁴⁷ noted the variable use of probability and value expectations, general and visit-specific expectations, and expectations relating to the structure, process and outcome of health care. Value expectations have been defined as hopes or desires concerning an event, expressed as wants or needs.⁴⁸ In this definition there is a distinction between hopes and desires, which are ideals, and anticipated, or realistic, expectations.

Predicted or expectancy probability expectations (social cognitive model)

Predicted or expectancy probability expectations are judgements about the likelihood of an event occurring, for example based on past experience, self-confidence or perceived difficulty of the goal. Expectations have affective and cognitive components and are multidimensional. They are the result of complex cognitive processes, modified by previous experiences and other influences.²¹ Cognitive processing involves a sense of subjective probability (the perceived likelihood of an event occurring) and causality (an understanding that an action or event is the result of another). Internal causality is the perception of outcomes as a direct result of personal decisions. External causality occurs when events are perceived as due to luck or chance. Expectations based on the latter are less likely to change than those based on internal causality because the outcome is seen as beyond one's control. Attitudes and motivation also influence behaviour and a specific course of action.

According to social cognition and response expectancy theories,^{30,36,49–54} human motivation and behaviour are regulated by forethought. Expectancies are believed to be the mechanism through which past experience and knowledge are used to predict future outcomes. Cognitive control of behaviour is based on outcome expectancies (beliefs that specific actions lead to certain

consequences) and self-efficacy expectations (beliefs in one's capabilities to perform the action to attain the desired outcome). The theory of self-efficacy holds that the stronger one's self-efficacy and outcome expectations, the more likely one will initiate and persist with a specific behaviour (e.g. exercise, adherence to medication, request for specific treatments). Dispositional optimism and pessimism are relatively stable characteristics and are further influences on expectations: optimism is the belief that one will experience positive rather than negative (pessimism) events. Using this framework, expectancies drive goal-directed behaviour, motivation and self-regulation.

Olson *et al.*⁵⁵ identified three antecedents to expectancies: *direct experience*, *other people* and *beliefs*. Kravitz's⁴⁷ dynamic model of patient expectations is relevant here. With this, the first stage involves the identification of determinants of consumer expectations (external factors such as friends, relatives, media, policy); previous experiences of health care; and patients' sociodemographic characteristics, health status and health-related quality of life. Patients' expectations can then be described according to definitional orientations (e.g. probabilities, values), type of health-care visit/episode or generic, and content (i.e. structure, process or outcome).⁵⁶ The model takes account of the importance of experiences and subsequent revision of expectations and evaluations.

Process and outcome expectancies

Expectancies of processes of care will differ from treatment outcome expectancies, as the latter are less certain, involve weighing up risks and benefits and involve the person's attitude towards risk-taking. Outcome expectations are an important element of social cognitive theory,^{30,49,57} which specifies psychosocial influences on behaviour, including self-efficacy, outcome expectations and goals. An outcome expectation is the belief that a specific behaviour will lead to a certain outcome. Judgemental processes involve making comparisons with personal and normative standards, with personal valuation of the activity and with beliefs about performance. Key determinants of behaviour are outcome expectations and self-efficacy.^{30,49}

Efficacy expectations are dynamic and established and enhanced by four mechanisms:⁵² (1) enactive mastery experience or successful performance of the activity of interest; (2) verbal persuasion or verbal encouragement given by a credible source that the individual is capable of performing the activity of interest; (3) vicarious experience or seeing like individuals perform a specific activity; and (4) physiological and affective states such as pain and fatigue or positive states such as feeling proud associated with a given activity. The theory of self-efficacy suggests that the stronger the individual's efficacy expectations (self-efficacy and outcome expectations), the more likely he or she will initiate and persist with a given activity.

Self-efficacy theory³⁶ maintains that psychological processes operate through a person's sense of personal mastery or efficacy – the belief that one is or is not capable of performing specific behaviours – incorporating outcome expectancy (that the behaviour will lead to a given outcome or not) and self-efficacy expectancy (the belief that he or she is capable of performing the behaviour or not). Bandura³⁶ further noted three related but conceptually independent subdomains representing physical, social and self-evaluative outcome expectations. Physical outcome expectations reflect beliefs about pleasant and aversive physical experiences resulting from engagement in physical activity. Social expectations reflect beliefs about physical activity resulting in increased opportunities for socialisation and attaining social approval. Self-evaluative outcome expectations capture beliefs relative to the feelings of satisfaction and self-worth associated with involvement in physical activity.

Placebo effect

Expectations have also long been present in medicine in the form of the placebo effect ('applied expectations'). This holds that a belief that a future event will occur contributes to it occurring (i.e. response expectancies are sufficient to cause the outcome, thus the effect is self-confirming). The positive placebo effect is well established and needs to be included in assessments of treatment efficacy and the potential influence of patients' expectations.

In a review of studies of the placebo effect, Crow *et al.*⁵⁸ concluded that expectancies are an important mechanism for the placebo effect across a range of clinical conditions and outcomes, although the studies they reviewed included several weaknesses. Crow *et al.*⁵⁸ defined expectancies as 'treatment-related outcome expectations' (beliefs that treatment will have positive or negative effects on health status) and 'patient-related self-efficacy expectations' (beliefs that one can carry out actions necessary for disease management or coping with the treatment). They focused on three clinical areas (preparation for medical procedures, management of illness and medical treatment), in which five subgroups of expectancy were identified within their two main definitions:

- treatment-related outcome expectations:
 - process expectancy (in relation to preparation for medical procedures)
 - positive outcome expectancy (in relation to medical treatment)
 - negative outcome expectancy (in relation to medical treatment)
- patient-related self-efficacy expectations:
 - interaction self-efficacy (in relation to management of illness)
 - management self-efficacy (in relation to preparation for medical procedures and management of illness).

As they indicated, research is still needed to assess the validity of their model in a variety of settings and whether it requires revising, and more information is needed on the influence of experience, knowledge and beliefs on expectations (including the influences and experiences of others).

Equity and discrepancy theory

The largest body of literature on expectations appears to relate to patient satisfaction, reflecting its alleged theoretical underpinning of this concept. Expectancy theory proposes that the degree of discrepancy between expectations and experiences determines satisfaction ('gap model'). Satisfaction is itself an attitude and refers to affect. However, expectations are not straightforward. For example, social comparison theory suggests that satisfaction is based on perceptions of what has been received *compared with others*.⁵⁹ Relative deprivation theory expands on this.

Equity and discrepancy theory holds that satisfaction is obtained when perceived inputs and outputs are balanced. Katzell⁶⁰ argued that satisfaction was the difference between the amount received and that which is desired. However, Locke⁶¹ argued that perceived differences are of greater importance than actual differences. Optimists may experience more favourable outcomes than pessimists, perhaps because they adopt more self-protective behaviours (e.g. adaptive coping).⁶²

Another approach to discrepancy theory is based on *how much* a person *expects* to receive, although this has been rejected as contentious, given the complexities of receiving more than expected.⁶¹ Similar to this is the *fulfilment model*, which holds that the higher the perceived fulfilment of the expectations the higher the satisfaction and vice versa. When expectations are low they are more easily met and higher satisfaction is achieved, but higher expectations are more difficult to meet and satisfaction is likely to be lower. However, increasing quality of care

may increase expectations of care, and overly high expectations might be unrealistic and difficult to satisfy. It is often argued that an excess of perceived delivery (e.g. of health care) over what is hoped for, anticipated or expected leads to increased satisfaction, and the converse that unmet expectations lead to increased dissatisfaction.^{45,47,63} This has been conceptualised as *expectancy dis/confirmation*.^{6,42}

The expectancy dis/confirmation model is popular and also important given the possible influence of these 'beliefs' on health-care outcomes. Several studies have indicated that treatment expectations (as beliefs) influence treatment outcomes (e.g. experience of severe nausea after chemotherapy).⁶⁴ However, Rao *et al.*'s systematic review⁶ in primary care settings reported that associations between expectations and health-related quality of life outcomes were inconsistent. This is likely to be due to weaknesses and variations in research design, as well as to the type of expectations measured.

See Table 2 for a summary of the different expectancy constructs presented in this conceptual overview.

Patients' expectations of health care: a narrative review of the literature

Aims and methods

A narrative review of the literature on the concept and measurement of patient expectations, by type, was conducted. The aim was to critically examine existing models and measures of patient expectations. The results of the review were also used to refine a model of expectations to inform (together with a pilot study of patients' perceptions) the development of a patients' expectations questionnaire.

The review built on existing reviews up to the year 2000 and thus the search was initially conducted for the years January 2000 to December 2006 (to inform the questionnaire) and was then updated from January 2007 to December 2009.

Search strategy

A multiple search strategy was adopted. A comprehensive, systematic search of the conceptual and empirical literature on patient expectations, across the clinical and social sciences, was conducted using the following databases: AMED (Allied and Complementary Medicine Database), ASSIA (Applied Social Sciences Index and Abstracts), British Nursing Index (BNI), CINAHL (Cumulative Index to Nursing and Allied Health Literature), The Cochrane Library, EMBASE, MEDLINE, PsycINFO, Sociological Abstracts, Intute, Web of Science and the HTA (*Health Technology Assessment*) reports. The electronic database search strategy was developed using medical subject headings (MeSH) terms and keywords, augmented by the inclusion of keywords used in studies as they were identified. No design filters were used.

We searched for any type of literature published or written between 2000 and 2009, and for reasons of practicality we searched only for publications in the English language. In the following databases, the term 'patient expectation OR patient expectations' was searched: ASSIA, The Cochrane Library, Intute (Social Sciences and Medicine), Sociological Abstracts and Web of Knowledge. In the remaining databases a number of terms, synonyms and subject headings for 'patient expectations' and 'health care' were used (see *Appendix 2*). In addition, the following databases were also examined to retrieve any unpublished or grey literature: Index to Theses, Dissertations & Theses and OpenSIGLE (System for Information on Grey Literature in Europe).

AB and MW conducted the database search design and searches, selection of abstracts and papers, AB wrote the conceptual review, SAF wrote the narrative reviews (AB also conducted some).

Study selection

The process of developing the search criteria was used to construct inclusion and exclusion criteria and so to determine the relevance of the evidence retrieved to the study aims. The search was not restricted to particular definitions or conceptualisations of expectations or type of site/setting. Broad inclusion criteria allowed a variety of studies to be reviewed, including theoretical and discussion papers, observational and interventional studies, randomised control trials, systematic reviews and meta-analyses. Because of time and budget constraints, only papers published in English were included.

Assessing relevance and inclusion

The titles and abstracts identified in the search were initially perused by AB to determine whether or not the articles were relevant to the research aims (i.e. the topic focused on patient, and not health-care staff, expectations). These results were sent to an independent researcher (GR) for checking. If criteria of relevance were met, the full-text article was obtained and assessed for inclusion.

Data extraction and quality assessment

A proforma for the included papers was developed by SAF and AB, after piloting, to enable recording of the following data: study design, conceptual basis, measurements, results and methodological quality of qualitative and quantitative studies.

The assessment of methodological quality in social research is complex, partly because of the wide range of qualitative and quantitative research methods used. For this study, criteria of quality included a clear description of the aims and underpinning theory and robustness of methods (e.g. sample type/size, design) and measurement (i.e. validity), where appropriate. Meta-analysis was not appropriate because of the wide range of study designs and types of samples. We thus undertook a narrative synthesis, using a framework analysis, to compile diverse evidence.

Results

Of the 20,439 titles and 266 abstracts identified, 211 papers were included in the review (*Table 1* and *Figure 1*).

Appendix 3 comprises the complete narrative review table of results and comprehensively summarises all records included in the synthesis, with the final column commenting on the weaknesses of each study.^{16,19,63,65–272}

In the majority of papers (61%), a statement referring to the theoretical frame of reference used was absent. Most research designs were weak, with small and/or selective samples, leaving findings inconclusive. When questions about expectations were used, they were largely untested, or some basic testing for reliability or validity was included in the referenced papers, often with mixed results.

Few studies discussed their results in the context of whether or not models were supported. Research on expectations is weak, often conducted in a theoretical vacuum, with uncertain contributions to knowledge and with little attempt to examine expectations in detail.

TABLE 1 Number of papers obtained, rejected and accepted for review by database

Databases (January 2000–December 2009)	Date search completed	Results of search ^b	Papers obtained	Number rejected	Number accepted for review
AMED	March 2010	90	6	4	2
ASSIA	March 2010	508	7	2	5
BNI	March 2010	532	8	1	7
CINAHL	March 2010	4082	16	1	15
The Cochrane Library	March 2010	407	20	9	11
Dissertations & Theses, Index to Theses	March 2010	57	5	2	3
EMBASE	March 2010	2772	59	12	47
HTA	March 2010	99	1	0	1
Intute	March 2010	18	0	0	0
MEDLINE	March 2010	6458	50	6	44
OpenSIGLE	March 2010	10	3	3	0
PsycINFO	March 2010	2790	11	2	9
Sociological Abstracts (was SocioFile)	March 2010	981	2	0	2
Web of Knowledge ^a	March 2010	1633	76	13	63
Others	post March 2010	2	2	0	2
Total		20,439	266	55	211

a Web of Knowledge is a gateway that can search across a number of products, one of which is Web of Science.

b Includes duplicates.

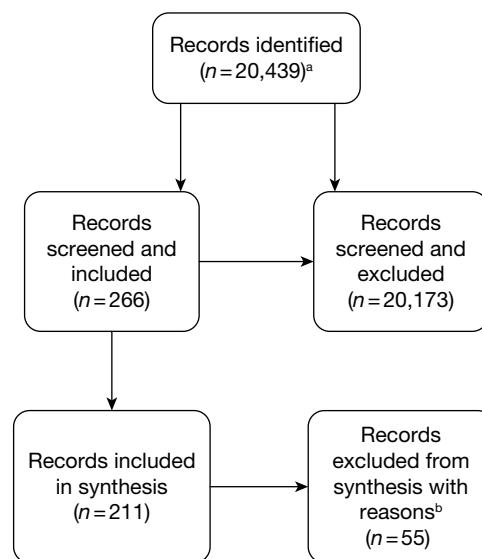


FIGURE 1 Flow diagram summary of systematic search. a Including duplicates. b Papers were rejected from the review if there was no mention of any aspect of patients' expectations. For example, rejected papers focused on patients' experiences, desires, preferences, needs, hopes, wants, health professionals' expectations, health care provision.

Expectancy constructs

In those papers in which the expectancy constructs had been discussed, some were comprehensive reviews of existing theories,^{66,85,105–107} whereas most empirical research applied the social cognition theories of outcome expectancy and self-efficacy. The particular theories of Bandura and Thompson and Sunol, as described earlier in the conceptual overview, were frequently adopted as a basis to the research presented.^{19,70,74,82,88,131,153,165,173,195,199,234,251,270}

Using Bandura's related but conceptually independent factors of physical, social and self-evaluative outcome expectations, Wójcicki *et al.*⁷⁰ developed a scale that measured outcome expectations for exercise and tested it with older adults. Their analysis provided evidence for initial factorial and construct validity of the Outcome Expectations for Exercise Scale. Janzen *et al.*¹⁹ published a non-systematic review of selective expectancy models. They reviewed Thompson and Sunol's conceptual framework (see earlier conceptual review), which identified four types of expectation: ideal (desired or preferred outcomes), predicted (actually expected outcomes), normative (what should happen) and unformed (unarticulated). This model was explicitly designed to examine the role of expectations in the formation of satisfaction. A limitation of this model is that it does not adequately address actuality. These authors questioned whether or not these expectations bore any relationship to each other. Emphasis was on the cognitive, affective and behavioural outcomes of the expectancy process, rather than on the process of expectancy interaction itself. They concluded that the development of a health expectation incorporates several longitudinal phases: precipitating phenomenon, prior understanding, cognitive processing, expectation formulation, and outcome and post-outcome cognitive processing.

Janzen *et al.*'s own, quite different social cognitive model¹⁹ was based on their review of the literature, although they found relatively little good-quality research. Their framework is a dynamic model and consists of:

- a precipitating, cognitive processing stage [an individual's sense of subjective probability of something occurring, causality (understanding of causality between actions or events) and temporality (concepts of duration and order)]
- a sense of self-efficacy (a person's perceived capability of carrying out specific behaviours to achieve a desired outcome), and which influences outcome expectations
- perceived expected subjective utility (impression of the personal value accruing as a result of achieving the behaviour)
- goal development (ideas directed towards future outcomes and influenced by past experiences) and
- expectancy formation (estimates of behaviours and their consequences), which was hypothesised to follow these processes.

However, as the authors themselves admitted, their model lacks empirical evidence to support it. Given that it has been shown that expectations of care are associated with recent experiences of health care, it is also likely to be important to distinguish *informed expectations* (in which people have received sufficient, timely information to reach an informed judgement) from *subjective expectations*. This indicates the importance of longitudinal analysis in the process of expectation development, although this type of research was not evident in this review.

Zebracki and Drotar¹⁵³ applied the theory of outcome expectancy and perceived self-efficacy for asthma self-management among adolescents. They found that although high outcome expectancy predicted greater asthma morbidity it was unrelated to self-management or treatment adherence. The authors questioned whether or not social cognition theory is generalisable to adolescents because of psychological factors such as expectations still developing. The research had good response rates (77/80), but mainly consisted of middle- to high-income families and highly educated caregivers. Iannotti *et al.*'s research¹⁶⁵ also applied social cognitive theory to adolescent respondents. The focus of this work was to develop and evaluate measures of adolescent diabetes management self-efficacy and outcome expectations. On this occasion, the measures were developed to be situation specific and the authors recognised the need for the instrument to include not only health outcomes and physical barriers but also items that reflected social, family and personal reality. Iannotti *et al.*'s research showed that high positive outcome expectations accompanied by low self-efficacy in older children was associated with the poorest

glycaemic control and lowest adherence (as reported by parents). Wilcox *et al.*¹⁹⁵ drew attention to the difference between the *adoption* of health behaviours in social cognition models and the *maintenance* of health behaviours. They concluded that initial outcome expectations should be considered in combination with attainment of those outcomes in predicting health behaviour.

Kravitz¹²⁵ defined expectations in terms of desires, wishes and entitlements and this framework was adopted by a number of researchers.^{69,109,115,137,198,271} Fryman¹⁰⁶ developed and tested a questionnaire on a small sample of 40 surgical patients from a single site to measure expectations of surgery for prostate disease. The questionnaire was based on the distinct concepts of wants, hopes and desires, and anticipations (predictive), stating that what is desired and what is expected in real life are distinct beliefs. Mahomed *et al.*¹⁷⁵ also focused on patients' desires, which reflected the patients' wishes that a given event occurred. Furthermore, Metcalfe and Klaber Moffett⁸⁵ made the distinction that expectations are not hopes but the perception that a person has of the world and his or her interaction with the world, based on knowledge or information gained, irrespective of the nature and accuracy of the source.

Leung *et al.*,¹⁷¹ following classic texts on the psychology of expectancies, argued that expectancies have been claimed to be the mechanism through which past experience and knowledge are used to predict future outcomes and refer to social cognitive theory that describes learned associations between the stimulus events, behaviours, self-efficacy, non-volitional response and outcomes; expectancies drive goal-directed behaviour, motivation and self-regulation (see earlier). They pointed out the conceptual confusion in the literature between hopes and expectations and the need for their conceptual distinction. They developed a conceptual model of the relationship between hopes and expectations, grounded in theory. They pointed out that, although both hopes and expectations are future-oriented cognitions, expectations are also distinct as they are an individual's probability-driven assessment of the most likely future outcomes. In contrast, hopes were defined as preference-driven cognitions about future outcomes, or an assessment of the most desirable but not necessarily the most probable outcomes. They argued that social cognitive factors may moderate this relationship and that external factors may moderate the extent of divergence by influencing the probability of achieving desired outcomes.

Hundley and Ryan¹²⁰ conducted their expectation research from the perspective of consumer preferences. Their theoretical basis focused on the view that consumer preference for an aspect of a service may be dependent on the availability of that attribute, which in turn will influence future expectations of care. Consumers therefore only prefer those aspects of care known to be available to them. Their research compared three different systems of intrapartum care in the Grampian region of Scotland. They discussed the influence of an 'endowment effect' on preferences in which respondents without experience of a service may be influenced simply by its availability. The impact of initial endowments on preferences included loss aversion, minimisation of the psychological feelings of regret and disappointment, lack of information about alternatives and whether or not respondents considered the options to be realistic. The response rate for this study was low at 40% and recruitment methods did not allow for examination of any response or selection bias.

Expectancy items

Spear's focus groups¹⁴⁴ listed the following as important in the development of the author's expectations questionnaire: access to help, being treated with respect, reliable care, responsiveness, being understood and participating in decision-making. Their expectations scale was reported to be internally consistent with fair criterion validity and acceptable validity. It included items on convenience of the service, getting the help that was wanted, ease of getting help, being treated by staff with courtesy and respect, reliability of staff, speed with which services responded, waiting time, empathy of staff, whether they were listened to and kept

informed, whether they were involved in treatment decisions and overall expectations. Spahr *et al.*¹⁴³ reported that the main expectations listed as important by parents (of children in an A&E hospital department) were to receive understandable explanations, to have possible causes of problems explained and to have a say in their care.

Dawn *et al.*²¹⁹ reviewed literature on patients' expectations between 1966 and 2002 and reported that the most commonly addressed areas of expectations were medical information, medication/prescriptions, counselling/psychological support, diagnostic testing, referral, physical examination, health advice, outcome of treatment, therapeutic listening and waiting time. They conducted further interviews with a small sample of 48 parents of child ophthalmology patients and asked about their most important expectations for their child's care. They reported that 35 different expectations were identified, classified into six categories: communication, interpersonal manner, doctor's skill, examination and testing, logistics and various other themes. The areas most often identified as the single most important by respondents were clinical competence, interaction, education/training, explanation in clear language, information about diagnosis and a personal connection.

Escudero-Carretero *et al.*²²³ reported on focus groups held with 31 patients with diabetes mellitus. The expectations they voiced related to health-care professionals (understanding of patients' situation, flexibility or customised treatment, good manners, communication skills, sufficient, clear and meaningful information) and the health-care system (responsiveness when needed, readily available equipment for treatment). Greenberg *et al.*'s review of the psychotherapy literature²²⁹ (methods unstated) identified the following expectancies: patient outcome, treatment, process and clinical strategy expectancies.

Expectancies, self-efficacy theory and outcomes

Outcome expectancy is the extent to which people believe they will benefit from an intervention. Price *et al.*¹³⁶ found some support for this, with higher outcome expectancies pre treatment being associated with greater improvements among 72 volunteers undergoing cognitive behaviour therapy. O'Malley *et al.*²⁵¹ also found that higher outcome expectancies significantly predicted changes in shoulder function 3 months post treatment, although the study was limited to a single clinic. Roscoe *et al.*²⁶¹ examined treatment-related nausea in chemotherapy patients and reported, on the basis of two small studies, that there was a significant association between patients' pretreatment expectations of nausea and severity of nausea post chemotherapy. In Koller *et al.*'s study¹²⁴ of expectations, quality of life and clinical variables with a sample of hospital inpatients receiving radiotherapy, quality of life was found to be altered little by radiotherapy but became substantially worse in the group who had expected healing but *perceived* that this had failed (even though physician-assessed Karnofsky performance status had not changed), although the authors do note that the exact temporal sequence of healing expectations and quality of life was not tested.

Self-efficacy refers to the belief that one has the necessary ability and skills to influence a specific event outcome. Wójcicki *et al.*⁷⁰ restated the theory that self-efficacy expectations encompass individual beliefs in one's capabilities to successfully execute a task and have been consistently identified as a correlate of physical activity. Delsignore and Schnyder²²⁰ reviewed 25 psychotherapy papers, published over 25 years, on expectancies and locus of control. They reported that there were three main types of therapy experience that are linked to outcomes or process variables: outcome, role and control expectancies. The last were conceptually related to locus of control. They reported on modest but significant associations between outcome expectancies and therapeutic improvement, but findings were inconsistent in relation to global expectancies and outcome. Metcalfe and Klaber Moffett⁸⁵ showed expectations to be directly linked to health beliefs, self-efficacy, locus of control, attitudes and schemata, and that

expectations were an integral part of the psychosocial make-up of each individual patient. They referred to a limited amount of evidence that exists to suggest that health professionals should take patients' expectations into account when making clinical decisions and planning treatment. Others have found no such associations (e.g. with locus of control), although methodology has been weak and samples selective and small.²¹¹

Jones *et al.*²³⁴ investigated the role of patient expectations and self-efficacy in relation to adherence to gym exercise over 12 weeks (77 complete pairs of baseline and follow-up questionnaires), referring to Bandura's theory of self-efficacy and its role in predicting health behaviour. They expected that high expectations would have a negative impact (in which people have unrealistic goals that inevitably fail). The authors reported that self-efficacy did not differentiate between exercise completers and dropouts, but completers had more modest expectations of change and came closer to achieving these expected changes than those who dropped out. However, Kalauokalani *et al.*,²³⁷ from an acupuncture trial of 135 patients with chronic back pain, reported that patients with higher, rather than lower, treatment expectations had improved function post treatment. Mohr *et al.*¹³¹ examined a model that included cognitive, affective, behavioural, disease and social variables as they relate to adherence to injectable medication for the treatment of multiple sclerosis. The authors found that pretreatment injection self-efficacy expectations were significantly related to 6-month adherence; however, pretreatment adherence expectations were not related to adherence. The study was limited by using single questions to measure variables, which can reduce reliability and attenuate effect sizes.

Resnick *et al.*⁸⁸ postulated that cognitive control of behaviour is based on two types of expectations: (1) specific outcome expectancies, which are the beliefs that a certain consequence will be produced by personal action, and (2) self-efficacy expectations, which are an individual's beliefs in their capabilities to perform a course of action to attain a desired outcome. Their own study tested a questionnaire measuring outcome expectations for adherence to osteoporosis medication with 152 people in a retirement community (mostly female with an average age of 85.7 years). The authors reported evidence of internal consistency and validity but model fit (factor analysis) was poor. They reported associations between outcome expectations and taking osteoporosis medication.

Mitchell,¹⁰⁷ in a review of concepts, reported that studies indicate that expectations *may* affect outcomes, but expectations are complex to measure as they have several components and global items may be inadequate or insensitive. Studies need to measure expectations separately and examine interactions and overlaps. Mondloch *et al.*²⁵⁰ undertook a systematic review of recovery expectations and health outcomes limited to MEDLINE and reported that few papers met relevance or quality criteria, and that 15 out of 41 included papers, of moderate quality, provided evidence that positive expectations were associated with better health outcomes, but this depended on the clinical condition and measures used. Davidge *et al.*²¹⁸ investigated expectations for recovery among 138 patients with extremity soft tissue sarcoma and found that those who expected a difficult recovery, and those with uncertain expectations, had worse functional outcomes than patients expecting an easy recovery. There was no indication that their questionnaire had been validated. Chunta⁷⁹ described studies that indicated that patients develop specific expectations about surgery and recovery, and experience negative feelings when their expectations are inconsistent with their expected recovery. They conducted a small convenience study of 54 largely male patients (average age of 63.46 years) from two hospital sites and reported that preoperative expectations, anxiety, depression and physical health were predictive of postoperative physical health status.

Focusing on the outcomes associated with total knee replacement, in a baseline and follow-up study of 74 surgical patients (about half female, average age 67.8 years), Engel *et al.*²⁰¹ reported

that generalised expectations for surgery (visual analogue scales of probability of improvement and change in quality of life) and personal self-efficacy beliefs were significantly associated with postsurgical improvements in health. Campbell¹⁰⁵ examined whether or not expectations about experience and treatment of pain determine how a person will view that pain experience. The authors sent questionnaires to adult patients with low back pain in two spinal clinics (211/234 responders at baseline, with response declining to 50% at follow-up). Their findings related utilisation of services to well-being, although their context was patient expectations.

Mitchell¹⁰⁷ explored a range of expectations among a convenience sample of 26 patients in general practice and hospital with osteoarthritis of the knee. The study also pre-tested a knee pain questionnaire and reported that higher expectations were associated with higher activity levels. Another study²⁴⁰ reported that, in a survey of 186 patients undergoing pre-stem cell transplantation, those with higher expectations that the transplant procedure would go well had better baseline mental and emotional (but not physical) functioning than those with less optimistic expectations, and improved survival at 2 months; those with higher expectations were more likely to be married or cohabiting. Bell *et al.*¹⁹⁸ undertook a questionnaire survey of almost 1000 patients in family practice, internal medicine and cardiology clinics, although the response rate was very low at 32.2% and, like many expectations studies, the study was limited to the post visit. They reported that unmet expectations were more common among younger, unmarried patients and those who lacked trust in their doctors. Unmet expectations were associated with lower satisfaction. White *et al.*¹⁹⁴ undertook a cross-sectional survey of 200 dental patients and reported that patients without academic qualifications had the lowest expectations of services.

Goossens *et al.*⁹⁹ proposed three assumptions of response expectancy theory:

1. expectancies for non-volitional outcomes are sufficient to cause the expected outcome
2. response expectancy effects are not mediated by other psychological variables
3. effects of response expectancies are self-confirming.

They pointed to two expectancy dimensions, the choice of which can affect outcomes: predictive (what people expect the service experience will be, e.g. based on previous experience and awareness of market/what is provided) and normative (ideal referent – what people believe the service experience should be, e.g. based on needs). The authors' mail survey about pharmacy services of almost 800 hospital patients (mean age 47 years) receiving prescriptions found that tangible aspects of a service, for example waiting times, were evaluated against expectations based on previous experiences, whereas less tangible, cognitive aspects were evaluated against ideal referents.

Morlock *et al.*¹³³ examined whether expectations were predictive of outcomes among 111 physical therapy patients (mostly female, average age 45.7 years) for low back pain. They reported that patients with the highest level of expectations reported the greatest level of improvement at discharge. Conversely, patients with the lowest level of expectations reported the lowest level of improvement. In contrast, Mannion *et al.*,¹⁷⁶ on the basis of a baseline and follow-up questionnaire survey of 100 patients who underwent lumbar decompression surgery (most were male, average age 65 years), reported no significant relationship between baseline expectations and follow-up pain scores. The systematic review of MEDLINE studies between 1966 and 1999, limited to psychiatric patients, by Noble *et al.*¹⁸¹ reported many methodological weaknesses in the studies reviewed, including the lack of validated measures of expectations. They found few studies of processes of care and identified a complex relationship only between expectations of improvement and clinical outcomes.

Fulfilled expectations linked to patient satisfaction

Some authors followed the gap model of expectancy fulfilment. Expectancy fulfilment theory is the extent to which a person's perceived occurrence of an event agrees with his or her previous expectations about that event.^{109,251} Patient satisfaction is then defined as being achieved when a patient's treatment expectations are met or exceeded.¹⁴³

Research is inconsistent, with some authors²³⁹ concluding that satisfaction is positively influenced by met expectations and positive disconfirmation (more positive experiences relative to expectations) and others finding that positive disconfirmation does not lead to increased satisfaction (Oliver³¹⁶).

Associations have been reported between having fulfilled expectations (in particular explanation and understanding, followed by emotional support) and higher satisfaction.^{140,143,233,236} Some studies, however, have reported that fulfilment of patients' expectations accounts for no more than one-quarter of the variance in patients' satisfaction.¹⁵² Rao *et al.*¹³⁸ undertook a review of the expectancy literature based on MEDLINE 1966–99. They reported confusion in the literature between expectation fulfilment and satisfaction, and commented on the narrowness of all studies included (frequently based on single visits).

In theory, a person with negative expectations and positive outcomes would experience more satisfaction than someone with positive expectations and a positive outcome. However, a study of medication expectations among pharmacy customers²³⁹ reported that patients with positive, rather than negative, expectations obtained the highest 'satisfaction with medication' scores.

Christiaens *et al.*¹¹² investigated expectations and experiences in childbirth in a questionnaire study with a convenience sample of 611 women in the context of the value-expectancy model. They found that the more expectations are met, the more women are satisfied, affirming the value-expectancy model of expectations and satisfaction, discrepancy theory and the fulfilment theory.

Bostan *et al.*²¹² adapted a hierarchy of customer expectations from market research and applied it to questionnaire responses measuring patients' expectations of their rights (e.g. to receive information, choice): 6, ideal expectations; 5, required expectations; 4, high expectations; 3, minimum expectations; 2, low expectations; 1, possible lowest expectations. The distinction between categories is not necessarily clear, and the source of the questions is unstated and the sampling method unclear. However, they reported that patient satisfaction was found to be high because patients' expectations of their rights were so low. Low expectations and their relationship with satisfaction were further examined by Mawajdeh *et al.*,¹⁷⁷ who found that patients with higher levels of expectation were less satisfied than patients with lower levels of expectation, and that this relationship remained significant after adjusting for sociodemographic variables.

Kucukarslan and Nadkarni,¹⁷⁰ on the basis of a cross-sectional postal survey of 187 patients on warfarin discharged from hospital to home, found that disconfirmation of expectations was only indirectly associated with patient satisfaction, and research is inconsistent on expectancy disconfirmation theory as the model is cognitive and excludes social factors, such as social comparisons or affective factors (e.g. anxiety or depression). Dispositional beliefs, relatively stable optimistic/pessimistic beliefs about future outcomes, may influence expectancies. Dispositional optimism is a relatively stable personality characteristic and is the tendency to believe that one will have good rather than bad outcomes in life. Optimism has been shown to influence cancer patients' quality of life and psychological distress to a higher degree than their recovery-related expectations.¹⁵⁰

However, Baron-Epel *et al.*,¹⁵⁴ on the basis of telephone interviews with a random sample of 92 adult patients (mostly female, average age 39.5 years), showed a weak association between satisfaction and the expectations–fulfilment gap (the higher the perceived fulfilment of the expectations then the higher the satisfaction, and the lower the perceived fulfilment of the expectations then the greater the gap and the lower the satisfaction). They concluded that this model is insufficient to explain variation in patient satisfaction. Fromentin and Laure Boy-Lefèvre,¹⁶⁰ on the basis of a questionnaire to 167 prosthodontic clinic patients, also reported that level of expectation was a poor predictor of satisfaction. In a small ($n = 16$) qualitative study with a convenience sample of patients after completing curative cancer treatment, Winterling *et al.*⁹² found that unfulfilled expectations for the recovery period were not related to lower levels of well-being.

Metcalfe and Klaber Moffett⁸⁵ suggested that some evidence exists to suggest that health professionals should take patients' expectations into account when making clinical decisions and planning treatment.²⁵⁰ Redsell *et al.*⁷³ used semi-structured interviews with 28 patients (with 19 pre and post nurse or GP consultation pairs) to examine the nature of the relationship between patient expectations and satisfaction, based on evidence which suggests that there is a positive association between meeting expectations and satisfaction and between unmet expectations and dissatisfaction. Their finding that patients who did not understand nurses' skills had higher satisfaction was speculated to be because they had lower expectations of them than of their GPs.

A few studies examined the issue relating to health professionals' understanding of patients' expectations^{132,138,190,202,207,238} and the degree to which patients have unrealistic expectations.¹⁸⁷ Montgomery *et al.*'s questionnaire survey of expectations in women with breast cancer attending their first annual review clinic¹³² demonstrated that women's expectations were not the same as their clinicians' (aside from relapse detection). Clinicians placed the importance of detection of side effects of therapy and psychological concerns far higher than patients. Rao *et al.*'s literature review of 23 studies¹³⁸ found that patients frequently expected information rather than specific physician actions, but physicians did not accurately perceive patients' visit-specific expectations. In comparing the views of chiropractors and their patients, Sigrell¹⁹⁰ found that patients had lower expectations of their treatment than the chiropractors but higher expectations of being given advice and exercises. Patients also expected to improve at a faster rate than the chiropractors expected them to. Physicians were shown to have poor perceptions for predicting patients' expectations for antibiotics.^{202,207} Expectations of returning to work as determined by patients with acute-onset low back pain and their clinicians were shown to be weakly correlated.²³⁸ In terms of unrealistic expectations, in their study of prefitting counselling among 60 new users of hearing aids, Saunders *et al.*¹⁸⁷ emphasised the need to address unrealistic expectations cautiously, otherwise expectations could be decreased to the extent of discouraging and demotivating the patient.

Expectations and health service use

A small semi-structured telephone interview study by Egbunike *et al.*²²¹ of out-of-hours GP users in six centres, reported some mismatches between service expectations and service delivery among patients without previous experience of the illness, mothers of children under 5 years of age, those who lived alone and those requiring specialised care. They reported that unmet expectations resulted in subsequent, and some multiple, consultations.

Conclusion

Patients' expectations of health and health care continue to be complex, dynamic and multidimensional, and there continues to be little consensus over conceptualisation and none over their measurement. Most commonly the research reviewed was based in the social

The findings of a number of studies supported an association between treatment outcome expectancies and therapeutic outcome, including the negative impact of the perception that an expectation was unmet. In those studies in which a theoretical basis to the research had been applied, self-efficacy expectations were frequently presented. This association was shown to be far more inconsistent and tenuous when global outcomes were examined. Further caveats to the association were the need for expectations to be realistic and that there could be variation according to clinical condition.

Patient satisfaction was shown by some researchers to be related to met expectations, but studies suggested that fulfilling patients' expectations does not account for more than one-quarter of the variance in patient satisfaction. A further note of caution is that focusing on the meeting of expectations does not take into account the level or appropriateness of those expectations. Expectations are individually defined, are poorly determined by health professionals but need to be realistic. Addressing unrealistic expectations requires caution to not discourage or demotivate the patient. There was little robust evidence of an association between expectancy type and patient satisfaction.

Figure 2 is proposed as a model of the multiple influences on patients' expectations of health care and is derived from layering the research findings of the review over the theoretical findings of the conceptual review. The interactions of people with society influence the development of their expectations. As such, expectations are dynamic and develop over time. The numerous factors that play a role in the development of expectations include personal characteristics such as age, sex, background and education, the patient's own belief system, their previous experiences and pretreatment factors (e.g. severity of condition, waiting time for treatment, knowledge of treatment, locus of control, previous experiences of the health-care system).

An integrated multidimensional approach to conceptualising and measuring expectations theoretically involves building a model of expectations from the dimensions identified in the patient satisfaction and expectations literature, supplemented by a patient-based model of outcomes, such as health-related quality of life. This suggests that the main aim of health care is to narrow the *gap* between a patient's expectations and what happens in practice in relation to (1) structures and processes and (2) patient outcomes and satisfaction (i.e. emphasising the value of individual expectations and experiences rather than relying solely on traditional measures, which capture mainly functioning). A counter-argument to building solely on the existing satisfaction, expectations and health outcome literature is that the most commonly used models and measures reflect the dominance of providers' or experts' interests and perspectives over patients whereas it has been recognised that expectations are poorly determined by others and should be defined by patients themselves.

In summary, a fully integrated model of expectations needs to be dynamic, both generic and site specific and multidimensional (e.g. in relation to types of expectations) and to identify determinants, including sociocognitive. It also needs to model potential causal pathways [between expectations and related attitudes and behaviours (patient satisfaction), health behaviours (e.g. adherence to therapy) and patient-based health outcomes (health status and health-related quality of life)]. A major gap in this area is that no standardised, well-validated instrument exists for measuring patients' expectations in any of these domains. This is needed, together with provision of information on the consistency and stability of expectations over time by type of measure and mode of questionnaire administration. There is much scope for further research in this area, especially given the evidence of poor agreement between patients' expectations and their doctors' perceptions of these expectations.¹³⁸ A large, mixed-method research agenda is required to address these issues.

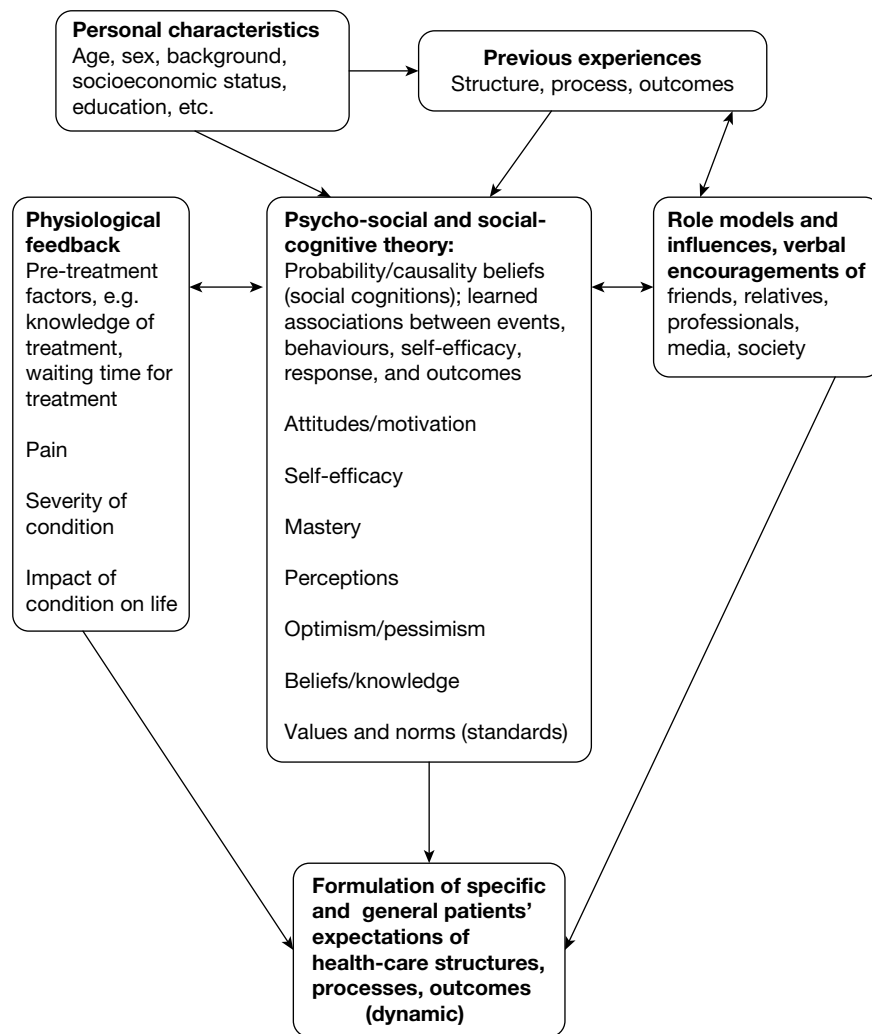


FIGURE 2 Model based on the literature of multiple influences on patients' expectations of health care.

Chapter 3

The exploratory study

Results from semi-structured interviews about expectations for health care with 20 GP and 20 cardiology clinic patients in Norwich

In this chapter we report on semi-structured interviews conducted with 20 GP patients and 20 cardiology clinic patients in Norwich, UK, to ascertain patterns in expectations. Our ultimate aim was to inform the development of an instrument to measure expectations. For the purposes of this research we distinguished between an ‘expectation’, as essentially a prediction of forthcoming events, and a ‘hope’ (synonymous with a *desire* or *want*), which relates to the desirability of an expectation, or ‘fear’, reflecting the reverse or the undesirability of an expectation. Thus, ‘hopes’ and ‘fears’ may be conceptualised as the emotional valences of an expectation and, importantly, as the ends of a scale by which expectations can be measured (see below).

Problematically, the term ‘expectation’ is likely to mean different things to different people, for example what it means to academics is likely to be different from what it means to patients. In this study, our method of eliciting expectations was informed by the repertory grid technique.²⁷³ In brief, this technique uses various cards on which are written important concepts that the patient (participant) is asked to compare and contrast. In the triadic comparison version, for example, participants are asked to look at three cards and to say how two are similar and how they are dissimilar to a third. In the original domain of use, the cards might have written on them important people in the participant’s life – such as mother, father and teacher. An output of such a comparison might be that ‘father’ and ‘teacher’ are most similar, in being ‘disciplinarian’, differing from ‘mother’, characterised as ‘forgiving’. This particular comparison would therefore be deemed to have revealed a significant ‘personal construct’ for that participant – a dimension anchored by ‘disciplinarian’ at one pole and ‘forgiving’ at the other (the poles need not be semantically or logically opposite). By doing many such comparisons, many different ‘personal constructs’ (dimensions) might be elicited, which together reflect how that participant thinks about the world and the people within it. Importantly, many variants of this repertory grid method exist (e.g. Fransella *et al.*²⁷⁴) and certain statistical methods have been developed to enable the characterisation and comparison of people who hold different personal constructs – such as generalised Procrustes analysis (e.g. Dijkerhuis and Gower²⁷⁵). Regardless of whether one accepts Kelly’s personal construct theory²⁷³ as an adequate description of human psychology, the associated repertory grid method has been seen as a useful knowledge elicitation device that has been used in a wide variety of domains, including characterising how people conceptualise the different sensory qualities of food products (e.g. Raats and Shepherd²⁷⁶) to eliciting patient preference dimensions for treatments for angina (e.g. Rowe *et al.*²⁷⁷).

In this research we used some of the characteristics of repertory grid techniques to help us structure data acquisition. In particular, we attempted to elicit the attitudinal poles of expectation constructs, anchored as either ‘hopes’ or ‘fears’, and, during a semi-structured interview process, to complete the kind of rating matrix used in the original method. That is, in the traditional approach, once a participant’s constructs are elicited, the different items – for example people – are then rated on each construct dimension (e.g. ‘disciplinarian’). Here, we have sought to have participants rate their expectations according to their attitudinal desirability, and then to rate the event afterwards to establish the extent to which the expectation was ‘met’. We detail the method

more fully later; suffice it to say here that our ultimate intent has been to elicit expectations in a coherent and structured way and in a form readily translatable into a survey instrument for future development and validation (in a similar way to our past research on patient preferences – see Bowling *et al.*²⁷⁸ for a summary).

Structure of this chapter

In this chapter we begin by discussing the research design and methods used in this pilot work. We start by discussing the patient sample (GP and cardiology patients) and then describe the process of the semi-structured interviews. This is followed by a description of the analytical process we considered. The results are then reported, first for the GP patients and then for the cardiology patients. The results are reported in the form of the main *themes* identified in the analysis of the interviews. There are six major themes and a number of minor themes for the GP patients, and five major themes and a number of minor themes for the cardiology patients – with a high degree of overlap between the themes. All themes are amply illustrated through use of quotes. Finally, the two sets of data are compared and contrasted – looking at additional issues, too, such as the extent to which the expectations of the different patients were met or not.

Research design and methods

A semi-structured interview process was employed to elicit and quantify 40 patients' expectations about a forthcoming consultation, either at a GP practice or at a hospital outpatient department. Soon after their consultation the same patients were asked to rate their actual experiences against their expectations. Full details of the patient samples used, the materials and the procedure are described in the following sections.

Patient sample

Twenty patients of a GP surgery were recruited from a consenting practice in Norwich, UK, between February and June 2008. Patients contacting the surgery for an appointment were asked if they would like to take part in a research interview connected to their appointment. Those expressing an interest were sent a patient information pack (including a consent form) and an invitation to take part in the study. Patients were required to ring the GP surgery if they agreed to take part in the study, at which point they were reminded that they needed to arrive 60 minutes before their scheduled appointment with the GP and to bring their completed consent form with them. Of the 33 invitations that were sent out, 13 patients either cancelled or did not turn up for their appointment. The participants comprised 10 men and 10 women, whose ages ranged between 22 and 83 years. The median age of the participants was 53.5 years and the mean age was 51.2 years (standard deviation 17.6 years). Of those who were invited but chose not to take part, 10 were women and 3 were men. Their age range was 26–75 years, their median age was 54 years and their mean age was 51.8 years (standard deviation 18.3 years).

Twenty patients from a hospital outpatient department were recruited from the cardiology department at the Norfolk and Norwich University Hospital, which had agreed to participate in the study. Because the appointment process is completely different to that of a GP surgery, a different recruitment strategy was required. For example, at GP surgeries it is usually the patient who initiates the appointment, which typically takes place within the next few days, whereas for hospital appointments it is generally the hospital that initiates the appointment, usually by post, several weeks in advance. The cardiology department in question had outpatient lists 6 weeks prior to the appointment. Invitations and patient information packs were sent by post to

patients attending Monday and Wednesday morning clinics at least 1 week before their scheduled appointment. Patients interested in taking part were asked to contact the field researcher (NL) by telephone to discuss arrangements. Initially face-to-face interviews were arranged pre and post consultation as for the GP patients, and six hospital patients were interviewed face-to-face. However, this strategy had to be abandoned because:

1. There was a very low response rate. Many patients were travelling over 30 miles to the regional hospital and some were using hospital transportation and so the inconvenience of an extra hour for the study in addition to their usually lengthy trip was significant.
2. Many patients were very ill with heart problems (as opposed to the generally milder symptoms found with the GP patients) and did not welcome the extra inconvenience and stress of the study.
3. The time spent either waiting or with the medical staff was unpredictable, ranging from minutes to hours, and so only one patient could realistically be seen in a morning clinic. Consequently, some patients who volunteered for the study had to be declined because of possible conflicting appointment times with other patients.

Following discussions between the research team and the cardiology department, it was decided to offer the interviews over the telephone, a process that bypassed the above restrictions. A brief addendum slip was added to subsequent patient invitation packs offering the option of a telephone interview. When patients rang the researcher expressing their interest to take part in the study, the necessary arrangements were made. Patients were telephoned 1–3 days before their appointment at a prearranged convenient time and again 1–2 days after their appointment.

It is important to recognise that telephone interviews may not yield similar-quality data to face-to-face interviews – for example, potentially undermining sensitive data reporting. However, the information we were asking for did not appear (to us or the patients) particularly sensitive, and we detected no real hesitancy in responding, or that the data we acquired were of significantly lesser quality. Indeed, the telephone interviews were less time restricted in contrast to face-to-face interviews immediately before a consultation, which sometimes had to be curtailed to enable the patient to make their medical appointment.

Recruitment of the cardiology outpatients took place between February and May 2008. In total, 127 invitations were sent out (59 to female patients and 68 to male patients) and 17 men and three women were interviewed. Only one patient cancelled their appointment (due to ill health). The sex imbalance was noticeable early on in the study, so the interviewer asked female cardiology patients who agreed to take part in the research whether there was anything inherent in the information they had been sent about the project that would discourage women from taking part. None of the three female participants could identify anything that would deter other women from taking part in the study. *Table 3* provides a summary of the patients by primary location and sex who were invited and who were interviewed for the study.

TABLE 3 Patients invited to participate and interviewed for the study

Health-care site	No. of patients invited to participate	No. of patients invited by sex		No. of participants interviewed by sex	
		Male	Female	Male	Female
GP practice	33	13	20	10	10
Cardiology outpatient clinic	127	68	59	17	3

The average patient age was 61 years (in 2008). For the cardiology patients, the average patient age was 69 years, whereas for the GP patients it was 53 years. The difference between the average ages can be attributed to (1) the wider age range of GP patients and (2) the fact that poorer cardiac health is more common in older people. Twenty of the participants were married or cohabiting with a partner, seven were widowed, six were divorced or separated and four were single or had never married (marital status was unknown for three).

The semi-structured interviews

The interviews with GP patients took place in a GP surgery (usually in a vacant GP room). Six interviews with hospital outpatients took place in an interview room close to the cardiology department of the Norwich and Norfolk University Hospital, and 14 interviews with hospital outpatients took place over the telephone. Irrespective of venue, the interview process was identical and the interviewer (NL, who held an honorary NHS contract) was the same throughout.

During the introduction to the interview, patients were thanked for volunteering and the aims of the study were outlined. Interviews were recorded using an Olympus WS-200S digital voice recorder (SRS Labs, Santa Ana, CA, USA). The loudspeaker function of the interviewer's telephone was used to enable telephone interviews to be recorded. A study consent form was included in the patient invitation pack. At the outset of the interview, patients were asked to complete a brief questionnaire that covered basic demographic information, health and quality-of-life perceptions and their association with the clinic/practice. When this information had been gathered, the interviewer switched on the recording device and commenced the structured interview on their expectations of their forthcoming consultation.

As previously noted, the interviews were informed by aspects of repertory grid analysis (RGA), which helped provide structure to the process. First, however, patients were simply asked to think about their expectations regarding their forthcoming appointment, with the interviewer noting all expectations mentioned. Patients varied in their ability to engage with the process. For many, what they were being asked to do – to break down a habitual process – was a challenge as it was not something that they had ever thought about. Those who were older or less well educated appeared to struggle the most in identifying their expectations. For those who struggled, the interviewer would use the following probes: 'what might you expect to see, to hear, to feel, to say, to think?'

Between 4 and 12 expectations were elicited from participants (mean = 7). When the flow of expectations dried up, the interviewer made the following interjection: 'I think we have sufficient expectations now to proceed to the next stage, thank you for your efforts so far. What we will do now is take each expectation you have mentioned in turn and play a little rating game with each. I will record your ratings onto a chart [shown to the face-to-face interviewees]'. This aspect was informed by RGA in that the constructs elicited were placed in a grid/chart to be rated. The chart provided had a number of columns into which the expectation data were recorded. For each expectation listed, the interviewee was asked to imagine the best that could possibly happen (their hope) and the worst that could possibly happen (their fear). In engaging in this discussion, the two ends of the dimension were elicited for each construct, as per RGA, and these were bipolar in the sense that what made a particular event the best or worst that could happen (the two poles of the dimension) were not forced to be precise opposites, but were recorded according to the natural understandings of the patients. Thus, although some expectations were expressed along a fairly unipolar dimension (wait a long time vs wait a little time), others were not (treated with respect vs treated as a child). The 'best' that could happen related to a particular expectation was given a rating of 10 and the 'worst' a rating of 0. The interviewer briefly summarised patient descriptions of the nature of the poles of the expectation dimensions, then asked the interviewee

to give a rating (between 0 and 10) for each expectation for their forthcoming consultation along the expectation dimensions that had been elicited. The main merit of this approach was to visually and logically structure the expectation elicitation – particularly valuable, it was felt, in the sense that the expectation dimensions readily lent themselves to translation into *personally meaningful* questionnaire items of direct use later in the project. This output is to be contrasted with the relatively unstructured narrative that would usually be achieved through normal interviewing practices, which would require significant experimenter translation in order to develop questionnaire items.

An example of this in practice is that a patient said that they expected to *wait* before they got to see the doctor. The best that this patient could imagine was to be seen on time, which was their 10 rating, and the worst was to have to wait for over an hour, which was their 0 rating. For what they expected to happen, the patient gave a rating of 8. Their rationale for choosing the rating was explored and audio recorded. The same rating process was then performed on each expectation in turn.

Occasionally, a cited expectation had two ‘best’ and ‘worst’ scenarios, one being a ‘medical’ aspect and one a ‘process’ aspect. For example, a patient may have cited the expectation that ‘the GP will tell me the results of my test’. The ‘best’ that they could imagine for this would be that ‘the results showed I was perfectly OK’ and the worst could be that ‘I’m told I have a serious illness’; these would be medical outcomes. However, the patient may also have added that ‘best’ would also be ‘that the GP told me my results in a clear, confident and warm manner with ample time for me to ask questions and to have them answered’ and the ‘worst’ could be that ‘the GP tells me my results in a cold, off-hand manner’. These would be process outcomes.

When all expectations had been processed in the above manner, the patient was thanked and informed that following their consultation the interviewer would (for face-to-face interviews) meet them in the waiting room and conduct a further short interview to explore what really happened and that this interview would also be recorded. (For telephone interviews, the interviewer arranged a convenient time post consultation to obtain the same information.) In the example described, the patient rated their actual wait as ‘10’, saying that they had indeed been seen on time. On rare occasions a ‘not applicable’ was placed in this column. For example, a cardiology outpatient may have stated that they had an expectation related to receiving electrocardiography, yet in reality they did not have one.

There were a number of difficulties in eliciting the expectations and patients’ ‘best’ and ‘worst’ scenarios. Several of the patients had difficulties in understanding what they were being asked to do, but after being taken through this process by the interviewer once or twice most were able to engage with the activity and for each of their expectations provide a ‘best’ and a ‘worst’ scenario as well as rating what they expected would happen in the consultation. One thing to note is that, in providing the ‘best’ and the ‘worst’ for each expectation, the patients tended to stay within what might be described as ‘normal boundaries’. For example, for the expectation of a standard consultation room with a desk, chair, computer, medical bed and appropriate equipment, a ‘best’ scenario might be that all of this was present and a ‘worst’ scenario that it was lacking in its content in some disconcerting way. It might also be noted here that we had hoped that the RGA-informed method would help gain deeper understanding of the source of the expectations than a relatively unstructured interview process would, through the process of comparing and contrasting the different elicited constructs. However, it rapidly became clear that there was relatively little ‘depth’ beneath the expectations to be explored – invariably expectations were informed by/derived from personal experience of past appointments (of which most patients had great experience) rather than anything else [beliefs informed by tangentially related (perhaps vicarious) experiences or unrelated emotional experiences, beliefs, information sources, etc.].

The lack of depth here is thus due to the reality of patient expectations and not methodological inadequacies – and, in fact, our piloting of the process had uncovered this issue and led to adjustment to the semi-structured interview approach to the form described here. This issue is discussed later.

Telephone compared with face-to-face interviews

Piloting of the telephone interviews and subsequent experiences highlighted some subtle differences from the face-to-face process. Although the amount and quality of the data elicited were not significantly affected, as the average number of expectations for both face-to-face and telephone interviews was just over seven per patient, it was slightly more difficult to explain the ‘best’ and ‘worst’ scenarios over the telephone, mainly because the patients could not see the expectations chart that was being filled in. Aside from this one issue – which we felt was adequately addressed through careful description of the process – we were not aware of any great difference between the nature of the discussions that took place or the quality of data we acquired.

Length of interviews

The average length of a GP patient pre-consultation interview was 35.51 minutes and the average length of a post-consultation interview was 7.40 minutes. In contrast, the average length of a cardiology patient pre-consultation interview was 32.12 minutes and the average length of the post-consultation interview was 9.16 minutes. Within the latter interviews, those conducted face-to-face took an average of 33.35 minutes for the pre-consultation interview and 7.08 minutes for the post-consultation interview and those conducted by telephone took an average of 31.36 minutes for the pre-consultation interview and 10.10 minutes for the post-consultation interview.

Analysis

In total, 20 pre and post interviews with GP patients and 20 pre and post interviews from the hospital cardiology department were transcribed verbatim, as a word-for-word reproduction of the audio-recorded interview.⁷ For this study, the interviews were carried out by one researcher and transcribed, coded and qualitatively analysed by a second researcher. Although the interviews have been described as being transcribed verbatim, as Poland²⁷⁹ notes, transcription is an interpretative activity and how the transcriber hears and perceives the content can affect the accuracy of the transcription. It should also be noted that many of the research participants had distinctive regional accents and the direct transcription of some words as they sounded would have altered the meaning of what was said, for example ‘been’ tends to be pronounced as ‘bin’ but was transcribed as ‘been’.

On the transcripts brief pauses were indicated by ‘...’ and more pronounced pauses were noted as [pause]. These were not timed, rather they were subjectively defined by the transcriber. Words that were unclear were noted on the transcript alongside the time code, for example [unclear word: 04:45]. For the most part, unclear words such as ‘er’, ‘erm’ and ‘mm’ were not transcribed as the transcripts were to be used for thematic and not linguistic analysis. This also produced a more coherent and fluid transcript, although it is acknowledged that the absence of such words may affect another’s reading of the transcripts. Other audible sounds such as sighing or laughter were included in the transcript as [sigh] or [laugh], which can assist in providing a context for the spoken word.

On occasions when the interviewer’s and patient’s speech overlapped, this was transcribed as far as possible, distinguishing who was speaking. Names and specific places were anonymised during transcription, for example Dr [name]. When more than one doctor was talked about, this was

noted on the transcript. If individual doctors had been relevant to the study, a coding system such as Dr A, Dr B, etc. would have been used by the project team.

Each transcript was read through by the transcriber at the same time as listening to the interview to fill in any missed or unclear words and to ensure that the speech attributed to the interviewer (marked in italics in the quotes used in this report) and interviewee was correct. Although the need to produce verbatim transcripts has been discussed by some researchers,²⁸⁰ the production of verbatim transcripts enables all members of a research team to have access to the data.

For analysis of the transcripts, the decision was taken to treat the GP and cardiology transcripts as two data sets to reflect the different locations and aspects of health care that the patients received. In the analysis process it was also thought that this would aid the identification of codes and later the development of themes pertinent to each location as well as the identification of more nuanced similarities or differences.

A thematic approach was taken to the analysis of the transcripts.²⁸¹ The transcription of the interviews formed part of the data analysis process²⁸² and notes made during transcription were referred to at the initial coding stage. The transcripts were read through to aid familiarisation with the data and the files were imported into NVivo8 (qualitative data analysis software; QSR International, VIC, Australia). Coding was open and inductive using Nvivo8's 'free nodes' (the basic level of coding), hence the codes did not fit into a pre-existing coding framework;²⁸¹ instead, verbatim quotes from the patients or researcher-generated codes were used. Coding was contextual with the surrounding text forming part of what was coded, and at times a section of text was multi-coded to reflect different aspects of the data.

Once all the transcripts had been coded in NVivo8, these were checked through, and where codes overlapped, for example where slightly different phrasing had been used, these were merged. In total, the GP patient data set produced approximately 1100 'free nodes' and the hospital patient data set produced approximately 950 'free nodes'.

After each data set had been coded, themes were developed as part of a recursive process taking an inductive or bottom-up approach. In order to manage the data after the coding, the most obvious free nodes were collated under broad tree nodes [the terminology used by NVivo8 to denote the development of (hierarchical) themes], for example around a particular theme such as 'space' and more specifically 'the waiting room'. This semantic approach drew on the explicit meanings of the data and produced a range of initial themes that were checked to see if they worked in relation to the coded transcript extracts. From this subthemes were developed through a continual process of searching for themes and then reviewing and refining the themes. Connections or linkages between the themes were developed to group themes under an umbrella theme until the point at which five such umbrella themes (the dominant ones) were formed from the cardiology data: *doctors and patients, tests, treatment and medication, outcomes, spaces and time*. A sixth theme labelled *minor themes* ensured that minor aspects arising from the data were not discarded. From the GP data, six umbrella themes were developed, namely *doctors and how patients feel, the consultation, examination through to outcomes, personalised experiences, spaces and time*. As with the cardiology data, a further seventh *minor themes* category was developed.

The analytical process was thus complex. Coding themes were informally discussed within the research team, although because the process relied on specialised use of particular software known to the coder no formal inter-rater reliability checks were made (and member checking was deemed infeasible for a number of pragmatic reasons). This limit to data trustworthiness

should thus be acknowledged, although the research team felt that the data were generally straightforward to interpret and the themes had a great deal of face validity.

Analysis of the expectation charts

As with the transcripts, separate analysis was undertaken for the GP and the cardiology patients' expectation charts to enable each location to be considered as well as allowing for the identification of similarities and differences. As described in the methods section, during the course of the interview, the interviewer filled in a chart recording the patient's responses and ratings. The patient was asked their reasons for their ratings (their rationale), but these were not noted on the chart. The charts were used to help systematically record the responses from patients – for their benefit and ours. Subsequently, so that the rationales could be analysed and for these to remain within context, two further columns were added to the chart: in one the rationales were added by referring back to the transcript and in the other the rationales were coded and themes developed by grouping similar codes together. An example of this can be seen in *Table 4*.

Results

GP patients

The GP patient results are presented to reflect the broadly chronological nature of the consultation process, from arriving at the practice through to the end of the consultation. First, patients' views towards the doctors and how the patients feel, personalised experience, the consultation and the examination through to outcomes are discussed. This is followed by discussion of the two cross-cutting themes of spaces and time and then by a short summary of the minor themes arising from the data. When quotes are used, the normal text indicates the patient and the italic text the interviewer. The sex and age of the patient in 2008 are indicated after each quote.

Table 5 provides a summary of common GP patient expectations with associated 'hopes' and 'fears'.

In relation to patients' views about the doctor they expected to see when they visited the GP surgery, three main themes emerged. The first concerned the positive aspects of the doctor's

TABLE 4 Example of rationales and coding for cardiology patient's rationales

Area	Hopes	Fears	Expect (0–10)	Reality (0–10)	Rationale for expectation from transcript	Rationale
Wait in waiting room to be called	Be in with Dr within 5–10 minutes	Waiting for 2 hours	8	8	'just past experience'	Past experience (of waiting)
Weighed by a nurse	Last <2 minutes	Not bothered to take my weight	10	10	Based on past experience	Past experience (of being weighed)
Discussion about my weight	To have lost a bit of weight	To have put some weight on	10	10	Expecting to have lost a bit of weight	No rationale given
Expecting electrocardiography and echocardiography	These things will happen	These things won't happen	10	10	Expecting electrocardiography Echocardiography may or may not happen	No rationale given
Information on left ventricle	Got better	It's got worse	5 (no change)	5	'no change in other words'	Remain the same

TABLE 5 Common GP patients' expectations with associated 'hopes' and 'fears'

Common GP patient expectations	Number of expectations	Generalised positive expectation/hopes	Generalised negative expectation/fears
How patients expect to feel	13		
(a) Anxious and nervous	9	To no longer feel anxious or for the anxiety to be reduced. To feel calm, relieved	To feel more anxious, to be told bad news, for the doctor to be indifferent, to lose control
(b) Relaxed and safe	3	To have an ice-breaking conversation, to feel relaxed, not to be under pressure	'Military drill', doctor not engaged, morbid, no confidence, wasted time and feel let down
(c) Guilty	1	'Feel on top of the world'	'Feeling sick, shaken and tearful'
Time with GP/length of consultation	16	Patients tended to cite a specific length of time varying between 5 and 20 minutes	Patients did not want an appointment to last too much longer than their positive expectation or to be significantly shorter
Examination from a doctor	7	For the examination to be thorough, pain free, not rushed and carried out so that the patient feels comfortable and maintains their dignity	Not to be examined, or for the examination to be painful or for the patient to feel more anxious or uncomfortable. The doctor suggests that it is something different from the patient's own beliefs
What the doctor is expected to be like	25	The doctor to listen and to be warm, easy to talk to, to greet the patient and if necessary introduce themselves. Take the patient seriously and to explain	The doctor is rude either verbally or in their manner and does not listen to the patient

manner or character, the second the negative aspects and the third a number of other aspects associated with the doctor. After discussing these, this section moves on to consider how patients *feel* about going to see a doctor.

Theme 1: the doctor

The positive aspects of the doctor's manner or character were for the doctor to be a professional who was an expert, had authority and was competent and confident. Alongside this, the doctor was also expected to be interested in the patient – established through the doctor engaging with the patient and exuding a positive manner (demonstrated by being helpful, courteous and polite). Patients also expected the doctor to be caring and sensitive about their particular health issue or reason for seeing them, and in doing so to appear empathetic and sympathetic to the patient:

Yeah, so I expect, I would hope that they again, it's down to the thing of competence and sensitivity on their behalf isn't it really in a way that they can, they make you feel relaxed rather than tense about the situation.

(Male, 58)

OK, right so the third expectation you have of this meeting is that you expect the GP to be sympathetic right ... so what would be the best one?

Sympathetic.

So how would it manifest that sympathy?

Well, listen to what I say and sort of act as if he understands how I feel.

Right, so listens to what you say and acts as though he understands, so that you're feeling heard

And listens yeah.

OK, so GP listens and understands to what I say OK. Any other things you can think of for the best case how would it manifest if it was an ideal situation for GP being sympathetic to you? So is there listening and understanding?

There's listening and understanding, talking to me about problems.

(Male, 58)

But what manner in which would he talk to you?

Oh, very, very calm, very reasonable erm reassuring erm I've gotta say caring sort of like, like a caring sort of way as well.

(Male, 31)

In contrast, the negative aspects of the doctor's manner or character that patients hoped not to face were for the doctor to be uncaring, indifferent and dismissive, and appearing unsure about what they were doing:

If they [doctors] didn't care, that would be the worst.

(Female, 81)

If they [doctors] seemed disinterested in your situation or what you're actually there for, that would be the worst.

(Male, 22)

I just wanted her to say [the doctor], yeah that's fine, that fine, but she was a bit indecisive [and] that made me think, well have I got a problem or am I right, yeah I know I am, 'Cos she said to me, anyway, but just the way she seemed unsure it started to make me feel unsure.

(Female, 47)

A doctor's poor communication skills was another issue that patients mentioned, for example a doctor who might be blunt in the way that they spoke or broke news to patients:

The worst would be where it's either rushed through, them being blunt and you know almost to the point where it's like sit down, what's up, let me have a look at it, great, that's your problem, clear off.

(Male, 36)

An area of concern arose with a number of patients suggesting that the actual doctor they saw may affect how they felt and the consultation process, for example patients cited certain doctors making them feel uneasy, defensive or inhibited, and consequently patients admitted feeling unable to tell the doctor what they needed to know. This appeared to be more significant for patients who would not or did not see their preferred doctor:

For me, from my point of view, the nightmare, I guess a nightmare would be ... if they made me feel, if they made me feel defensive about my health you know if they made me feel if they made me feel that I would rather not open up and be honest about things, but just you know sweep stuff under the carpet, just to get out of it [laughs].

(Male, 58)

I was seeing a different doctor, so, no I just thought I'd keep everything quiet and wait until I see my doctor next then that's what I've done, so pretty much all the stuff I come in to talk about, I haven't.

(Male, 31)

I have been known to come, make an appointment and try to get my doctor, and I haven't been able to get him and I've actually not bothered coming to the surgery and

Right

made another appointment, solely waiting for my doctor to come back again.

(Male, 31)

If patients feel too inhibited to explain their symptoms or reasons for seeing the doctor, this can be viewed as having potentially dangerous ramifications for a diagnosis, treatment and health outcomes.

Although the ways in which doctors were talked about have been broadly described as positive or negative, other minor themes about doctors also arose. These related to the doctors' sex: most often doctors were referred to as being male, unless the patient knew that they would be seeing or had seen a female doctor. A few of the patients regarded doctors as being people with their own lives and problems or referred to the doctor they had seen or might see as 'being foreign', 'from overseas' or not having English as their first language, which could affect doctor–patient communication and understanding between the two parties:

I know people have experiences, not in this area, with doctors who haven't got English as their first language. I haven't had that experience, but I think that would be a real no no because I think you need to be really clear.

Yeah

About, you need to have, to have a feeling and an understanding that the doctor is clear about what you're saying to them and need to understand what they're saying to you.

(Female, 46)

I couldn't understand her 'cos she was foreign.

(Female, 29)

For some patients, seeing the doctor was regarded as a last resort because they rarely needed to see a doctor and did so because they were unable to treat their own condition:

Yeah, yeah. I mean it's obviously, I mean the rarity of seeing, that I made a point of wanting to see him then I'd hope that he would make me welcome knowing that there was something wrong to bring me there you know and he'd be understanding about that and there'd be a concerned welcome if you, if you get my drift on that.

(Male, 49)

I will only go and see the doctor when I'm really ill, I mean if I usually get a flu for example, I won't actually see the doctor, I'll just get myself a Lemsip or Strepsils.

(Male, 32)

As well as talking about what patients expected the doctor to be like, patients also discussed their expectations about how they expected to *feel* when they went to see a doctor. Before seeing the doctor, the way that patients felt was a significant factor, for example they spoke of feeling embarrassed, feeling pessimistic or having a sense of feeling better because a health issue could be treated:

I'd should feel embarrassed I think, I mean I shouldn't be at my age, but

Being physically examined and ...

I must be a prude.

(Female, 72)

Right, so which one are you expecting it's going to be as it is or are you expecting to get an NHS prescription?

[Laughs] I'm going to be pessimistic to be honest.

(Male, 49)

There's something wrong with me, but I know that it's going to be fixed.

(Female, 47)

One recurring theme concerned expectations of feeling anxious or experiencing anxiety, nervousness, worry and fear. Although one patient viewed anxiety as natural and expected under the circumstances, for another patient it was something they always felt around medical settings. Patients tended to describe experiencing anxiety while they were waiting to see the doctor or for a specific reason, for example they were expecting to receive test results in their consultation. Alongside the feelings of anxiety, three of the patients spoke about experiencing physical signs of anxiety prior to their consultation, for example having sweaty palms, feeling hot, sweaty and jittery and having butterflies in their stomach:

OK and what are you, how are you expecting to feel throughout that entire process

Well, I think I'll feel nervous for about, because it's just yourself, you also assume things are bigger than they are.

Yeah.

By the time you get in there you're sort of like hot, sweaty you think and then the pain's gone and you think, oh God, I'm coming here for nothing, I'm wasting his, this person's time.

Yeah.

And by the time you get in there, there's no pain at all, even though, you just think, you know, oh God, I'm wasting it and then I just I feel like, I say, you know, tell me I'm OK, but yeah, this anxiety you get, really nervous, it's like going for an interview, not seeing a doctor.

(Female, 46)

Anxiety appeared to decrease if the patient had something to do or someone to talk to while waiting or when the patient was actually in the consultation with the doctor:

When I've got something to do or someone with me talking to me I'm fine, it's when I'm actually on my own.

Right.

My mind just starts wandering and you just start thinking things.

Right.

So, other than that if I'm busy I'm fine.

(Female, 38)

Although not mentioned in this context, patients expected to have activities to occupy them while waiting, for example reading materials.

With regard to feeling nervous, the extent of this appeared to be affected by the situations in which patients found themselves, for example one patient suggested that they were less nervous if they saw a doctor of the same sex, and another suggested that they were more nervous at the hospital. Several of the patients described feeling worried about seeing the doctor, and two felt that it was the responsibility of the doctor not to worry the patients until all the facts of the patient's condition were known:

the worst scenario would be that they presented me with un, that they presented me with an unnecessary over the top scenario, you know where they would tell you, where they actually make you feel paranoid about your health, where they you know blow it out of proportion, that would be the worst thing where I come out spooked [laughs] unnecessarily and that does, it has happened in the past.

(Male, 58)

I'm trying to get from him something he can't give me, but he's got to be really sensitive, he's got to actually reply, he's got to be economical with the truth in that certain ways.

(Male, 60)

Feelings of anxiety, nervousness and worry might be in part explained through patients also reporting feelings of uncertainty or not knowing what to expect in the contexts of either the actual consultation or what the doctor would do to treat a condition. From the analysis, although more patients reported expecting to feel anxious, nervous, worried and uncertain, a number of the patients spoke of feeling calm and relaxed and did not, at least for the specific consultation that was the focus of the interview, experience feelings associated with anxiety:

Yeah, I know that 'cos every time I go in there, you know, I'm always calm, you know and I feel calm and feel relaxed so I feel I can talk about anything so that's, solely on that reason that's why it's a ten 'cos every time I go in there it's, you, always for me you know it's always a calming environment and everything for me and my doctor so that's, that's why.

(Male, 31)

How a patient felt was also affected by feeling (un)confident and (un)comfortable. The extent to which a patient felt confident was talked about in three ways: first, that the patient had confidence in the doctor; second, that the patient was confident in their self, for example being assertive in getting their point across to the doctor; and, third, that the patient lacked confidence, for example in telling the doctor their symptoms or seeing a doctor they did not know:

The best would be one where, the best where, where ... the GP has a manner that makes to feel that, that makes you feel relaxed and confident in, relaxed in yourself and confident in their abilities to give you a, to give you a decent examination and come up with the right, I guess the word is prognosis isn't it?

(Male, 58)

Doctors are usually quite confident and you're looking for confidence. If you're looking for confidence in someone and you find it.

(Male, 32)

Well I think I I'm confident enough to explain my symptoms to him.

Right.

And as I say then it's entirely up to him.

Right, so for that expectation, for the best to happen you'd be confident to be able to

Yes, I think I am confident.

OK. And what's the sort of rationale behind giving it an eight instead of a five or a ten?

Well, I think I could be forceful enough to

Yeah

Yeah, I can be pretty bolshie.

(Male, 49)

Feeling comfortable was briefly mentioned in the context of physical comfort, but tended to be referred to within an emotional context of feeling comfortable with the doctor, as the quote below exemplifies:

So how are you expecting to feel during your consultation with the doctor?

I'd expect to feel relaxed, you know, to feel safe in my environment and to feel that the person who I'm having my consultation with understands who I am as an individual.

Right.

And ultimately to, you know, I'll feel comfortable with them, do whatever it is that they need to do to help me feel better basically.

(Male, 22)

I suppose I would like to see my normal doctor 'cos I feel comfortable with him and he knows me.

(Female, 67)

Patients expected doctors to make them feel relaxed and comfortable, so that they would find it easy to talk to them about anything – and this was aided by having a familiarity with the doctor. The doctor, according to a number of patients, also had the potential to make them feel physically or emotionally uncomfortable, through their attitude, by not introducing themselves or by being a different doctor from the one who the patient usually saw:

Exactly, but again you know I mean obviously I was uncomfortable, obviously though because it was a different doctor.

The GP's presence is part of the physical environment?

Exactly, but then at the same, at the same point it was a different doctor and she was, she wasn't rude or anything like that erm she did ask like about the medication that I was on at the moment, she did ask which one, she weren't rude or anything like that and as I said it was more of the shock

Yes

of not having my usual doctor erm so I think, I think I'll put a five down for that [referring to the rating for the expectation chart].

(Male, 31)

That's the main thing the worst would be for me to be very uncomfortable both physically or at all emotionally through their [the doctor's] actions.

(Male, 36)

Yeah. I don't, I've never seen the doctor before, she didn't introduce herself, she just sat there and waited for me to speak.

Right.

And I'd find that a bit uncomfortable.

(Female, 47)

This section has discussed the expectations that patients have regarding the manner of their doctor and how patients expect to and indeed do feel before and while seeing their GP. The next section considers a specific aspect of the doctor–patient experience – the extent to which the consultation is a 'personalised' experience.

Theme 2: personalised experience

Patients placed a significant emphasis on what can be described as having a *personalised experience* when they see their doctor. This can affect how the patient feels in, and about, the consultation. To begin with, patients felt that it was important that they were greeted or welcomed by their doctor through an action such as a smile or handshake. When a patient sees a doctor for the first time it is important that the doctor introduces themselves, as patients said that they felt more comfortable knowing the name of the doctor:

The best thing, a good handshake, calls me by my name and he's sort of smiling. I don't think I'd say happy to see me 'cos GPs probably prefer not to see anyone because then everybody was well, but you know, pleased to see me and you know just says hello, how are you, that kind of thing.

(Male, 36)

Ah, just like it is now I suppose, you sort of, one you can't always see the same GP, so sometimes you see a stranger and when they come and greet you, that's quite calming because you're going in there 'cos you think or you have got something wrong, so when you're greeted and he say I'm Dr Joe Bloggs.

(Female, 47)

Because they [doctors] are warm and friendly when they come out [of their office], smile.

Yeah.

They greet you, they usher you through to their room, they don't just, Mrs [name] and stomp off and expect you to catch them up or anything.

(Female, 46)

It was noted by the patients when doctors did not greet them, with one worst-case scenario being that they were treated as an 'inconvenience':

[doctor says patient's name], yes, and she just marched off.

Right.

So I was really disappointed and, and quite shocked.

Right

So, yeah.

So what are you going to give that then?

I don't want to give it a zero because she didn't look particularly irritated or cross or dismissive, it was just like [name of patient] and she was off.

(Female, 46)

Nightmare consultation is basically a doctor that erm, they don't do it here fortunately here, but one of those doctors where they have a beeper where it just lights up outside and a red light comes on and you know that you need to go through, you open the door and they just sit and look at your notes without real lack, well without welcoming you so they're sitting at a desk, they may look over to the door, sit down and just sit by their computer really, so they don't treat you really like a person and they treat you more like an inconvenience.

(Male, 36)

Several of the patients expected to see or would ask to see a specific doctor. Patients tended to prefer to see the same doctor, one that they knew, each time they visited the surgery, and one patient suggested that this provided continuity of care for a specific health issue. When a patient's preferred doctor was not available, some patients would wait until they could make an appointment with their preferred doctor. However, this is not to suggest that all the GP patients wanted to see specific doctors, as several were happy to see whichever doctor was available, and patients mentioned that they often did not know which doctor they would see:

I do prefer to see the same doctor, all through it's better I think than [to] keep seeing different doctors in the surgery and having to go through a history and that.

(Female, 38)

I always try, if I can, to see the same doctor.

(Female, 81)

I've been with my doctor for so long you know it's sort of like more, more of a bond there and I feel a lot more comfortable, a lot more at ease to be able to talk to my doctor myself.

(Male, 31)

I haven't built up a doctor-patient relationship with any individual here.

Right.

Which is something that I think possibly concerns me a bit about the practice that in four years I still, there isn't anybody here who I can identify as being my doctor.

(Male, 58)

The personalised experience was enhanced when the patient knew the doctor and when they felt that the doctor knew them. It was in this context that the patients spoke of having a 'personal experience' with the doctor; the sense of knowing and being known by the doctor was highly valued, with lack of mutual recognition serving to detract from the experience for some patients:

But when you've been with a GP long enough and when he's seen your notes, obviously he may recognise that certain people are going to have certain chronic problems or certain repetitive things that they tend to come in for ...

Yeah.

... I haven't been with this GP long enough or visited them often enough for them to have sort of accomplished that yet really so they're probably not going to have any idea what I'm coming in for.

(Male, 36)

Just a generally warm welcome, just a sort of manner that's going to put me at ease and just, I would expect that he'd actually seem interested in my problem sort of a more personal experience really that's the sort of thing I'm hoping for, a more personal experience rather than a conveyor belt.

(Male, 36)

Alongside knowing the doctor and/or being known by the doctor, the personalised experience was enhanced by the doctor making eye contact and displaying positive body language as well as there being a good rapport between the doctor and patient. This was characterised by a chat or 'friendly banter':

Sometimes we, you know we seem to have a bit of friendly banter and like between the two of us as well which is sort of, perks me up even more once I've been in, we don't like always have a bit of banter, you know, but sometimes you know he'll say something funny or I'll say something funny sort of thing.

So someone you can have a laugh and a joke with?

Yeah, yeah exactly and then again that's why, that's why I've said about seeing my doctor, and 'cos sometimes I'll walk out and sometimes I'll walk out of here a damn sight better than when I've come in and it sets me up for the days, it's weird but you know, that's how it is you know.

(Male, 31)

I shall ask him how his little dog is because [laughs] I've got a dog and they met up with sometime, so I ask him about his dog but that's ...

So you have some friendly chit-chat?

Oh absolutely, yes.

(Male, 83)

I first met him [the doctor], he introduced his self, and I was pregnant at the time and that was my first child, and I was like, you know, and then through the years and I used to go and I used to speak to him like I spoke to my dad, and that was good, because I could tell him anything.

(Female, 47)

Another aspect of the consultation that can affect patients is how they feel that they are treated by the doctor. Several patients suggested that not being taken seriously by the doctor would be an issue, with one patient saying that they might feel that their integrity was being questioned. Patients also spoke of not being treated as a person, being ignored or being treated as a number or as an inconvenience by the doctor:

She don't even look at me [laughs] because normally I go help my name's and then that's it, they just stare at their computer and then they go right you've had these tablets, you've had these, you had these, I'll try these and they don't even give me eye contact and they never ask me what's the matter.

(Female, 29)

In contrast, patients identify being treated positively as being given the full attention of the doctor, the doctor regarding the patient as an individual and intelligent, and being treated with respect:

Yeah I suppose caring, you know a genuine sort of level of caring towards you as an individual there, they want to help you, to me that would make me feel relaxed and safe in knowing that they want to help me.

(Male, 22)

Feeling that he's not wanting to push you out of the door to get to the next person in, that you're actually this is your time and your space with him and he's giving you one hundred percent of that, so there's no pressure on, so you're not feeling he's just wanting to get you done and dusted.

(Male, 60)

Well say a comparison, you go in a shop and some shop assistants are very pleasant and some of them are grumpy and rude and not really polite and that's not right, you shouldn't treat the public like that, GPs don't, they treat them [clears throat] as a patient and with courtesy.

(Male, 72)

The first two sections have highlighted what could be described as the emotional aspects of going to see the doctor and the importance of the doctor's manner as well as the extent to which doctors know or can appear to know (about) the patient. Alongside this are the emotions of the patient, whether they feel anxious or relaxed, and the significance for some of knowing and being known by the doctor they see and the reality or the perception that the doctor knows about them as an individual. The following section moves onto the practical aspects of the consultation,

but the emotional aspects discussed above still play a significant role in the expectations and experience of the consultation.

Theme 3: the consultation

Before talking about the consultation, the appointment-making process was mentioned by a number of the patients, and, although this is outside the scope of the project, it is worth mentioning to highlight the difficulties that some patients reported having in either making an appointment to see a doctor of their own volition or making a (follow-up) appointment because they had been told to do so by the doctor or practice:

'Cos like if you're making a first appointment it's a bit of a chore and it's a bit difficult to try and fit it in with your work, you getting an appointment that's convenient, but if the doctor said to you I need to see you in a week's time I would expect to go out of his room to the receptionist and make that appointment, I wouldn't expect to have to ring up in a week's time and try and fit it in again with my work.

(Female, 46)

The doctor said they wanted to see me in a week, not two weeks, that really annoys me, like I come in when I'm ill and I can't get seen until the week I'm better [laughs] when I've got my appointment and I just cancel it to say I'm better now and I've fixed myself. *So you expect a follow-up fairly promptly.*
Yeah if I need one, I expect one to be able to say, it don't matter what time of day it is, you know, just don't want to wait a week.

(Female, 29)

That can be a problem if you've got a follow-up appointment from your GP when I go away he says I want you to come and see me in four weeks time, I then go see the receptionist and I expect from the receptionist co-operation to actually book me an appointment, an early morning appointment to come in to see the GP rather than be told I've got to keep phoning in.

(Male, 60)

Patients referred to several aspects of the consultation: the reasons why they are seeing a doctor, the style of the consultation, the length of the consultation, doctor–patient communication within the consultation and what the doctor would be like in the consultation, including what the patients viewed as positive and negative things a doctor did in the consultation.

During their participation in the research, patients were not asked specifically why they were seeing a doctor; however, in the course of the interviews, it became clear that several of the patients had ongoing or recurring health issues and therefore were aware of the issues surrounding a particular health concern, or used their single appointment to raise multiple health issues with the doctor. Patients also felt that the doctor would ask about their previous health issues, and a few felt that they already knew what was wrong with them, and perhaps knew more than the doctor:

Well if I did it perfectly I'd probably be in there about half hour or more but you know in depth he'd ask me about the different aspects of my various problems one by one, and deal with each one, one by one.

(Male, 58)

Yeah duration I mean I generally don't take very long because I've generally got an idea and an expectation of what the diagnosis could be and what potential follow-up to that

is, so I can usually go in fairly quickly and state symptoms and the history and things like that, let them know what I think something might be and then it's really just a quick chat and a general examination so I generally don't take very long.

(Male, 36)

Because I've had this problem so many times, I know the doctor like the back of my hand; I know exactly what he's going to tell me and what he's going to do.

(Male, 45)

The expectations and experiences of consultation style or the ambience varied between patients, such as being described as 'a bit informal' or of 'a high standard':

And she commented on how you feeling, she had a little bit of a joke as well you know that's what I want, I don't want to go in there and act all serious all the time, you know so it was a nice not to have that formal thing about it, it was a bit informal and I like that, that's good.

(Male, 22)

A few of the interviewees suggested that the doctor was responsible for creating the ambience or atmosphere of the consultation. For example, one interviewee expected a warm environment created by the doctor, but the post-consultation interview revealed that this patient's expectations had not been met:

The physical side, I'm don't, I'm not quite sure what they're gonna be, the environment is going to be created by him [the doctor].

(Male, 49, pre-consultation interview)

Yeah, so cosy, warm environment you was expecting a nine.

I was warm.

Yeah.

But again, I think his [the doctor's] personality, you know, I'll knock it down to a seven again.

Right. Yeah.

But that's personal demeanour, that's him [the doctor].

(Male, 49 post-consultation interview)

Because they make you feel welcome here and, you know, not so you come, so you want to come everyday, but you're made to feel, you are tried to make [made] to feel at ease.

(Female, 59)

The expected length of the consultation varied: one patient described it as needing to last for 'as long as it takes', whereas others preferred a straight in-out approach. When time was referred to, patients tended to want or expect the consultation to last between 10 and 15 minutes:

Well bearing in mind that the injection I have to unclot, I have to put my trousers down, vest up, he then gives me the first injection and I then wait a couple of minutes for it to take affect.

Yeah.

And then while I'm redressing again, he is on his computer and I don't expect to be in there more than fifteen minutes.

(Male, 83)

A key aspect of the consultation was the communication between the patient and the doctor. This should be viewed in conjunction with the sections on how a patient feels and the personalised experience of the consultation. Patients expected that the doctor would talk to them and begin by asking why they were there (although for some patients this was a question *they* wanted to ask, as they had been requested to make appointments):

Well he'll ask me how I've been and I'll tell him and take it from there you know.
(Male, 58)

He'll, I imagine he'll greet me like he normally do, how are you, and then ask what the problem is and then if they're not sure ask again and then obviously look at the problem.
(Female, 47)

You go in and they ask you to sit down don't they?
Yeah.
[Pause] sometimes they ask you why why you're there, but they already know why I'm going to be there this time as they actually sent for me.
(Female, 59)

In return the patient would explain to the doctor why they were there, outline their symptoms and perhaps expect to provide a context or timescale:

Tell them the symptoms I've got.
So, OK.
Explain how long it's been going on for and hopefully we can get to the bottom of what the problem is.
(Female, 38)

Yeah, basically I'm going to tell him a brief history of what's happened up to this point and the thing I'm particularly worried about, get him to have a quick look and hopefully, he'll either to sort of allay my fears or what it potentially could be or just guide me to the right person to sort it out if it does need sorting out.
(Male, 36)

I need to explain my symptoms quick, in the shortest way possible and as accurate as possible.
(Male, 60)

At some point during the early stages of the consultation it was expected that the doctor would look at and, if appropriate, refer to the patient's medical records to inform them about the patient's medical history. Patients felt that looking at their medical history would provide the doctor with some contextual information that may or may not be useful in the diagnosis or ongoing treatment of their health issue, while also providing them with the opportunity to check up on the outcome of a previous health issue (which was appreciated by the patients):

The doctor didn't know me personally and so didn't know because I've had no previous dealings with her she couldn't refer back to her own experience, but she obviously got my notes and had looked at them on the PC, I could see her referring to them whilst we were doing it and adding to them, but again she picked up on something, on an issue I'd had in September, right.
Right.

And asked me how I was going and how I was feeling with that and how that was affecting me still, you know, was it still cropping up and things like that, so not only had she access to the notes, but she referred back, which I thought was excellent.

(Male, 36)

When I go into the room I want them to know who I am, because on records they've got what, what you've had done previously, you know, where you live and everything and, you know, when I go into a room I want to know that the doctor I'm seeing knows what they need to know about me.

So they're aware of your history.

They're aware of my history, yeah I want them to know what they should know about me, you know not anything else but you know so that by them knowing, well for me to think that I know that they know.

They've read your notes, they've read your notes.

They've read my notes, that makes me, going back to the old point that makes me feel comfortable in my surroundings and I know that I can feel comfortable which is why I've never left this practice really.

(Male, 22)

Having received this information from the patient and referred to the patient's medical records, it was expected and hoped by the patient that the doctor would understand their situation and carry out appropriate actions that would lead to a diagnosis (this aspect of the consultation is discussed in greater depth in the following section on examination through to outcomes). Alongside this it was expected that the doctor would talk to the patient and provide an explanation of what they were going to do:

She [the doctor] explained, she explained things well.

Right.

She done it so I could understand, because I don't understand medical terms.

(Female, 59)

Yeah she gave me advice on the first issue that I had [which] was very good. Second issue very quickly identified the problem and I sort of explained that I'd looked into it and had kind of gone through most of the things I thought it maybe without a need to be referred on and she agreed straight away, told me exactly who I'd probably need to see, not necessarily the doctor, but the department I'd be needing to go to, what the result probably would be and the treatment that I'd probably end up receiving and explained that very well.

(Male, 36)

And if he offered me treatment, drugs whatever, and I was unsure about it, I would want to, I would, if I asked him what alternatives are there, I would expect him to say, to be honest with me and say, well there are alternatives, but they aren't as good, these are the reasons why or I would want him to say, no I'm sorry there are not alternatives, I would want him to be straightforward with me in that respect as well about treatment.

Right.

Just a thorough explanation.

And being honest and open.

And listening to my questions and answering them honestly and accurately and not fudging the issue.

(Female, 46)

Two issues emerged from the data relating to doctor–patient communication during the consultation. First, patients expected doctors to take care over what they told patients, with one patient suggesting that sometimes doctors needed to be economical with the truth:

So he's economical with the truth, he may have some suspicion that something serious is quite seriously wrong, yet he's not going to actually express that suspicion until he knows from the test results exactly what is going on.

(Male, 22)

Second, and perhaps an area of greater concern, surrounds the active unwillingness of some patients to tell the doctor about aspects of their health that might be relevant to a diagnosis or treatment. Patients suggested that being in a position where they could not talk openly to their doctor would be a worst-case scenario, and for two of the patients this reflected reality – and they chose to withhold information about their symptoms. These actions would be influenced by seeing a doctor they did not know or feeling too inhibited to speak openly to the doctor (noted earlier in discussing the negative aspects of a doctor's manner), but could also be influenced by patients' past experiences:

I can tell the doctor what I come to tell him, but I don't always do it.

Based on past experience, something you've had problems with and
Yeah.

And you get home and think oh I wish I'd said

And I've learnt to keep things quiet and secret.

Right.

I've learnt to through bad experiences I've learned to do that, I've learned that you don't tell everybody everything ...

Yes.

... and I've learned that you don't trust everybody and I'm very wary and very cagey sometimes people around me and you keep it here and you think only I know that and no one else know that and that is how I do it.

(Female, 59)

Yeah ... yeah I did get that, you know again as I said earlier she weren't she weren't rude or anything like that, she was there to do her job, so but it was just my choice not to, it was my choice not to tell her the things that I wanted to discuss.

(Male, 31)

The worst would be, if you go in and obviously sit down or take and seat and you sit down and there's, they'll look through your records and there's a silence, they ain't saying nothing and you're worried about what you're going to say, by the time they actually spoke to you, you've forgot what you went in for because you think there's something wrong because they haven't spoken to you, and then if you feel there's something there and if you feel you're not being taken seriously.

(Female, 47)

During the course of the consultation patients expected that the doctor would listen to what they had to say, but one fear was that the doctor would not listen to them. For example:

I'd feel relaxed [if the doctor listened] and I'd feel like the doctor was treating er my indigestion, I've got another word for it, it's gastro something but and I'd expect him to sort of think that is serious matter instead of just thinking, she's got indigestion again, you know. I always thought indigestion, you know poor old soul, you're alright but that's

worse than that, so I expect her to say you know I'll listen to you, I'll help you, you know and make you feel relaxed and comfortable and make me feel like I've been listened to and understood.

(Female, 29)

Aside from listening, patients identified other positive actions from the doctor including the doctor being interested in the patient and demonstrating understanding as well as providing the patient with information – whether this was a detailed explanation, guidance or explaining something in lay terms:

Rather than just go in and find out what's wrong and away you go you know they do try to explain and talk to you you know it's although may not understand all the medical things, but then you tell the doctor that you don't understand what he's saying and then they break it down into layman's terms so you do, you know.

(Female, 59)

In contrast, the negative actions that a doctor could display were, for example, appearing disinterested, appearing unprofessional, not asking or answering questions and failing to explain to the patient about their health and possible future situations:

Yeah, 'cos they don't even ask me about it no more, they don't ask me about it, they just say got indigestion again have you? Yeah. They don't ask me what or nothing.

So what would be the worst?

I'm in and out in two minutes.

And just like a conveyer belt really.

Just chuck you in, chuck you out.

(Female, 29)

The worst case, apart from the obvious of not receiving the sick note, would be, would be for them to just to say no you're not having it, not, not give me an understanding of why they wouldn't give me the sick note.

With no explanation.

Or not offering any alternative methods of recover for me.

(Male, 22)

The previous section considered the general aspects of the consultation. The following section focuses on specific aspects of the consultation from the examination through to the outcomes.

Theme 4: examination through to outcomes from the consultation

Five aspects of the consultation were identified, patients' expectations relating to these features: an examination, tests, a diagnosis, treatment, prescriptions for medication, and outcomes.

Whether or not patients expected a physical examination depended on their symptoms and past experience; however, when they did they expected that the examination would be thorough and be considered from the patient's perspective. It was important that the doctor explain to the patient how far they needed to undress to maintain and respect their dignity while being examined. Patients also wanted examinations to cause minimal discomfort, although the possibility of examinations being painful, uncomfortable or rushed was acknowledged:

And I think as well when you're being examined, it's nice that again that you're treated respectfully and they, that, you know, they either explain what they're doing or, you know, they make some kind of connection with you, because I think if you were just

examined in complete silence, that would be quite intimidating and quite, it's quite a, even if it's not an intimate examination it's quite unnerving being touched by someone who you're not familiar with or who you don't know very well so I think, you know, just to try and put you at your ease.

(Female, 46)

The best consultation is one ... one to be at, for me to be as comfortable as possible, both sort of physically and emotionally, for them to, if I needed to remove any clothing or make anything obvious, to keep that to a minimum.

Yeah.

Erm [pause] and just for them to be very professional about it, you know just treat me I would say delicately, but again I suppose professionally and just you know not obviously not leer or anything like that.

That that comes up in the next one.

Yeah, just be professional, keep it ... any removal of clothing or any discomfort to a minimum, yeah that's about it.

(Male, 36)

Yeah, whether it's, you know, don't hurt me too much.

Yes.

'Cos that can get to where, an exam can be painful and actually come out feeling worse than when you come in.

(Female, 38)

One female patient expected that if she needed an intimate examination by a male doctor then a female nurse would be asked to be present:

If it was an intimate examination and it was a male doctor, I'd hope that he'd call the nurse in.

Right.

And that he would have a screen that I could get undressed behind and he would explain to me what clothing he needed me to remove and what he needed me to do.

(Female, 46)

Unlike the cardiology patients, most of the GP patients did not expect to undergo any tests while at the surgery or with their doctor, expecting instead to receive test results:

Er, they normally take my blood pressure because I've had some blood tests took, because I get numbness all down my arm and tingling in my fingers, pins and needles so they took blood, so I've got the results in there, so I'll expect to get my results back as well for that.

(Female, 29)

And how are you expecting to feel throughout the whole entire process?

Well that depends, all depends on what the result of the urine test is, but it doesn't matter which way it is, either there's going to be something done about it or something ain't, either they can do something or they can't.

(Female, 72)

Most hoped for good test results, although one hoped that her test results would prove that there was something wrong with her:

The good thing about my blood tests is that they [the doctors] might take me more seriously 'cos they could see, like I could be anaemic and not have enough iron and things through lack of food, so I'm expecting, the best possible thing is that they see my blood results and think Jesus, I should have done something.

(Female, 29)

Patients expected to receive a diagnosis from their doctor based on the explanation of their symptoms and answers to any questions asked by the doctor, combined, when appropriate, with an examination and test results. In receiving a diagnosis patients wanted this to be honest and accurate:

He will examine me where I have the pain.
Right, OK right, so GP will physically examine [you] right.
 And then he will give me his opinion on what he thinks it is.

(Female, 58)

I want an honest diagnosis.

(Male, 58)

So how would you know he was being straight with you?
 Well he would tell you exactly the score of what is wrong.

(Female, 58)

However, patients were aware that they might not receive an immediate diagnosis as further tests might be required and the doctor would wait for the results rather than guessing at a diagnosis. Patients also raised issues of doubt about diagnoses (e.g. having previous experience of a misdiagnosis):

Because I have in the past, I once went into a GPs with, with a, I don't know what they call it, viral hepatitis B, the one that was going around like flu and the doctor told me I had stomach ulcers and treated me for those, so you know [laughs] so, you know, they can be pretty shocking.

(Male, 58)

Patients commented on the impact of receiving a diagnosis and that it could affect how they felt and their emotions, but that they would be better able to cope and to plan once they had the diagnosis:

Yeah, knowing what the outcome is going to be, I think that's was it is. I'm a person what likes to know and if I don't know then I worry.

(Female, 72)

I'd feel great, top of the world, just think about, again, right I can go and get dinner on, feed the cat, so you can start planning again.

Yeah.

'Cos when you come in you're dreading, you don't know who's going to do that planning for you, but when you're leaving you know exactly where you're going and what you're going to be doing, even what you're going to watch on telly because you're more focused too, because that's not bothering you, that's gone.

(Female, 47)

A positive diagnosis of a health condition appeared to make patients think beyond themselves to the implications it would have on the future and their family. As one patient put it, a positive diagnosis meant:

You've got to make decisions you don't want to make.

(Female, 46).

Once a diagnosis was made or the state of an ongoing health issue was established, the next stage concerned how to treat the condition. Patients expected and/or received a form of treatment, with some expecting a specific treatment or an alternative treatment to their current one. As well as talking about treatment as a generic term, patients spoke more specifically about whether or not they expected a prescription. Some patients wanted medication and received this or wanted their current prescription altered:

As a prescription it's easiest if the medication is, it counter the symptoms as powerfully as possibly so if you go to the doctors in the morning and feel down you go the, the pharmacy to pick up the medication by the evening that day you're much better again and that's really what you're looking for.

(Male, 32)

Other patients did not want or expect medication because they did not feel that their existing medication helped, or they did not like taking medication:

So are you expecting a prescription at all?

No. No I'm not expecting a prescription at all.

OK.

Whether I will end up with one or not, I don't know.

(Female, 59)

Issues of concern were raised about medication including side effects and having to pay for it:

some of the drugs have side effects that clash with other drugs and I've found myself recently being in that situation where they've introduced a third drug to counter balance and I don't want to go down that route you know I just don't like the whole idea that scares me.

(Male, 58)

Four main outcome expectations were identified from the data: general outcomes, referral, lifestyle advice and reassurance. General outcomes included positive outcomes for the patient, which tended to be what the patient hoped would happen (in short, that their health issue would be resolved so that there was nothing to worry about and they could leave the consultation feeling more positive):

I expect him to say right, I mean you know I'm your doctor and I've let this go on too long, I'm gonna to fix you because this makes you really ill and he's my doctor so he should fix me, I've had it for like over two years, he should fix me [laughs] that's what I expect.

(Female, 29)

OK, so you expected to go away feeling more positive, you was expecting a ten [rating] there?

Yeah, in a sense am I positive, yeah I am actually, ten [rating].

That's ten as well.

'Cos I'm happy that (a) I know my tests are cleared, so I know there's nothing ... going on underneath, underlying ... and secondly I know that this problem is ... not going to cause me a great distress in my day-to-day life, that's the reason I came to ten really.

(Male, 60)

However, when a health issue was diagnosed, the positive outcomes were connected to the patient starting 'a journey leading towards recovery' (male, 60), with a course of action decided on and possibly a timescale.

For some patients a lack of resolution of their problem was either their worst-case scenario or the actual scenario they were faced with, which led to uncertainty. They had the possibility of returning to the doctor if the problem continued or they felt that one consultation was not enough:

As I say if he's inconclusive at that point it that makes the worrying even worse doesn't it if you if you have a pain or something wrong and he says 'Well, I'm not sure what it is' then you immediately think oh [mumbles], yeah.

(Male, 32)

Just getting really nowhere in the sense that you're still in the same position as I came two weeks ago really, that's not going to go any, you know, I've still got the symptoms and the problems, but there's no, there doesn't seem to be any ending of it.

(Male, 60)

The negative outcomes for the patient were not necessarily connected with receiving bad news about their health, rather with being left dissatisfied or disappointed with the doctor and their (lack of) action:

Not getting referred would be the worst and just to come out feeling that I've got to go and stick with this indigestion again for another couple of weeks because I've got it now and then that'll be back in two more weeks and that. I know that I've got to come and moan at them again.

(Female, 29)

Yeah, obviously I'm disappointed because I didn't get a definitive answer to what my query was that I went in with.

(Female, 46)

One specific outcome that patients mentioned was a referral. If a patient was to be referred, for example to a hospital for further tests, they wanted an explanation of the process but more significantly an indication of the timescale. Patients varied in their opinions towards referrals: some patients did not like or trust hospitals and wanted to avoid a referral whereas others did not mind:

I've got an appointment not for the doctors, I've just got an appointment with the hospital and I've got an appointment with a specialist about my numbness in my arm, so I won't be seeing the doctor obviously, specialists at the hospital, so that's fine, they're going to send me appointments as well.

(Female, 29)

Zero out of ten would be, ah I had to go the hospital, referred to the hospital, I come out, I wouldn't be smiling, I wouldn't be crying, I'd be a bit deflated and then all the way walking home, that's just going to bother me and just think, why couldn't he just do something, you know.

(Female, 47)

The doctor was viewed by patients as a source of (lifestyle) advice and in general this was viewed as a positive aspect of the doctor's role. However, this positive view changed to a negative view if patients felt that the doctor was expected to or might actually advise them to change their lifestyle for the benefit of their health, for example by stopping smoking or moderating their alcohol intake:

I'm getting like a lecture [about smoking] from the doctor about what, so he's like really going on about it sort of like what sort of damage it's expecting to do to you, etc. etc. you know if he really starts dragging it out then to me that feel like a lecture and that would be the worst scenario for me.

(Male, 31)

Well if I get any lifestyle advice, I'm sure they'll tell me ... I'm sure they'll tell me that I should take more exercise and to, to moderate for certain my alcohol intake, that will be the, that will be what they, I would be very surprised if they say anything beyond that really, my diet and stuff is pretty good, so I think that's what they'll, I think that's what's likely they'll just, they will, they will advise me, they will advise me just to live a more healthy lifestyle.

(Male, 58)

The final outcome that patients expected was reassurance:

I've wasted ten minutes of his time, but the best ten minutes of my life, just to come out feeling a lot better.

(Female, 46)

What, I just, I really just come to see the GP, I think mainly for reassurance, I've got something that reoccurs, has done for the last five years, so it's just really, I don't think there's really a problem there, but I want to find out, that it's not what you think it is, it's fine.

OK.

So that's really what I want, I've come for reassurance.

(Female, 47)

Although not every patient expected to be or felt reassured by seeing the doctor, reassurance was an important outcome from having seen the doctor. This provided patients with a sense that everything was all right and that their particular concern or health issue was not more serious.

This section has considered the stages of the consultation and what could be broadly described as the expected good practice from the patients' perspective, which would lead to the patient leaving the consultation satisfied. The next two sections consider underlying themes of spaces and time.

Theme 5: spaces

Three spaces were identified by the patients: the surgery or practice, the waiting room and the consultation room. Several issues were mentioned by patients in relation to the space of the surgery/practice. Most patients had been with the practice for a long time and rather than comment on the physical space of the practice it was the people within this space that mattered,

in particular the receptionists and the nurses. The receptionists, when mentioned, were mostly regarded as welcoming, and were expected to greet the patients, answer their questions and be pleasant. It was hoped that the receptionists would not be inattentive or show a lack of interest in them:

But I would expect her [the receptionist] to look up, smile, hello, how can I help you.

Right.

I'm Mrs [name] I'm here for my appointment at ten o'clock, oh yes you, the doctor will see you shortly, if you would like to take a seat and wait.

(Female, 46)

They're very quick to answer when you come, unless they're on the phone or anything, but most of the time there's somebody there to answer and if you feel you want to have a talk you can go, if they're not too busy and you can talk to them.

(Female, 72)

Well when I came in the receptionist was talking to a colleague behind the screen and she was aware that I was there and she didn't (come over), she finished her conversation before she came over and I, I wasn't irritated but she was, I noticed it.

(Female, 46)

Nurses were contextualised by the patients as carrying out a variety of routine or minor aspects of health care and might be seen if the doctor was unavailable:

I mean you go and see the nurse, she does syringes your ears, takes blood tests.

(Male, 58)

Well I saw the practice nurse Friday and she took my blood pressure and sample and everything was clear so I haven't got that to go through today.

(Female, 72)

After arriving at reception, patients would wait in the waiting room. The expectations of the waiting room included the environment being well managed, comfortable, friendly, having an appropriate temperature (not too cold or too hot), being clean and tidy with comfy seats and having activities that a patient could take part in (e.g. reading materials, children's toys):

How would describe your perfect GP waiting room?

Not too warm and not too cold.

Right.

Magazines.

Yeah.

Unobtrusive music perhaps playing.

Yeah.

If I had children with me I'd expect toys or something there to amuse the children, comfortable seating, light and airy.

(Female, 46)

It would feel like a sort warm area or atmosphere that you're actually in, and not, when you walk in somewhere, the worst thing is having some like people staring at you see, if you're coming into a room where everyone's there for the same reason but everyone's erm sort of pleasant and polite.

(Male, 22)

I would expect to be able to sit down, have room to sit down and I would expect the seating to be relatively comfortable, I would expect the experience to be you know not to be sitting on dirty seats in a messy waiting.

This is in the waiting room?

Yeah yeah. I would expect it to be kind of ordered, not over the top to the point where you don't feel comfortable with it [laughs].

(Male, 58)

As has previously been suggested, activities appear to reduce the anxiety of some patients. Patients also referred to listening to music while they waited as being a positive aspect. One patient regarded the waiting room purely in functional terms, as 'simply a place that you would park your body' (male, 83).

In contrast, the patients did not expect (or feared) the waiting room to be crowded, unkempt, dirty, too hot, with screaming children and with glum and miserable people lacking activities:

[W]hat would be your nightmare GP waiting room?

Overheated.

Yeah, OK.

So to me being too hot's worse than being too cold.

Yeah.

Noisy.

Noisy.

No reading materials, peeling paint, scruffy, uncomfortable.

(Female, 46)

[W]hat would be the sort of nightmare waiting room, what would that look like and feel like?

Nightmare waiting room, I, oh, well it'd be small.

Right.

It'd be busy and I think the worst thing where as people got all different ailments and they're coughing and spluttering over you and

Right.

And you get the odd person that has, not through their fault, but who's got body odour and things and they're sitting on top of you.

Yeah.

And then you've got families with children in prams that are, the kids are getting restless, screaming their heads off and then you've got the poor receptionist with the phone going and someone having a go at her, because they haven't got an appointment to see the doctor on time, to what they thought, so and because she's all flustered, this kid screaming, this guy smells and someone's puking up in the corner [laughs].

(Female, 47)

Once in the consultation room, patients expected this space to be clean, cosy and a space in which they would feel calm and happy. With regard to the physical aspects of the room, it would be private, closed, a confidential space. A few of the patients emphasised the importance of the consultation room door being shut whilst they were with the doctor:

[A]re doors open or closed?

Well yeah they're always closed so it's always sort of private.

(Male, 58)

That would be shut, I want that to be shut because you know I think that's private you know although it's not, just a suggestion if the door's open then you know people keep walking past and coming in and out and you don't get the attention of the doctor anyway, so I expect the door to be shut, is that what you mean.

Yeah, I just wondered whether you expected it to be, you know, left ajar, open, shut or what?

Shut, I like it shut 'cos I like to be full of attention [laughs], but I don't seem to get it so I might try it open today, but no I expect it to be shut.

(Female, 29)

Patients expected the room to be functional as well as pleasant, and to be able to see that the room was clean, tidy and organised and had appropriate furniture, for example a bed, desk and computer:

Well, desk set out neatly obviously with this one you've got the examining table there and it's tidy, scales sort of everything in its place you know no clutter, depending on what they do in this surgery I mean you go and see the nurse she does syringes your ears, takes blood tests if you go somewhere like that I suppose you expect everything to be out of the way no syringes and stuff lying around.

(Male, 58)

[W]hat makes a typical GP's room for you?

Well the desk, the computer, the you know the stethoscopes and the, and the bed you know, with your screens and things like that, usually you know your usual things that you'd see.

(Male, 45)

The patients did not expect the consultation room to be impersonal or for this space to be dirty, smelly, unhygienic or cluttered:

Yeah a nightmare doctor's office would be just sort of clutter everywhere, looking like it hadn't been tidied up at all and maybe was just left the way it was from the last patient who'd been in, so a lot of evidence of the last consultation that they'd had. Maybe looking like it was a general workspace, again there's no personal effects or anything in there or nothing that identifies it as being a particular doctor's office, then it makes it a little bit less friendly and less personal. And obviously the other thing is obvious dirt or rubbish left around so if the sink was dirty or maybe there was some, you know, say some swabs or something that had another patient's blood on them or something like that laying around, something just basically unhygienic.

(Male, 36)

I think it'd put you off if you sat in a doctors you know in their actual surgery bit with a grubby floor and you know or dirty carpets and finger marks all up the walls and all that sort of thing that would probably put you off a bit.

(Male, 45)

Although the patients commented on the spaces that they inhabited during their visit to the doctor's surgery, it was apparent that a lack of attention was given to these spaces, even when the patients were specifically asked about them:

[W]hat things are you expecting to see in that time period?

Nothing really, just the doctor.

Right, anything else about the physical environment?

No, I've been coming down here too long, I don't even look around now.

(Female, 81)

That the room would be pretty plain and clinical with some

Well I didn't take much notice of it as we were talking together so I didn't really bother with that.

(Female, 72)

It wouldn't bother me if that [the consultation room] was just painted white or black, that really don't 'cos I'm there to see him and not the décor if you know what I mean, you'd expect it to be clean.

(Male, 45)

As with the cardiology patients (see later), a 'taken for grantedness' existed about the spaces of the surgery/practice, waiting room and consultation room, suggesting that patients did not feel that there was anything too wrong with these spaces and that they fitted their requirements.

Theme 6: time

Time was an oft-commented on expectation. As with the cardiology patients, patients in the GP surgery expected to wait before seeing the doctor. Most did not mind waiting as long as this was not for too long. However, waiting had an affect on some patients and they could begin to feel anxious or become fidgety. Although patients were aware that a delay could be the result of an emergency, they still wanted an explanation if they had to wait:

Because I've never, I mean all the time I've been here, everything has just, I've not had to wait long, even with appointments I haven't had to wait long and to be quite honest.

(Female, 47)

I wouldn't expect to be seen instantly because I know that patient's appointments can vary in length.

Right so

So I wouldn't have any great expectation to be seen instantly.

(Female, 46)

Really I was getting fidgety, tapping my nails, picking at my nails, tapping my watch, that's me getting anxious and getting really, really getting ready to walk, if I hadn't been going in the next patient, I would have said I'm going.

(Female, 38)

It was very uncomfortable about another ten minutes longer I'd have been gone, I wouldn't have been here, that was how bad as it was getting because I was starting to get quite stressed out and quite sort of anxious and quite as I waited and I know, I know I'm getting to that point because I start I start sort of stretching and start sort of like flexing sort of thing you know, clicking all my bones and stuff and normally when I get to that point it's not long after that point before my patience go you know and I start being rude and you know can be aggressive so yeah, a bit longer and I'd have been gone [laughs] yeah.

(Male, 31)

Yeah. If they're running behind times, something's happened that's quite acceptable, what I find difficult is sitting here, you think what the heck's going on.

(Male, 60)

Yeah, the only time I can imagine if it was, is if there was an emergency, something like, someone that needed his time and then I'd be happy to sit back and wait, so but, I think the longest I've waited is fifteen minutes.

(Female, 47)

For some patients, having to wait was significant because they had only a limited amount of time, for example they had had to take time off work to see the doctor and did not want to waste this time waiting:

I get limited time off work so I like to get in and get it sorted and get out.

Right.

'Cos I have a lot of things to do and I don't have a lot of time off work, so I have to fit a lot in.

Yeah.

So I have to get in, get out, get it sorted, you know, and get out, so that's my main point.

Right.

That's why I rang up yesterday for an appointment so it might sound weird or selfish but that's just the way it is with me, you know.

(Female, 38)

In contrast, waiting time could also be beneficial, for example patients could use the time to compose themselves:

Yeah that would, because I think even when you get in, you don't want to go straight in to see the GP because, you go to sit down and think about what you want to talk to him about and if you, he takes you straight in, you ain't got time to think about what you want to say.

(Female, 46)

Patients expected the doctor to take their time and for the consultation to last for as long as it takes, allowing time to talk and not being rushed:

So but not rushed, so that everything so that they take their time over things and actually show an interest, but that they get the information that they need, examine anything that they need to examine without it taking too long really.

(Male, 36)

If I had a problem, I'd like to see him for as long as it took me to make my feelings felt if you know what I mean, to say how I feel, what's wrong and for him to sit there and have the time to tell me, you know, it's not that [name of interviewee], it's not this, you know, we've looked at everything, what I think is this, this and this, maybe I need counselling or maybe I need some tablets, but to explain to me.

Right.

And what's the best way forward to make me better or, you know, you're fine but if you've a problem come back, so he's got time to talk to me.

Yeah.

Instead of maybe having to look at who's coming in next or what's coming up next.

(Female, 47)

Some patients aware of the time pressures on doctors tried not to take up too much time. Patients were keen not to waste the doctor's time and were worried that they might be doing this, but, as noted earlier in discussing outcomes, reassurance was an important outcome for the patients, even if they ended up feeling that they had wasted the doctor's time:

I mean I'm just thinking the ones that come after you know I don't want to take up more of her [the doctor's] time that I've got to.

(Female, 72)

It's though he [the doctor] had no time for, he got no time at all.
But thinking about you and your feelings how would that make you feel?
 I would not, I think I'd feel I'd wasted my time even coming here basically.
Right.
 Yeah, a waste of time, that was a waste of my time and his and maybe a waste of my time and also I would feel quite let down.

(Male, 60)

Because you don't want to waste his [the doctor's] time, or well I don't, I don't want to waste his time unnecessarily because a lot of people may need that time than I do and when I go in, even though when he reassures you, yeah, that's fine, that's OK, go away, don't bother me 'til the next time, then I feel guilty when I leave, because I feel as though I've taken his time and I shouldn't have done, somebody else might have needed it, I don't know whether that's just me or so I'll go away feeling better, cos I know I'm alright, but I'll feel a little bit guilty because I feel as though I took, sort of half an hour of his time and possibly didn't need, maybe I would have seen the nurse, that might have saved his time, but, but I'm sure I'm going to go away and kick my heels and think, that's me until next time.

(Female, 47)

Minor themes

A number of minor themes were referred to by the patients. These included age, the body, computers, other patients or other people, past experiences, the patient's own manner or character and patients seeking the doctor's help on non-medical issues.

Cardiology patients

The cardiology patient results, as with the GP patient results, are presented in roughly chronological order with regard to the process: doctors and patients, tests, treatments and medication, the outcomes and then the two cross-cutting themes of spaces and time. Minor themes arising from the data are again briefly discussed. When quotes are presented, the normal text indicates the patient and the italic text the interviewer. The sex and age of the patient in 2008 are indicated after each quote.

Table 6 provides a brief summary of common expectations shared by cardiology patients and their 'hopes' and 'fears' for these expectations.

Theme 1: doctors and patients

This section considers the attributes that patients believe are positive and negative for doctors to display during consultations, patients' views towards doctors and the expectation that patients would see a specific doctor when attending the cardiology clinic.

In the interviews, patients told of their respect and trust for doctors, viewing them as busy and with pressures on their time, while recognising them as people. Patients described what they

TABLE 6 Common cardiology patient expectations with associated 'hopes' and 'fears'

Common cardiology patient expectations	Number of expectations	Generalised positive expectation/hopes	Generalised negative expectation/fears
To have tests, e.g. electrocardiography, radiography, blood pressure	12	Good test results with tests carried out efficiently	Poor test results showing deterioration
To see a specific consultant	9	Patients would see the specific consultant	Patients would see a junior doctor, who was unable to make decisions and who did not know the patient's history
Total time in hospital/total length of appointment	6	A shorter amount of time in hospital than their expectation	A longer amount of time in hospital than their expectation
Waiting time	17	The ideal was not to have to wait, or to have a relatively short wait of a few minutes	A long wait, in general over an hour
How patients expect to feel	17		
(a) Relaxed, calm and comfortable	12	To be calm, feel great, relaxed and unhurried	To be told that there is a serious medical problem, to lose confidence and control, to feel worried and anxious
(b) Apprehensive, tired, depressed and anxious	5	To feel OK and generally to receive good news	To be told bad news
Issues around treatment and medication	9	The doctor would be pleased or would reassure the patient. Medication would be left as it is, reduced or stopped and side effects would be explained	A lack of interest in or knowledge about the patient. To remain on medication or medication would be increased. To feel anxious or be told bad news

believed were the characteristics or attributes that they would expect the doctor who they saw to display, as well as those that would not be beneficial to the consultation. The positives attributes were for doctors to be interested in the patient, make them feel comfortable and at ease, know (something of) the patient's history, respect and treat the patient as an individual as well as ask appropriate questions and answer the patient's questions:

[S]he always makes me feel very comfortable.

OK and how does she make you feel very comfortable may I ask?

Erm ... she listens.

Right, yeah.

She listens to what you have to say, she gives you time, she doesn't put you under any pressure as regards to speed or gathering your thoughts or anything like that, if you can't, because sometimes when you're in a consult, a consulting room it's sometimes difficult to remember the name of drugs and this kind of thing, and she'll usually help to remind you if you can't remember.

(Male, 68)

And her [the consultant's] approach and, I got no reason to doubt, you know, I've only been treated with kindness and respect and she explained what she's going to do fully and you know that I took as given.

(Male, 71)

Yes, normally she gives me a diagnosis on how things look medically and if there's any problems that you want to put to me or and, and tries to sort of really sort of answer what you've, if you've got any queries so, that's if I've got any.

(Male, 47)

In contrast, the negative attributes that patients identified would be for a doctor to show no interest in them, to appear to be incompetent, inconsiderate, impolite and to not listen to them:

If I had been seen by an incompetent or a consultant who's running out of time, rushing it, or who, the whole idea of sending away to the hospital is a [sounds like: diagnosis] sometime, consultant.

Yeah, so the worst you could imagine is that you'd be seen by an incompetent doctor, who was in a rush?

An incompetent doctor, yes.

OK, so that's, we'll give that a marking of

That's quite right because even you can be qualified, you could be incompetent.

(Male, 76)

OK, so if you imagine your nightmare consultant, how would they look like and behave?

Well if they're not into you, you can usually tell by the mannerisms of them if they're doing the job or up to the job, sometimes they're not you know overly, we all have off days, but sometimes, in some departments, you can tell they're not even listening to you, let alone take any notice or bothered about your situation and that, that would be the worst thing is the very demoralising, you go up there to see these people and just do the end product with badness wouldn't be too good.

(Male, 64)

One likes to think that they have an interest in your, in your health and well-being, so yeah worst-case scenario would be you know just a total disinterest, total lack of er history, situation I guess even knowledge, you know.

(Male, 60)

As all the cardiology patients were recruited through one consultant's list, nearly all expected to see this specific consultant. This expectation was not without foundation: it was based on either receiving a letter confirming the appointment and stating that they would see that consultant, or the fact that their previous appointments had been with that consultant. Patient preference was to see the specific consultant and this was also based on what they viewed as a long-term professional relationship with that consultant. A more common reason to want to see the consultant was because of their seniority over the registrars. Some of the patients were aware that they would not necessarily see the specific consultant and regarded this with some scepticism, believing that it would not be the same, and those who had been treated by the consultant in the past were concerned that another doctor would not know them or their history as well as they believed that their consultant did. Although there was a strong expectation of being seen by the consultant, patients felt that they would be satisfied with the doctor they saw as long as they were dealt with professionally:

Well they tell me in my letter when they sent it to, you know from the hospital, that I'd see Dr [name of doctor].

Right, so that's who you're expecting to see, is it?

Yeah.

(Female, 73)

And the, I shall demand to see the consultant that I have been referred, usually you go to the junior or whoever's available because, but normally the consultant, every third time, he or she is supposed to see you, so I hope this will be my third time, and Dr [name of doctor] will see me.

(Male, 76)

I guess you do like to see the main person, you feel they're the one who have got the handle on it and have experience going back rather than seeing someone who, just picks up your notes and you know that type of thing.

(Male, 60)

I've got to be honest with you, I wouldn't mind who I saw, I'd prefer to see Dr [name of doctor] 'cos I've seen her ever since I first started going to hospital but I think I've only ever seen one other person, every time I go she seem as though she make it her business to see me.

Good, so the worst would be what then, to see somebody totally different or?

Somebody different 'cos the only reason is, if you see different they have notes.

Yeah.

But that's not the same is it?

(Male, 82)

Because she's my consultant and, you know, she knows my past history.

(Female, 64)

Nothing really, I go up there 'cos I got an appointment, I just wait to get in to see the person who's on the list to see rather than one of the lieutenants, if you know what I mean, I usually do see Dr [name of doctor].

(Male, 82)

The consultation between the doctor and the patient can be viewed as having a standard 'script' with patients recognising the roles that they and the doctor take. Patients tended to expect a 'normal' or 'straightforward' consultation in which the doctor would talk *to* them rather than *at* them and ask relevant questions, for example about their heart, how they felt and whether or not they had any concerns. Patients would be able to answer these questions and the doctor would pick up on their answers:

Ask the obvious questions, do you feel any different to you did like from last year and if there's anything you're experiencing that you haven't experienced before and you know questions like that, the obvious things that, if things aren't right they would probably pick up on if you said something, oh I feel dizzy, or now and again, or can't keep awake, or whatever you'd expect ... you see them writing notes and things and they'll possibly action on it either by reducing a certain drug or increasing a certain drug or doing away with one or giving you alternative one.

(Male, 64)

In return, patients expected to have the opportunity to ask the doctor questions or to raise any concerns, which they hoped to articulate clearly and, for some patients, with a degree of assertiveness. Patients expected that the doctor would listen and be able to explain in such a way that they could easily understand their situation and progress (or not). This would include an explanation of their symptoms and situation regarding their health and for the answers to be tailored to them rather than receiving a generic answer:

Doctors are much better nowadays than they ever used to be, with especially people like Dr [name] and others that I've had over my treatment over the last few years, they've been much better at talking to you and explaining to you what's happening or what's about to happen or you know what's wrong whereas in the old days they used to just to use technical terms you didn't understand and you came out of the surgery none the wiser.

(Male, 74)

One patient specifically talked about wanting to know ‘the truth’, aware that doctors may not always tell patients the truth if this is particularly bad news. Patients revealed an expectation that their doctor would be happy, satisfied or pleased with their progress, and that they might also identify other health issues, which might or might not be related to their cardiac health. They also wanted to talk about other health issues and hoped that the doctor would be interested in these:

Yes it went very well, the examination determined that my blood pressure was normal and she seemed to think everything else was doing well, not, not normal obviously, but you know good from that point of view.

(Male, 74)

I know Dr [name] was very pleased, so and I felt pleased about it, so yeah I couldn't have come away from it, I mean you do come away sometimes feeling depressed from them sort, you know if things, the news is not that good, but yesterday I expected it would be good because I've been feeling so well just lately, so it went absolutely well, yes.

(Male, 68)

Just to discuss the situation with her ... I'd express my thanks to her as such because she's brought it to attention which she, I mean they thought that the aorta was a bit swollen that's why they had the scan done and then they found the aneurysm there.

(Male, 74)

Although the doctor–patient interaction has been here likened to a script, the patients were aware that the script could easily be disrupted, thus altering the experience of the consultation and its outcomes. Issues around communication were central and at times it was felt that doctors might not explain themselves clearly enough when talking to patients, which meant that the patients would not (fully) understand what doctors were saying about the state of their heart or their future prognosis:

I don't know, my doctor say that that's sort of my heart was a bit, now what did she say, a bit flabby.

Right.

So I don't know what she meant by that.

(Female, 73)

[W]hat would be the worst that you could possibly imagine with respect to the doctors being professional, just being hypothetical?

Well to come away and not really know what was happening and, and what you can expect in the future.

So to be left in the dark totally?

Yes, not understand a word that they've said.

Yeah.

Or too technical or too ...

(Female, 72)

The manner of the doctor might also have an effect. One patient described a doctor as being ‘a little bit forceful’ and another was aware that the doctor ‘will tell you off’. After their consultation another patient described the doctor they saw as ‘not as severe as expected’:

Yeah, well I didn't get quite as much stick as I thought I was going to.

Right.

So probably, I mean she were obviously weren't happy that I was smoking again and said, you know, OK you've proved yourself you can do it, so you can do it again sort of thing, because I did last eight months, so, so that's probably, I didn't, that weren't quite as, she weren't as severe as I expected her to be.

(Male, 51)

Patients also identified expectations of having difficulties in understanding what was said by, in their words, 'foreign doctors'. The semi-structured interview style did not allow for this issue to be explored in greater depth, but it was clearly situated as a communication issue:

The worst doctor you could see?

Yeah, the worst person I would say is, sort of one of these foreign people you can't understand when they talk to you.

(Female, 73)

Another interviewee also suggested that he wouldn't be able to understand 'somebody who's foreign', basing this on his past experience in another hospital department, but demonstrated greater reflexivity about this issue, acknowledging that his English regional accent might be just as difficult for the doctor to understand:

Well I suppose my worst bit would be again somebody who's foreign who I couldn't understand and don't really understand me, you know.

Right.

So I have had that happen on a, not with the heart people but on another visit to the hospital following an operation I couldn't understand what the man was saying and I'm a bit [regional] accent and I don't think he could understand what I was saying.

(Male, 51)

As well as the verbal doctor-patient interactions, just under half of the patients expected a physical examination from the doctor they saw, aside from any tests or test results that they were expecting. If they were physically examined, the patients expected the doctor to explain why this was necessary and that it would be carried out correctly and thoroughly and that one of the purposes was to aid a decision about future treatment. In the post-consultation interviews, it was clear that, although a physical examination might have been expected by the patients, not all had received one:

She'll probably just listen to my heart and my lungs and give me a short examination, she might take my blood pressure, but probably not, because my blood pressure is OK.

(Male, 68)

Well I don't expect to see, but I expect them to take a check on the

The physical examination?

Yeah, the heart beat, etc., etc.

Right.

And then to decide [future treatment] on the outcome of that whether they'll do me another one or whether I stay with what I've got.

(Male, 80)

Oh well, ten [rating], 'cos I was examined.

Right and it felt good did it?

Yes.

So . . . so what was it about it that felt good, what was, what made it?

That someone was listening to it [heart] and we weren't just sitting there talking.
(Female, 72)

She says that she doesn't really need to examine me, it'll be because she's very well satisfied about how I am [laughs].
(Male, 68)

In the context of how the patients could expect to feel emotionally (or actually felt before their consultation), this could be argued to fit along a continuum from patients who felt anxious, apprehensive and worried through to others who felt relaxed, unworried or – as one interviewee described it – as though they had an 'inner calmness':

Yeah, a little bit apprehensive I think, but healthy so, I I feel pretty healthy I feel OK, so I'm not too worried about that erm I think that's it really, I just hope to sort of come out in an hour's time and all to be well.
(Male, 60)

I'd be worried sick I think.
(Female, 73)

Yeah, I, I'm, I'll be quite calm and relaxed, I know I will.
(Male, 74)

Another interviewee, a 71-year-old male, suggested that he would not experience any emotions:

What sort of emotional things are going to be running through you?
There won't be no emotions, there won't be no emotions.
(Male, 71)

When patients talked about their expectations for their health and how they felt about this, they appeared aware of their state of health and the degree of seriousness around their particular cardiac condition and two broad themes emerged. The first was an optimistic theme. Patients in the pre interview suggested that they felt well and healthy and hoped to receive positive news from the doctor, for example that their pacemaker was working well or that their medication was having a beneficial effect:

Hopefully I'll get a good report, I think everyone expects to hear better than, but you've to sort of wait and see really, but, yeah, I mean I feel comfortable and generally healthy, sort of in my progress from the op, so hopefully I'd expect some good, some sort of good follow-up report or confirmations from the ultrasounds and stuff like that.
(Male, 47)

No, no, I mean sitting here, I, I've had no chest pain since I've been on my medication and I, I feel A1 as far as I suppose a seventy-four year old can be, yeah.
(Male, 74)

I suppose if she said don't plan a holiday or Christmas then it might jolt home that, at the moment she ain't said that so I have to go in there with open mind.
(Male, 71)

The second theme that emerged was a fatalistic view. For some, this was the worst expectation that patients could identify:

My worst expectation is that she would say, well it's got so blooming bad now, you've got to get your affairs in order.

(Male, 74)

Obviously, the nightmare is to say that things have drastically gone downhill you know, I guess the worst-case scenario is that we've just found something that's going to kill you in the next six months.

(Male, 60)

Yeah, but actually she said there's nowhere to go really, you know, in the heart, 'cos they've already, you know, put two lots of graphs in like.

Right, so there's not much, there's not many options for them?

No, I'm just, actually I'm living on borrowed time [laughs].

[Edit]

Yeah, yeah, yeah, I knew that, I mean that, by going on last time they said they couldn't do nothing for me and she just shrugged her shoulders, she didn't know what to say like, you know.

(Male, 72)

This section has outlined the expectations that patients have about the doctors that treat them and the consultation, and how the patients expected to feel or actually felt in terms of both their emotions and their health. The next section draws together aspects that are part of the consultation: tests, treatment and medication.

Theme 2: tests, treatment and medication

Before their consultation with the doctor, most of the patients expected to be measured (sometimes including height) and to undergo one or more tests, for example an electrocardiography, radiography or blood pressure. A greater number expected to be weighed because this is what had happened on previous visits to cardiology. After arriving at cardiology and waiting in the waiting area, being weighed was the first stage of their appointment. Weight was an issue for some patients as they had been told to lose weight and expected that they had done so, but were concerned that this weight loss still might not be enough:

Yes, I mean you go in and ask or let them know you've arrived, they normally obviously er notify that you've arrived, normally it's about five, five minutes or that you expect and then someone, a nurse will come out and say can we, Mr [name] can we come and weigh you and measure you, so it's sort of a thing of I'm familiar with.

(Male, 47)

Vary, sometimes it's long, sometimes it's not so long, but its always a wait, it's never straight in and then, one of the nurses will come out and want to weigh me and measure me, I don't know, they don't bother to measure you now, they'll weigh me.

(Male, 74)

Right, so you're expecting some sort of discussion are you about, about your weight?

Yes, yes, just a quick word, it won't be a real discussion because it's not really, it is just a conversation really rather than a discussion because it's nothing to do with her really.

(Male, 74)

After being weighed, most patients expected to have their blood pressure taken and undergo at least one test relating to their particular heart condition. This was based on their appointment letter mentioning that they might undergo tests, or the patients' past cardiology appointments.

They were aware that the results of the tests were used to follow the improvement or deterioration of their particular condition. However, whether a patient had any tests (or the tests that they were expecting) depended on whether the doctor felt that they were required. The patients did not receive and did not expect to receive the test results until they saw the doctor in the consultation, when these would be explained and discussed. Patients hoped that their test results would indicate an improvement in their particular condition (or at least that it would not have deteriorated) and that they and the doctor would be pleased with the results:

Well say you'll just wait in the reception, you, you, you're called, you're weighed and blood pressure is done and that sort of thing and then go back to sit, wait again and you're called when your consultant or you might go for a test, like I said earlier, I don't know what they call it, an ECG or something they put a tape on you and wire you up and get these machines on you to test heart beat I assume and things like that, the time you're called back again, they've got the results of them and then you go and see the consultant for the last bit of the appointment.

(Male, 64)

[S]he told me straight away that the echocardiogram was exactly the same had no change which was good because that was my only, that was the only thing that could have been really in my head could have got a bit worse or something, but it's the same so that's great yeah and the doctors who were very pleasant, yeah, we had a chat you know so yeah it's fine.

(Male, 60)

Although treatment can be in the form of medication, for the purposes of this section it is considered separately. Patients tended to be unsure what, if any, treatment they would receive. Some patients did not necessarily expect to receive any treatment, as there were concerns from a few that their heart was too damaged, or that the risks compared with the benefits of undergoing a particular treatment were too great:

Well I think if they tell me now that my heart has been damaged in my terms that is, and no they can't do anything else or they don't reckon to do anything else and I'm left like this, what I'm feeling, that's zero [rating].

(Male, 80)

During the course of the consultation, medication was an issue that both the patient and doctor were likely to talk about. Although patients expected to continue on the same medication, some specifically wanted to discuss their medication, with particular reference to the side effects they experienced. In general, patients either experienced side effects from taking the medication or noticed that other aspects of their body/health were affected by taking the medication. The patients expected the doctor to discuss their medication and side effects and offer appropriate advice, expecting to be told that they would have to cope with the side effects as it was more important that they continue taking the medication:

All, all those sort of questions I expect to be asked, I will, this time, be asking her about the medication, because one of the, one of the things I'm taking, the beta-blockers, which are a, a relatively recent addition, i.e. the last year or so, I seem to be feeling the cold much more than I ever did before and whether that is again, we're back to that same old question, how much of that is the age of the beast.

Yeah.

And how much of it is the heart problem.

Yeah

I shall ask her that, whether she'll give me, I doubt she'll be able to give me a definite answer.

So you're not expecting a definite answer?

No. She will say, well the medication is more important than the, than the cold is, wear an extra pair of gloves you know.

(Male, 74)

You see I take quite a bit of prescription now for other things and I worry that some of this lethargic-ness is brought on by these drugs I'm taking, it may well be, I don't know.

(Male, 80)

Patients hoped rather than expected that they might no longer need some of the medication that they were taking and that the range of medication, number of pills or dosages could be reduced. One patient's ideal was to 'scrap the drugs and carry on as normal' (male, 74), while knowing that this outcome was very unlikely. Other patients expressed their expectation for further medication. This was not as an opposite of a patient hoping to no longer need some medication; rather, they hoped that a new drug might have been produced that would help their heart and prolong their life:

Yeah, because what it is, I went into Papworth last year to have me, they wanted to laser my heart out, to get more blood into it, so I could have me knees done, but the heart was too thin, and so they just had to come out of me heart and that, sent me home and just put me on medication and just hope that, they said that if something new comes out we'll get in touch with you straight away like.

So are you expecting to be put on a new drug regime?

Well, well, well yeah I presume, you know, like if something comes up that's like they can, that deals with the heart, that's, it's, it's for my benefit and you know it will give me a bit more of a longer life [laughs].

(Male, 72)

Patients also discussed altering medication as an option, although, as one patient pointed out, when the doctor altered his medication he experienced practical difficulties:

I've tried to have words, not get angry, but try to say to them, look you're changing these medicines from this, that and the other and the only thing is that I'm getting on a bit now, I think that the confusion part is that say for arguments sake that you know the shape of the pills and you know what you're taking ... The beggars change the shape and they change the name.

(Male, 71)

Patients are aware that, despite side effects, it is important to keep taking their prescribed medication:

You know and really the medication is sort of to keep everything on an even keel, that's, you know, so, so that in future things won't get worse.

(Male, 51)

Well yeah, because now there's nothing to worry about, as long as I keep taking the tablets and I should be alright.

(Male, 72)

A cause of concern was when a patient had been prescribed medication from more than one doctor – whether or not the doctor they saw would be aware of all of their medication. The concerns voiced were broadly related to communication within the health system, for example between the hospital and their GP and vice versa, and whether medications would ‘clash’, that is, not be compatible if taken together.

Theme 3: outcomes

This section summarises expectations about the ‘outcomes’ from the patient visits to the cardiology department – effectively what they expected to go away with and how this may or may not affect them. To begin with the positive and negative outcomes are discussed and then the effects on patients’ lifestyles and their views about the experience as a whole are considered, before discussing how the cardiology department appointments could act as a form of reassurance.

The outcomes that patients expect from their appointment in the cardiology department can be divided into broadly positive and broadly negative outcomes. On the positive side, patients *expected* that they would receive a clean bill of health from the doctor and be able to carry on as normal. Alongside this, patients also *expected* to be given a diagnosis and a cure or a solution for their particular cardiac issue:

No, no, no I feel fine so I can't say they've told me to do anything, so I'm just expecting to get a clear, clear, clear bill of health.

(Male, 82)

Really I suppose in a way I'm expecting them to sort of say, all OK carry on as you are sort of thing.

(Male, 51)

I'm sure I'll be cured or I'll get the best treatment they can offer.

(Male, 76)

Other patients *hoped* that they would come away from the consultation having been given a ‘good bill of health’ and told that they could get on with their life as normal without needing further surgery, and, for one patient, with a new lease of life:

Knowing that when they come in and examine me that, you know, I was put, well not A1, but I was in a better condition than when I went in there.

(Male, 72)

Well I don't know, I'd just like to go and, and hear her say, oh well that's fine you can go home and get on with your life.

So how would you feel if you heard that news?

Oh, over the moon I think.

(Female, 73)

I will tell you is simple [laughs] that's your heart is so improved that you can expect a full, full term, whatever that might be, in other words, your heart isn't going to affect anything, that would be the best scenario.

Right.

You're going to die a normal course of the usual things that kill you off; your heart isn't going to be an issue.

(Male, 74)

The negative outcomes ranged from patients' awareness that the doctors could no longer do anything to help them, or being uncertain about what to expect in the future, through to patients hoping that they would not have to go into hospital or face further 'work' on their heart and be left vague, in the dark or ignorant:

What would be the worst you could possibly imagine for that particular?

That I needed further surgery.

That you need to

That I would need further surgery.

OK, right.

That would be the most scary thing and the worst.

(Male, 51)

Not to be told anything and left completely in doubt.

Right.

Complete or in complete ignorance.

(Male, 65)

Well to come away and not really know what was happening and, and what you can expect in the future.

(Female, 72)

What would be the worst you could possibly imagine with respect to the doctor and ...?

My health was not as good as it was when I was last there.

(Male, 78)

The impacts of these outcomes on patients' lifestyle raised an issue around the apparent lack of discussion about diet, which one patient was very surprised by, and smoking habits. Patients were able to live what they defined as a normal lifestyle, with their particular heart condition not affecting their lifestyle, with one patient appearing to have stabilised and another recognising that they were able to do things better after having been fitted with a pacemaker. The negative effects on patients' lifestyle were awareness that they could no longer do things that they had been able to do, thus restricting their lives, and the likelihood of a shortened life expectancy:

I suppose if she said don't plan a holiday or Christmas then it might jolt home that, at the moment she ain't said that so I have to go in there with open mind.

(Male, 71)

Patients' views towards the experience of their consultation varied, with some finding that there had been confusion around their attendance, voicing concern that the doctor who they saw was 'not up to speed with everything' (male, 60) and that there was a lack of information about a follow-up appointment. Individual patients in other contexts had experienced being given the wrong diagnosis, no support, a lack of privacy and a lack of interest from the doctor:

The worst I can imagine is if things went wrong and I did contact [the hospital] and nobody called me back and I perhaps couldn't get through to the secretary or if I did get through to her if she had a word with Dr [name] and Dr [name] didn't phone, I don't expect any of that to happen.

Oh no, sure yeah.

Didn't phone me. I would be upset, I would probably go to my doctor and have to go through that procedure and yeah that would be the worst situation really.

(Male, 60)

There were also some concerns about the NHS, with patients expressing a lack of trust in the system and being unimpressed with the administration, although generally patients tended to praise the NHS and were very happy and grateful for the treatment that they had received, with one patient saying that 'I could have gone to Bupa [private health care provider in the UK] and I wouldn't have got any better service' (male, 65).

One of the outcomes that patients hoped to receive from their cardiology appointment was reassurance, but how this was achieved differed between patients. For some, reassurance was provided by a longer time period between hospital appointments (the opposite being greater concern attached to a shorter time period between hospital appointments) or being discharged and only needing to see their GP:

Yeah. That's what it's been so far and I thought that would continue, 'cos they would want to keep monitoring you, but obviously it's going in the right direction and they don't want to, you know there's no need to do it every year, which I regard as a good sign.

(Male, 74)

Well I guess I come out, my expectation is that I'm going to be told that I... don't need to come back basically... it's back to the GP, so I mean if that happens, then that's fine.

(Male, 60)

For other patients, having a hospital appointment and remaining on the consultant's list with regular check-ups provided them with reassurance. As one patient put it, 'It's not the pills, it's the five minutes' reassurance' (male, 60):

I, I don't exactly enjoy is the wrong word, I don't enjoy going to the hospital to be check up but at the same time it's reassuring to see her about every 6 months.

Right, that's interesting.

Because of my health problems that I've had in the past, it is a bit reassuring to be seen every 6 months so that's my best scenario that she will say she'll see me in 6 months time, the worst is that she'll say she that doesn't want to see me anymore.

(Male, 68)

Theme 4: spaces

In the course of the interviews, three main spaces were identified: the cardiology department as a whole, the waiting area/room and the consultation room. The cardiology department was regarded as busy yet smooth running as well as being quick and efficient:

Well I should imagine so, but when I've been before they've been amazingly efficient, I've always been surprised at the cardiology unit, they're very quick and you don't normally hang around much at all.

(Female, 64)

In talking about the waiting room/area, the patients discussed the positive and negative traits of such a space. The patients viewed a good waiting room/area as being clean, tidy, quiet and relaxed. It would also have activities including reading material and refreshments available, for example a vending machine. In general, the waiting room/area lived up to these expectations:

I've never felt as if I've been hanging around and waiting area's normally relaxed, I haven't been having to stand up and there's things there to sort of help you relax like magazines and stuff like that.

Yeah.

To help, help you forget that you are waiting really so it's generally a sort of relaxed environment really, it's not chit-chatter noisy sort of claustrophobic environment, it's normally quite an open, quiet and relaxing sort of environment, so yes I'd say that I've never even, when it's been, has been busy in the past I've never really felt ... sort of restless or anything like that.

(Male, 47)

Best waiting room, I suppose, one with a television in it.

Yeah.

Yeah, like when me daughter goes to the dentist, there's a great big television in a, you know the waiting room, so it relaxes you a little bit and

Anything else to describe this?

Book, you know, books to read.

Yeah.

You know, while you're waiting.

Yeah, so anything else about this?

Machine, if you're allowed a cup of tea.

(Male, 72)

In contrast, a poor waiting room/area would be crowded with misbehaving children, uncomfortable, silent, unclean, with no books to read and patients fighting:

Well I'm actually seen when, at the old [name of hospital] years ago, I've seen families come in there with kids and they go on the fruit machine, not the fruit machine, the coffee machine, the crisp and they're throwing them all around and then in that environment they actually destroy the cleanliness of the, of the room just by bad manners and I think that, that I don't know what the hospital do about people like them, that's just the way they've been brought up and I just saw one once at the old [name of hospital], it was chocolate tipped over and there was crisps thrown on the floor and I thought that ain't on.

(Male, 71)

Well uncomfortable in a way that you couldn't sit down maybe and relax, wondering how long you're going to be waiting, whether you get an explanation of why the wait or yeah.

(Male, 47)

The consultation room was likened to an office, with standard furniture, for example a desk, chairs, a table, a bed/couch and a computer. It would be a clean and private space in which patients would feel comfortable to talk:

Oh, well I just thought that'd be an ordinary sort of room where you just go and see the doctor, to hear your results.

(Female, 73)

Yeah, well when we got there I went in the consulting room, there was everything there for, blood pressure machine, couch and all they, you know, oh blimey, the old, not the video, the

Computer?

A computer was all there and she got it up on the computer and that, so yeah, it was, yeah, very, I'll give that ten out of ten.

(Male, 72)

There was a little room there with a desk and two chairs and nobody was there, so you could, you know, you could talk openly and get on if you needed to say anything sort of private, you could have done sort of thing.

(Male, 64)

Patients preferred the consultation room not to be cramped, crowded, dirty, scruffy or without privacy:

Well if it was people coming in and out and doing things, I suppose, a lot of distractions, yeah and a, a, cramped room, that wasn't like that at all.

(Male, 74)

As long as it's a room and it's not full of the general public, I don't mind.

(Female, 64)

Well in an open room where there's no privacy and there's people in and out and chasing round, noise and one thing and another where you don't know where you're coming or going.

(Male, 64)

The descriptions of the waiting and consultation rooms that the patients gave were relatively limited, but, as a couple of patients commented, what the rooms looked like was not their greatest concern:

I was more interested in what the nurse was doing than I was looking at the room.

(Male, 74)

As a patient I don't have too much feelings about that [waiting room] because you aren't here to look at the décor, you're here to be treated.

(Male, 71)

Although many of the patients talked about the spaces they expected to be in, most reported that they did not take much interest in these spaces and, as the quotes above suggest, the reason for their appointment in the cardiology department was more significant than the spaces they inhabited and moved through during the course of their appointment.

Theme 5: time

Time and timing cut across other cardiology themes. In their interviews cardiology patients implied that they turn up for their appointment in good time and consequently expect to be seen on time or after a relatively short wait. What patients believed was a short wait was subjective and ranged from between 5 and 10 minutes to about half an hour. Many of the patients were used to being seen on time or having only a short wait. In contrast to a GP's surgery where a patient would expect to arrive, wait and be called to see the GP, the cardiology unit followed a different pattern. Before patients had their consultation with the doctor (consultant or registrar) they had to go through several, albeit often short, waiting times before and in-between being measured, being weighed and having tests. Patients tended to expect that they would have to wait to see the doctor too. One patient described the flow of the different components of his appointment:

Well it was, I didn't have to wait long at any time during the whole process, which was quite remarkable, it was a very good session actually, I think I waited about, I suppose five minutes before I went, was weighed, another maybe five, six minutes or whatever

before I had the next step and then I did have about twenty minutes wait to see the doctor finally, but you know very good indeed I thought, all round.

(Male, 74)

Waiting before the appointment and between the segments was expected and patients were aware that the appointment could flow relatively smoothly or become drawn out, depending on how long the tests took, whether or not they required treatment and the length of time that other patients took. As a result, patients either had experienced or were aware of delays that would lengthen their time at the hospital. Some patients appeared to allow for this, suggesting a length of time that they expected to be in the hospital for, estimated to be between 45 and 60 minutes:

[A]bout twenty minutes I suppose.

So you're expecting the thing to last twenty minutes?

Yes, plus a bit of waiting in-between which I understand you know, so yeah generally I suppose the whole thing including waiting times, forty-five minutes maybe.

(Male, 60)

I mean I don't want to, my appointment is 10:40, I don't want to be there until 12:00.

(Male, 76)

In the post-consultation interviews, the length of time that patients reported spending in the hospital appeared to be much less. For some, however, the opposite was true, for example a 73-year-old female patient in her pre-consultation interview stated that a wait of 15–20 minutes would be acceptable. In her post-consultation interview she explained that she had had to wait for over 1 hour before it was explained that her notes had been mislaid, and in total she had been in the hospital for over 2 hours (estimate based on interview). Although waiting is expected by hospital patients, when a short wait turns into a significant delay, as in this case, patients want to be informed that there is a delay, as well as be provided with an explanation and an apology:

Well I suppose if it gets into long waiting times, you know if it gets over an hour or something like that, I suppose . . . I would expect someone to come and say, awfully sorry, the doctor hasn't turned up or she's been delayed somewhere, it's going to take a little while, can we get you a cup of tea or something.

(Male, 60)

The time delays were not always explained but when they were patients' reactions varied. If the delay was caused through a fault in a system, for example the NHS as a whole, or the appointment system, or not having enough staff available, patients tended to be less forgiving, believing that the system should be better (several patients noted that they became frustrated by these time delays). Two rather savvy patients who were aware that later appointments were more likely to experience delays opted for early appointments:

I suppose as I'm going early in the morning, if that was later in the day then you'd expect to get delays, yeah, yeah, I would have thought an hour.

(Male, 74)

That's right, right, I do try and get early, early appointments, then I can get up there early and I can get back to work, you see, as I said, I'm self employed and if I don't work, I don't get work, so, I'm left like three parts of the day, three-quarters of the day left to do something.

(Male, 64)

In contrast, patients also appeared to be happy just to sit and wait for ‘their turn’, and likewise an acceptable delay was one in which a doctor took slightly longer with a particular patient:

I mean it was immaterial I mean you know you have to wait your turn, I was not bothered, I just sat and waited and that was it, but Dr [name] did call me.

(Male, 68)

But if some patient takes a bit longer time and, and we are going behind, running late, I’m not worried about that.

(Male, 76)

You can, you can expect the obvious really if there’s a few people there that you’ve got to wait your turn really.

(Male, 47)

Delays caused by emergencies in which the doctors or other medical staff are called away to deal with another patient were also accepted. It could be argued that the patients’ acceptance of this is because, for some, it is a situation that they either have been in themselves or could be in the future:

Because sometimes they get called out on emergency and they, you know, especially if they’re in the crash team, they just get, and you just have to wait.

(Male, 72)

Like I say I was in the waiting room getting more stressed, definitely getting more stressed than I was like the sort of delay, but erm, you know I think you’ve got to say, I think you have to understand, I mean hearts are sort of front line thing in’t it.

Oh for sure yeah.

You know and people do get dragged in on a [sounds like nah-nah] I myself, I can imagine when I went in there I would probably, because I went in as an emergency, I probably delayed other people that were routinely going there.

(Male, 51)

In summary, aside from the medical aspects of the cardiology appointment, time is a significant factor because it can affect a patient’s emotional state. If everything runs (more or less) to time, patients appear to be happy with how they have been treated. If the appointment does not run to time or there are delays and unacceptable explanations are provided this can negatively affect the patient, which may make them feel frustrated, fed up, or increase existing feelings of apprehensiveness or anxiety about their appointment.

Minor themes

A range of minor themes that emerged from the data are briefly discussed below.

Self-description and age

A few of the patients positioned themselves very clearly as patients by emphasising that they were not a doctor or a medical expert. However, one patient suggested that they were a ‘bit of a pro on the medical side’, based on their experiences. Another patient constructed themselves as being a ‘really good patient, because I don’t complain’.

Age was broadly mentioned in several ways: patients described their health relative to their age – often that their health was relatively good for someone of their age – or speculated about

how much of their decline was down to their age. Although cardiac health tended to be seen as an older person's issue, it was recognised that younger people can also have problems with their heart and that the cardiology department did not treat anyone in a lesser way because of their age. Age was also mentioned in the context of life expectancy and the prognosis for the patient.

How patients expect to be treated (generally rather than by the doctor)

Patients expected to be treated as intelligent people, civilly and as adults; they did not want to be treated as a number.

Issues beyond the specific scope of the project

During their interviews the patients raised a number of issues beyond the focus and scope of the project. Patients had concerns about arriving on time for their appointment, being late and car parking. A few patients mentioned the possibility of a referral on to a specialist hospital for further treatment. Alongside this, patients mentioned general hospital experiences, for example one patient appeared to have a tendency to get lost in the hospital.

Other patients

The patients who were interviewed referred to other patients in three ways. It should be noted that they drew on experiences that went beyond the cardiology department. First, other patients and their behaviour were a source of annoyance or concern for the patients interviewed. Some other patients were described as moaning or complaining, displaying poor behaviour or being argumentative or bringing an excessive number of other people with them to the appointment and thus crowding the waiting area. Second, patients suggested that it was important to respect other patients and to treat other people as they would expect to be treated themselves and to be aware that other patients might have 'more grumbles than what I've got' (male, 68). Third, patients recognised the priority of other patients and acknowledged that this was because these patients had a poorer state of health.

Internet/education

A minority of the patients had either received or found information themselves about their particular condition, either from booklets or on the internet; however, one patient was aware that it could raise more concerns:

When you don't know exactly what's going to go wrong you can get onto the internet and, it's probably a bit too dangerous because you look at that and you start building up all sorts of problems you didn't really exist.

(Male, 74)

Staff at the hospital

Aside from the doctors, who are discussed in the section on theme 1, patients commented on the other staff that they were likely to encounter at the hospital. Patients either specifically mentioned nurses or tended to refer to hospital staff without being more specific. They identified the positive attributes of hospital staff as being professional, kind, courteous, 'whizzing about', jovial and happy, polite, efficient and pleasant and as treating patients as equals. In contrast, they identified the negative attributes of hospital staff as being blunt, off-hand, flustered, unprofessional, unhelpful, unco-operative and miserable and talking down to patients. When nurses were specifically mentioned, patients had only positive things to say, and viewed nurses as professionals, being straight to the point, helpful and polite. The patients' interactions with nurses came from them carrying out tests or being present at their clinic visit.

Uncertainty

Uncertainty was something that several of the interviewees felt, because they were not sure what was going to happen on a practical level or because they did not know which doctor they would be seeing or what was going to happen in the consultation or because they were uncertain about their health, for example what their test results would show.

Summary of the cardiology outpatient and GP patient expectations

The data have shown that there are many broad similarities between the expectations of the cardiology clinic patients and those of the GP patients, although there are also some differences of emphasis. In *Table 7*, the number of times that the different expectations emerged from the interviews is recorded, including expectations that were uniquely coded in one or other of the sets of patients.

TABLE 7 Summary of patient expectations

Expectation	Hospital patients	GP patients	All
To be seen on time/short wait	12	5	17
To have a long wait or delays	5	5	10
To see a specific doctor	18	4	22
To feel nervous	4	9	13
To feel relaxed	12	5	17
For the waiting rooms to be pleasant	1	6	7
To have medical tests	13	1	14
For the doctor to be professional	4	12	16
To receive a diagnosis	5	7	12
To get treatment/medication/prescription		9	9
For the doctor to ask the reason for the appointment	1	1	2
To explain symptoms/reason for visit to the doctor	3	13	16
For the consultation to last a certain length of time	1	14	15
To receive an examination from the doctor	5	7	12
To be in surgery or hospital for a certain length of time	6	1	7
To discuss medication, treatments, etc.	7	1	8
To see a doctor in a consultation room	7	11	18
To be given results	2	3	5
To be welcomed/greeted/put at ease by the doctor		6	6
To receive advice/information		3	3
For staff (excluding doctors) to be professional	1	1	2
For lifestyle issues to be discussed	3	2	5
For the doctor to ask how the patient is	2	3	5
To have a private consultation		2	2
To receive a prognosis/indication about the future	3		3
To receive a referral or follow-up appointment		2	2
To wait in the waiting room (before seeing doctor)	4	1	5
To not see the doctor until the next appointment	3		3
To be treated with respect	1	1	2
To trust the doctor	1		1
To get a good outcome	3	7	10
That the doctor will know my medical history		2	2
To be polite to the doctor		2	2
To be uncertain what the doctor will say		1	1
Number of responses	127	147	274

This table gives a sense of which expectations were most common in each set of patients and overall. As can be seen, the expectation to 'see a specific doctor' was most common (noted by over half of all patients), although it was more common in hospital patients than GP patients – reflecting the realities of the different types of consultation experiences for these patients. Thus, the cardiology patients expected to see a specific consultant who they believed knew their history and was a senior medic; although GP patients tended to have a preferred doctor, they were aware that they might see one of several at their practice. Likewise, 'to have medical tests' and 'to discuss medication, treatments' were significantly more common expectations for hospital patients. In contrast, 'to get treatment/medication/prescription', 'to explain symptoms or reason for visit to the doctor', 'for consultation to last certain length of time' and 'to be welcomed/greeted/put at ease by the doctor' were more frequent expectations of GP patients. Again, these differences are largely understandable, reflecting, for example, the fact that the GP will not necessarily be aware of the nature of the patient's complaint beforehand. These results indicate the need for a caveat with regard to the design of a universal 'patient expectations' instrument, as it is likely that different types of patient will have different expectations.

Cardiology and GP patients both spoke of experiencing and expecting to experience a range of feelings and emotions before their appointment, from anxiety through to calmness, and GP patients also spoke of experiencing physical signs of anxiety (see *Table 7*). Both patient groups expected to be treated for their health issues with an eventual outcome of improved health; however, for the cardiology patients and their often serious heart conditions, some felt more optimistic about their consultation whereas others took a fatalistic view, because they either felt or were aware that little more could be done for them.

Both sets of patients were generally aware of the pattern that their consultation would take, with cardiology patients expecting to undergo one or more tests or examinations during their time at the hospital and GP patients more likely to receive test results and be examined than undergo tests. Medication was more of an issue for the cardiology patients, of whom most already appeared to take one or more drugs. Depending on their reason for seeing the GP, patients varied in their expectations around tests, treatments and medication that they might or might not receive. Unlike the GP patients, the cardiology patients appeared to have very little choice in whether or not to take medication or in what medication they took, given the seriousness of their cardiac condition. In contrast, given the relatively less serious health issues of the GP patients, they appeared to have greater agency over whether or not to take medication and whether to consider alternatives to medication.

The positive outcome for cardiology patients was that the state of their heart had not deteriorated; for GP patients positive outcomes were that whatever was wrong could be treated, that they received appropriate advice or that they would be referred for further tests. The negative outcome for the cardiology patients was knowing that nothing more could be done for them; for the GP patients it was a sense that little had been resolved and that they left feeling disappointed with the doctor. One common outcome for both the GP and the cardiology patients was to leave their appointment feeling reassured. For the GP patients this was about knowing that their health issue was not more serious; for the cardiology patients, paradoxically, reassurance for some came from knowing that they *would* have future appointments with the consultant whereas for others it came from knowing that they *would not* see the consultant again.

Some of the patients had the expectation that they may not be seen on time and then would have to wait, but hoped that this would not be for too long. If the wait was for a longer period of time they expected to be given an explanation. For both sets of patients, waiting could increase anxiety, but having activities in the waiting room could somewhat ameliorate this, for example having reading materials available.

The spaces that the patients moved through in the course of their appointments were identified in the interviews. The cardiology patients noted the smooth running of the department, whereas the GP patients commented on the receptionists and the nurses within the space of the surgery. Both sets of patients broadly agreed that they expected waiting rooms to be comfortable, relatively quiet and with activities, and not to be unkempt, crowded or uncomfortable. Likewise, views about the consultation rooms highlighted expectations for these spaces to be clean, private with standard furniture and not cramped or crowded. In general, patients had little to say about these spaces, perhaps because they usually met expectations and fulfilled their purpose.

Table 8 suggests that the hospital patients were slightly more hopeful about their consultation than the GP patients, as they were more positive in how they rated their expectations beforehand. For both sets of patients, the consultations essentially matched their expectations or indeed slightly exceeded them.

Table 9 shows whether the ratings that patients gave after the consultation met, exceeded or did not meet the pre-consultation expectation ratings. Similar percentages of expectations were met, exceeded or not met for each location. A small number of expectations did not take place, for example tests, and so patients were unable to provide a rating. GP patients reported that 81% of their expectations had been either met or exceeded after the consultation, which was true for 77% of hospital patients.

A small number of selected patient expectations that broadly share similar hopes and fears in the data sets were compared to see whether the post-consultation reality ratings met, exceeded or did not meet the patients' expectations. It should be noted that most of the pre-consultation expectation ratings were quite high, leaning towards the 'best' expectation. *Table 10* shows that GP patients appear to have mostly had their expectations met or exceeded rather than expectations not being met. For hospital patients, two of their generic expectations were mostly either met or exceeded; however, two of the expectations – the total time patients expected to spend in the hospital and waiting time to see the doctor – were as equally met or exceeded as not met. Although these ratings are acknowledged to be subjective, this may have highlighted an area that could be improved for patients.

TABLE 8 Expectation ratings for the hospital and GP patients: pre- and post-consultation

Expectations	Hospital patients	GP patients	Difference	t-value (df = 38)	p-value
Before	8.301	7.533	0.768	2.01	0.052
After	8.433	8.055	0.378	0.81	0.425
Difference	0.132	0.522	0.389	-0.93	0.356

TABLE 9 Per cent of post-consultation expectation ratings that met, exceeded or did not meet pre-consultation expectation ratings

Expectation ratings	GP patient expectations	Hospital patient expectations
Met	43.6	44.5
Exceeded	37.8	32.6
Not met	15.5	17.4
Did not happen	3.1	5.5
Total	100	100

Expectation rationales

What informs patient expectations was also sought during the interview process. Patients were asked to provide a rationale for each of the expectations they identified. The top three rationales for each data set are provided in *Table 11*.

Overwhelmingly, the main rationales that patients gave for their expectations were related to 'past experience': what the patient had experienced previously was what they expected to experience again during their impending consultation. This is not unsurprising as most of the patients appeared to see a doctor on a fairly regular basis, meaning that they held a degree of certainty that their forthcoming consultation would follow a similar pattern. In both data sets, when asked about their rationales across a range of different expectations, patients replied saying that it was just what they expected to happen and they were unable to provide a rationale. The second-ranked rationale for the cardiology patients was either how they felt about their health at the time or how they had felt since their last appointment. The third-ranked GP rationale of 'could go either way' was associated with the patients being unsure about whether or not their expectations would be met, and some characterised a visit to the GP with an aspect of the unknown or being unsure about what was going to happen: it could be good news or it could be bad news. As noted earlier in the *Methods* section, during the interview process several of the patients had difficulties in understanding what was being asked of them and in identifying their expectations; likewise several patients had difficulties in providing rationales. The dissection of what is to many patients a habitual process and the teasing out of the component parts to develop expectations was a challenge in itself. Patients do not tend to reflect on the constituent aspects of the process of seeing a doctor. Indeed, people rarely reflect on the habitual or mundane aspects of everyday life, which tend to follow a similar routine or patterns, so much so that they are often taken for granted. It is therefore perhaps not surprising that patients referred back to their past experience(s) in the specific health-care setting to inform both their expectations and their rationales about their forthcoming consultation.

TABLE 10 GP and hospital patients' expectations that were exceeded, met, not met or did not happen

Type and number of generic expectations	Exceeded	Met	Not met	Did not happen	Total
GP patients					
Expect to wait to see the doctor	6	3	4	0	13
Expect a certain amount of time with the doctor	9	5	2	0	16
Expect an examination from the doctor	5	1	1	0	7
Expect the doctor to be, for example, polite, welcoming	6	13	5	1	25
Hospital patients					
Expect to spend a certain amount of time in hospital	1	2	3	0	6
Expect to wait to see the doctor	2	4	6	0	12
How a patient expects to feel before or during the consultation	8	4	1	0	13
Expect to undergo test(s)	5	1	2	4	12

TABLE 11 The top three expectation rationales by patient group

Rank	Cardiology patient rationales	Tally	GP patient rationales	Tally
1	Past experience of the patient	46	Past experience of the patient	51
2	How a patient felt about their health (at the time or had felt recently)	33	Unable to verbalise a rationale	29
3	Unable to verbalise a rationale	26	Could go either way – unsure of the outcome	9

Discussion

In this study we took two different samples of patients and, using a semi-structured approach, attempted to elicit their expectations for forthcoming treatments. We attempted to assess patients' attitudes towards their expectations, along a dimension of hopes versus fears, and we have measured the extent to which their expectations were met.

The use of qualitative data in health research provides a perspective that goes beyond the information that a purely quantitative approach can produce. The results presented in this report reflect the ways in which people think and, more specifically, show that relatively minor aspects of a medical consultation can have a significant impact on the patient and their experience, for example the simple action of a doctor greeting the patient and if necessary introducing themselves can make the patient feel welcomed and more comfortable with the doctor. Without using a semi-structured interview approach, such detail could be easily overlooked as well as the more idiosyncratic ways in which patients use terminology to express themselves, which provide a lay perspective to expectations, health-care structures, processes and outcomes, which can all too easily be categorised within broad academic terminology.

The themes arising from the patient interviews can be grouped under health-care structures, processes and outcomes. Patient references to health-care structures strongly relate to the spaces that they inhabit during their time in either the GP practice or the cardiology outpatient unit. For the GP patients this was the waiting room and the consultation room and for the cardiology patients this was the department as a whole, the waiting area/room and the consultation room. However, much of what patients talked about in the context of their expectations related to processes. Doctor–patient interaction was an important process for both GP and cardiology patients, including aspects such as the doctor's manner or character, the ways in which the doctor and the patient communicated with each other, the style and length of the consultation, any tests, examinations or treatment and the extent to which the patients felt that they had had a personalised experience, for example the doctor taking an interest in the patient. Waiting time was another process that both GP and cardiology patients commented on. In terms of outcomes, these varied between the two health-care settings. GP patient outcomes leaned towards receiving a diagnosis and/or knowing that something could be done for their particular health issue, for example a referral. Reassurance was also important for GP patients. For cardiology patients the outcomes leaned towards a prognosis, with the hope that this would be good relative to their state of health. Both patients referred to lifestyle advice as another outcome of seeing a doctor. Overall, the patients' expectations tended to reflect processes within their health-care settings, which is not unsurprising as the interviews tended to ask patients to think about their time from the waiting room until they left their appointment with the doctor, so there was perhaps less scope for them to comment on structures or outcomes. However, this does begin to address the value that people place on processes.

The analyses revealed the nature of the expectations that patients had about their interactions with the doctor. GP patients tended to want to be greeted and welcomed by the doctor and some liked knowing and being known by their doctor for continuity of care. The way that patients expected to be treated by their doctor had underlying emotional aspects affecting how the patient felt. Both patient groups wanted caring, empathetic and sympathetic doctors who treated them with respect and communicated clearly. However, what is of concern appears to be the way that some GP patients felt too uneasy or inhibited to explain fully to their doctor why they were there. Although this may be idiosyncratic to the patient, this has potentially serious implications for the health of the patient. The issue of 'time' was also an important one but expressed contextually – the amount of time that patients had to wait before their consultation. Patients generally hoped

not to have to wait too long, but how this was defined depended on the individual patient, how much time they spent with the doctor and the length of time they had had their health condition, and, for a few of the cardiology patients, time was referred to in the context of their life expectancy.

Although expectations about the spaces that the patients passed through in the course of their appointment were elicited, this was less important to the patients (patients could generate expectations when prompted but, as several noted, the space was ultimately less important than the nature of the doctor and the processes and consequences of the consultation). The generic space of the waiting room was expected to be clean and tidy with seating and reading materials and the consultation room was expected to be clean, tidy and functional and to have appropriate contents. Both of these spaces appeared to live up to these expectations. There were some differences between the two patient samples that were understandable given their respective contexts – for example the important expectation of hospital patients to see their own consultant, which was based on greater trust in the seniority of the consultant than in the registrars and the fact that they appeared to see the consultant for their regular outpatient appointments; this was generally less important for GP patients. Many of the patients reported feeling anxious or nervous about their impending appointment, although this was more likely among the GP patients than the cardiology patients, many of whom reported feeling calm or relaxed about their appointment. This might be because most of these patients were expecting to go through a repeat of their previous appointments in the cardiology outpatient clinic. Clearly, more research is needed to look at the expectations of a wider set of patient types, identifying commonalities but also additional important expectations.

In undertaking research about expectations there are theoretical difficulties, largely because the concept of 'expectation' appears to be broad and multidimensional, with expectations seeming to have both cognitive/calculative components (probability/likelihood of something occurring) and emotional components, and expectations may be held by individuals about a wide array of processes and outcomes, from the nature of the consultation to the behaviour of the doctor to the physical diagnosis. This was a small-scale pilot study in a limited number of settings, in a single geographical area, which limits the transferability of the study data. Patients were generally aware of, or familiar with, the setting and processes. It was clear from the interviews that, for many patients, a visit to the GP or the cardiology department was a relatively routine or habitual process. This was something that patients tended not to have spent much time thinking about in-depth before their participation in the study. For most patients, the rationales for the identified expectations meant drawing on their past experiences. The majority of the 'hopes' lay within what might be termed the normal boundaries for the primary health-care settings. Patients' expectations rarely exceeded these boundaries and some found it difficult to identify and hypothesise 'worst' outcomes, often because they did not believe that they would ever happen and they were not something they had previously experienced.

Note: A small proportion of this chapter (GP patient data) has been published as Kenten C, Bowling A, Lambert N, Howe A, Rowe G. A study of patient expectations in a Norfolk general practice. *Health Expect* 2010;**13**:273–84.

Chapter 4

Survey aims, methods and response rates

Aims

The aims of the overall study were to examine existing models and definitions of patient expectations in the literature; to explore expectations with patients; and to develop and test an expectations questionnaire, informed by both approaches.

The survey aimed to address multiple questions, including the following:

- How do expectations for different health-care settings compare?
- What are the most common types of met and unmet expectations expressed by patients, and do these vary by health-care setting?
- Are expectations influenced by respondents' characteristics, behaviours and circumstances?
- What are the psychometric properties of the developed expectations questionnaire (in different health-care settings)?
- How does mode of questionnaire administration (face-to-face interview or self-administration) affect the expectations elicited?
- What is the relationship between pre-visit expectation type and post-visit met expectations and patient satisfaction?

A mixed-method approach was used to address these research questions, including a narrative review of the social, health and clinical literature, exploratory interviews and the development of patient expectations pre-visit and post-visit questionnaires and their psychometric testing. This chapter details how the results from the earlier described research elements led to the development of a pilot questionnaire, which was refined following field testing. The method of the main survey and response rates are then detailed.

Methods

The pilot study of the questionnaire

As previously described, we conducted semi-structured interviews with 20 GP patients and 20 cardiology clinic patients in Norwich, UK, to ascertain patterns in expectations. The most commonly occurring themes were included as items in a pilot questionnaire, together with findings from the literature review (which considered additional conceptual and measurement issues). The additional items from the literature included measures of global expectations, perceived influences on expectations, health service use over the past 12 months, global patient satisfaction, preferences for shared decision-making,²⁸³ self-efficacy and control, psychological outlook (to control for any biasing effects of optimism bias),²⁸⁴ psychological morbidity [Short Form questionnaire-36 items (SF-36) items on anxiety/depression],²⁸⁵ health status, quality of life, healthy lifestyles,²⁸⁴ and sociodemographic and socioeconomic items – including age, sex, ethnic group, marital status, household size, socioeconomic status and level of education.

The resultant expectations questionnaire aimed to measure pre-visit ideal and realistic expectations, and post-visit experiences (met expectations). It was decided to retain questions on

ideal rather than deserved and importance ratings as the literature review indicated that the bulk of the conceptual literature focused on these (the empirical literature was generally conceptually weak – see *Chapter 2*).

The questionnaire was piloted on a small number of patients (described in the next section), refined and then tested on 833 patients before and after their consultations in GP and hospital outpatient departments (described at the end of this chapter). The data also provided information on whether expectations varied between GP and hospital outpatient populations and whether pre-visit ideal and/or realistic expectations predicted post-visit experiences (met expectations) and patient satisfaction. Caution is needed as the patients were not randomly sampled – which is acceptable for psychometric testing, although the survey distributions may not be generalisable.

Pilot (field trial)

A questionnaire comprising the items most commonly mentioned by patients, and items from existing studies from the narrative review, was developed and tested on 45 patients in London, UK, before and after their medical consultations. (The original intent was to field test the questionnaire on 100 adult patients in GP surgeries and hospitals; however, this proved unfeasible as it took 9 months from applying to obtain consent to conduct the hospital interviews – as discussed below.)

Patients were approached in waiting rooms and invited to take part and sign a consent form, then to complete the pre-visit questionnaire while they waited for their consultation and the post-visit questionnaire afterwards. It was explained that the questionnaire was long as we needed to test which items worked best before designing the main study questionnaire. Feedback about the questionnaire was also sought.

The questionnaire listed over 50 items relating to the structure, process and outcomes of the health-care episode. At pre visit we asked patients to rate their ideal hopes and their realistic (probabilistic) expectations, as well as how important each item was to them (values), and finally whether or not they felt that they deserved their expectations to be met in practice (entitlements). At post visit they were asked to rate the extent to which their expectations were met. The responses to the questionnaires were entered into SPSS version 15 (SPSS Inc., Chicago, IL, USA) and analysed for item completion, acceptability, reliability and validity. Poorly performing and redundant items were eliminated.

The analyses showed that each value expectation, as well as deserved expectation, was highly correlated (correlation coefficient >0.98) with the ideal expectations, indicating their overlap and redundancy. A decision was thus made to include ideal and realistic expectations only in the final pre-visit questionnaire and to remove the individual items on values and deserves – which also reduced the burden of the questionnaire. Global items for assessment of overall importance (values) and deserves (entitlements) of respondents' ideal expectations were included instead in the main study.

The post-visit questionnaire simply asked patients if each expectation item was met. Both questionnaires included 5-point response scales for each item ('strongly agree' to 'strongly disagree'). The five post-visit items on procedures performed at the consultation were changed from ranked agreement to dichotomous 'yes/no' responses following strong pilot feedback from patients that rating scales made no sense for these items. The final (as well as pilot) questionnaire was given to Sally Brearley, who represented patients' organisations, and her feedback was taken into account in the final questionnaire design.

Main study recruitment and response rates

The study of patients' expectations for their health care was based on interview and self-administered surveys of patients before and after they consulted their doctors in primary care and hospital outpatient departments. The pre- and post-visit expectations questionnaires are included in *Appendices 4* and *5* respectively.

The survey was conducted using two modes of questionnaire administration for the purpose of comparing the reliability of alternative methods of administering the same questionnaire: self-completion and face-to-face interview. Using these approaches it was intended to recruit a wide range of adults (i.e. varying in age, sex, ethnic status) into the study to test the psychometric properties of the expectations measures across a diverse population.

As most of the NHS hospital and primary care trust research honorary contracts took between 6 and 9 months to arrive (and research staff could not have any patient contact without these), and sites preferred to follow their own procedures, in addition to the (delayed) NHS research passport scheme, the fieldwork was severely hampered and this hindered the flexibility needed to recruit new sites as speedily as possible to compensate for slower/smaller/cancelled clinics. This required a funded and unfunded extension to complete the fieldwork and the adoption of a pragmatic (two-pronged) approach to data collection. The investigators were pre-prepared to be flexible in approach, as this was explicitly requested by the funding body.

The clinic patient surveys

Two hospital cardiology clinics and six primary care centres were approached, agreed to participate and were included in the study. Laminated posters with information about the study were provided to practices to display in their waiting areas. The study sites were situated in Norwich, north London and Essex in the UK. The clinic patients were approached consecutively by a member of the research team and invited to participate, read the information sheet and complete the consent form. These patients then completed the pre-visit questionnaire while they waited to consult the doctor and the post-visit questionnaire afterwards. The short time interval between questionnaires was selected for practicality, in order to enhance response rates, reduce memory bias and enhance return rates. This approach led to some item non-response on the post-visit questionnaires as patients wanted to leave. The agreed approach was pragmatic given the lack of access to a sampling frame of (a list of) patients attending because of patient confidentiality. The clinic patient study further suffered because of prolonged delays in researchers' honorary contracts being received, several train strikes on clinic days and cancelled clinics when clinic staff were on study leave or during holiday periods. Hence, the second arm of the study was initiated to enable the study to be successfully completed, which is described in the following section.

The population patient surveys

The Ethnibus survey is a monthly nationwide face-to-face interview survey of the main ethnic minority communities living in the UK (and white British people when requested). It is mounted by Ethnifocus (a research organisation), and governments, researchers and commercial companies can buy modules of questions on the survey. Ethnifocus included the self-administration mode of the expectations questionnaires in two waves of their ongoing Omnibus surveys of adults in Greater London, UK (spring 2010), after sifting their respondents for those with a pending GP or outpatient appointment within the next 4 weeks. This two-pronged approach had several advantages: to increase the sample numbers for self-administration modes of the questionnaires, especially for respondents with pending hospital appointments, for whom our hospital clinic recruitment was slowest; to increase the number of clinics that patients attended, reducing the likelihood of site-specific findings (the danger with our small number of participating clinics).

The Ethnibus survey is based on focused enumeration and stratified random sampling to ensure that samples are representative of the population. For sampling, Ethnibus uses census information on ethnicity across postal sectors and lists the postal sectors according to concentration. Standard indicators of ethnic status are used. Systematic random sampling is used to ensure an even spread of postal sectors with differing concentrations. The number of addresses that are selected within the sector is proportional to the size of the ethnic concentration, for example high concentration sector yielding high number of interviews. These addresses form the starting point of the focused enumeration procedure, with interviews obtained until the target is achieved.

In the current case, the Ethnibus survey was conducted in 53 distinct sampling points across London, UK. The postal districts were ordered and systematic random sampling was conducted. The process of systematic random sampling, applied to the ordered list, automatically enabled the distribution of the sampling points to be selected according to their relative ethnic population size, ensuring that participants represented ethnic minority groups, as well as white British members of the population. The aim of the sampling strategy was to ensure that a wide range of adults were included in the study (ethnic status). The Ethnibus responders represented a further 19 hospitals and 16 primary care centres.

Interviews were conducted by Ethnibus using trained, multilingual field workers. In the interviews, interviewers invited responders who had an outpatient appointment within the next 4 weeks to participate in the study. They asked them to complete the pre-visit self-administration questionnaire immediately before their clinic visit and the post-visit questionnaire immediately afterwards. The interviewers revisited them soon after the date of the clinic visit and collected the questionnaires.

Measures

The measure of patients' expectations used in the surveys was developed using information on expectation constructs, relevant items from the narrative review and the results of the exploratory study. As mentioned, additional items included measures of global expectations, perceived influences on expectations, health service use over the past 12 months, global patient satisfaction, preferences for shared decision-making,²⁸³ self-efficacy and control, psychological outlook (to control for any biasing effects of optimism bias),²⁸⁴ psychological morbidity (SF-36 items on anxiety/depression),²⁸⁵ health status, quality of life, healthy lifestyles,²⁸⁴ and sociodemographic and socioeconomic items – including age, sex, ethnic group, marital status, household size, socioeconomic status and level of education. The psychometric properties of the questionnaires were tested.

Patients' expectations of the structure, process and outcomes of their health care were measured by 27 visit-specific items in both the pre- and post-consultation questionnaires. Against each item, patients were asked to rate their:

- pre-visit:
 - (a) ideal hopes about what would happen during the consultation
 - (b) realistic expectations of what would happen ('in reality')
- post-visit:
 - (c) actual experiences (expectations met).

The domains included were structure of health care (four items), process of health care (four items), doctor–patient communication style (five items), consultation and treatment/procedures performed (five items), doctor's approach to information (six items) and treatment outcomes (three items) (*Box 1*). In addition, two items requested by the ethics committee (to reflect

government policies on patient choice) were included in the questionnaire: a choice of doctors to consult if more than one and choice of hospital if referred onwards. As these did not apply to all respondents they were excluded from the summed expectations scales. All items carried a 5-point response scale ['strongly agree' (1) to 'strongly disagree' (5)] with the exception of the five post-visit items on procedures performed, which had 'yes/no' (1/0) response choices.

The expectations items were analysed individually by pre-visit ideal and realistic expectations and post-visit experiences (met expectations). The items were also summed within these constructs to form a pre-visit ideal expectations subscale, a pre-visit realistic expectations subscale and a post-visit experienced (met expectations) subscale. Each of the six expectation domains within each subscale was also summed. The psychometric properties of the subscales and domains were tested by mode of questionnaire administration and site (GP, hospital).

BOX 1 Pre-visit ideal and realistic expectations and post-visit experiences (met expectations) scale items (minus 8, 9) by domain

1. Structure of health care

Easy to find where to go when there
Easy to get around inside building
Clean inside
Enough space in waiting room

2. Process of health care

Clear information about where to go
Given an appointment for a convenient date/time
Seen on time
Reception staff helpful

3. Doctor-patient communication style

Doctor helpful
Doctor respectful and treats me with dignity
Doctor knowledgeable about/understands my health condition/problem
Doctor clear and easy to understand
Doctor involves me in decisions about my treatment

4. Consultation and treatment/procedures performed

Physical examination
Tests/investigations
Given diagnosis or have a previous diagnosis confirmed
New, changed or repeat prescription
Referral to another doctor/specialist/therapist

5. Doctors' approach to information

Reassurance about condition
Advice about health/condition
Full explanation, in clear language, about:
What caused condition/problem
How to manage condition/symptoms/pain
The benefits/side effects or complications/risks of treatment
Opportunity to discuss problems in life

6. Treatment outcomes

Improved quality of life
A reduction in symptoms/problems
Increased chances of improvements to health/staying healthy

Analyses

Reliability testing of items within subscales and domains, by mode of administration and site, included measures of internal consistency, including Cronbach's alpha, using an acceptability threshold of $\alpha=0.70$. For homogeneity, items should also correlate more highly with items within their own subscale than with items within other subscales. Item–item correlations should be >0.20 , and items should intercorrelate with the total score by at least 0.30 (some use 0.20). If item–total correlations of <0.3 are achieved, this suggests that the scale may be measuring something other than that intended. In addition, exploratory factor analysis requires loading of <0.8 on all factors and cross-loading of >0.8 on more than one factor, with a difference between loadings of <0.4 . Analyses included tests for item redundancy based on endorsement frequencies (maximum endorsement frequency $>80\%$). The distribution of same-sample responses to the different forms of the questionnaire (self-administration and interviewer administration) was compared to assess the reliability of alternative methods of administering the same questionnaire.

In the absence of a gold standard, tests of validity were based on whether items correlated at least moderately with expected or similar items. SPSS²⁸⁶ was used to examine the psychometric properties of the expectations questionnaire and associations with expectation type and patient satisfaction.^{287–289}

The study hypotheses were assessed initially by using descriptive statistics. The independence of any associations was further examined using multivariable analysis (multiple regression analyses). Convergent validity was tested by analysing correlations between expectations and key survey measures (e.g. patient satisfaction). Modest to strong statistically significant correlations are generally judged to be acceptable for validity testing when concepts overlap but are not identical. Criterion validity is more complex to assess in the absence of a gold standard for expectations. Predictive validity (i.e. can the measure predict future changes in key variables in expected directions?) was assessed by examining whether or not post-visit experiences (met expectations) were independently associated with evaluations of satisfaction.

The subscale reliability statistics required complete sets of the items (with no item non-response for the 27 items tested). To assess any resulting item–response bias, the descriptive statistics were conducted twice – on all respondents to an item and on those with complete items only.

The level of acceptable statistical significance was set at the 0.05 level; however, because of the large number of statistical tests conducted, caution is required as chance significance is increased.

Response rates

The numbers of responders (total 833) recruited to the study by each approach and by mode of questionnaire administration are shown in *Table 12*.

Using this mixed-method approach to patient recruitment, 833 pre-visit and post-visit questionnaires were returned completed. An additional five pre-visit questionnaires were returned without the post-visit questionnaire; these five incomplete pairs were excluded from analysis. Full clinic lists were not accessible to us for the GP surgery and hospital clinic site patient recruitment (because of patient confidentiality); thus, response rates could not be calculated. The response rate could be calculated for the Ethnibus survey: 1413 London (inner and outer) households were contacted out of which 318 were eligible (e.g. had a hospital or GP appointment within 4 weeks); 255 agreed to participate and completed both questionnaires (80% response rate) and 63 refused.

TABLE 12 Numbers of respondents by source and mode of administration

Sample type	% (n)
GP patients (n = 434; 52%)	
GP surgery patients: interview questionnaire	9 (74)
GP surgery patients: self-administered questionnaire	37 (306)
GP survey patients: self-administered questionnaire (Ethnibus)	6 (54)
Hospital patients (n = 399; 48%)	
Hospital clinic patients: interview questionnaire	6 (54)
Hospital clinic patients: self-administered questionnaire	17 (144)
Hospital survey patients: self-administered questionnaire (Ethnibus)	24 (201)
Total interview questionnaire	128
Total self-administered questionnaire	705
Total respondents	833

The sociodemographic characteristics of the respondents by study site are shown in *Table 13*, suggesting that the different samples of respondents were comparable.

Tables 14 and *15*, however, which present data by site and mode of questionnaire administration, show more variation, although the subsample numbers are smaller and hence such variation is more likely. These tables indicate that comparisons of results of analyses of subsamples by mode of administration need to be regarded with caution in relation to descriptive analyses. All multivariable analyses need to be adjusted for the effects of age, sex and ethnic status.

A higher rate of item non-response than expected for the post-visit questionnaire was due to the request that patients complete and return the questionnaire immediately after the clinic visit, although freepost envelopes were given to patients who left without returning their questionnaire. Item non-response is described further in *Chapter 7*, as the subscale reliability statistics required complete sets of items (with no item non-response for the 27 items tested) for each respondent. To assess any resulting item-response bias, the descriptive statistics were conducted twice – on all respondents to an item and on those with complete items only. The results were similar; there were no differences between respondents with complete cases and those without by age, sex, tenure or ethnicity.

For psychometric assessment, the distributions of items are presented for all respondents in order to display the amount of item non-response for the items (items with low response are considered for improvement or removal).

TABLE 13 Respondent characteristics by study site

Characteristic	GP patients, % (<i>n</i>)	Hospital patients, % (<i>n</i>)	Total, % (<i>n</i>)
Housing tenure			
Homeowner/mortgage	55 (223)	58 (224)	56 (447)
Rents/other	45 (184)	42 (163)	44 (347)
	(407)	(387)	(794)
Age left school			
< 14 years	4 (17)	16 (62)	10 (79)
14 to < 16 years	21 (85)	27 (105)	24 (190)
16 to < 18 years	30 (124)	33 (127)	31 (251)
18+ years	45 (187)	24 (93)	35 (280)
	(413)	(387)	(800)
Marital status			
Married/cohabiting	58 (238)	64 (247)	61 (485)
Divorced/separated	11 (46)	10 (39)	11 (85)
Widowed	8 (32)	13 (51)	10 (83)
Single	23 (97)	12 (47)	18 (144)
	(413)	(384)	(797)
Household size			
Lives alone	21 (82)	19 (72)	20 (154)
Lives with others	79 (305)	81 (308)	80 (613)
	(387)	(380)	(767)
Employment status			
Employed/self-employed	38 (155)	34 (130)	36 (285)
Full-time	17 (70)	10 (40)	14 (110)
Part-time	6 (25)	8 (31)	7 (56)
Unable to work because of medical condition	5 (19)	9 (33)	7 (52)
Unemployed	6 (26)	7 (28)	7 (54)
Homemaker	25 (103)	30 (115)	27 (218)
Retired	4 (15)	2 (7)	3 (22)
	(413)	(384)	(797)
Sex			
Female	63 (262)	53 (207)	58 (469)
Male	37 (152)	47 (181)	42 (333)
	(414)	(388)	(802)
Age group (years)			
≤ 39	34 (141)	38 (148)	36 (289)
40–59	32 (133)	34 (131)	33 (264)
60+	33 (136)	30 (108)	31 (244)
	(410)	(387)	(797)
Mean (continuous variable) (SD)	50.962 (18.419)	52.717 (17.561)	51.821 (18.016)
Ethnic status			
White English, Scottish, Welsh, Irish	65 (263)	59 (219)	62 (482)
White other	14 (57)	8 (30)	11 (87)
Indian, Pakistani, Bangladeshi (includes British Asian IPB)	11 (45)	17 (65)	14 (110)
Black Caribbean/African/British/other	6 (24)	14 (54)	10 (78)
Other	4 (17)	1 (5)	3 (22)
	(406)	(373)	(779)

IPB, Indian, Pakistani, Bangladeshi; SD, standard deviation.

TABLE 14 Age and sex of respondents by site and mode of questionnaire administration

Sample type	Age (years), mean (SD) ^a (n=791 ^b)	Sex: female (n=469), male (n=333), % (n)
GP surgery patients: interview questionnaire	52.89 (18.24)	65 (46), 35 (25)
GP surgery patients: self-administered questionnaire	51.76 (18.78)	64 (185), 36 (104)
GP survey patients: self-administered questionnaire (Ethnibus)	44.35 (15.38)	57 (31), 43 (23)
Total GP self-administered questionnaire	50.57 (18.46)	63 (216), 37 (127)
Hospital clinic patients: interview questionnaire	45.15 (13.34)	69 (37), 31 (17)
Hospital clinic patients: self-administered questionnaire	63.01 (18.25)	54 (72), 46 (61)
Hospital survey patients: self-administered questionnaire (Ethnibus)	48.04 (14.93)	49 (98), 51 (103)
Total hospital self-administered questionnaire	53.95 (17.87)	51 (170), 49 (164)
Total all samples	51.82 (18.02); female 48.49 (18.00), male 56.38 (17.04)	58 (469), 42 (333)
Total GP patients all samples (414–434)	50.97 (18.01)	63 (262) 37 (152)
Total hospital patients all samples (388–399)	52.72 (17.56)	53 (207) 47 (181)

df, degrees of freedom; SD, standard deviation.

a Age was calculated from date of birth using the Yrmoda compute function in SPSS version 16.

b 791 participants had complete records for day, month, year of birth (797 gave incomplete details, with the rest missing).

Age (recoded into <40, 40 to <60, 60+ years) by source of sample chi-square 22.364, 6 df, $p=0.001$; sex by source of sample chi-square 15.936, 5 df, $p<0.007$.

TABLE 15 Ethnic status of respondents by site and mode of questionnaire administration

Sample type	White British, % (n)	White other, % (n)	Indian, Pakistani, Bangladeshi, British Asian, % (n)	Black African, Afro-Caribbean, black British, % (n)	Other, % (n)	Total, % (n)
GP surgery patients: interview questionnaire	11 (53)	7 (6)	5 (6)	1 (1)	23 (5)	9 (71) ^a
GP surgery patients: self-administered questionnaire	44 (210)	59 (51)	36 (39)	29 (23)	55 (12)	43 (335)
Hospital clinic patients: interview questionnaire	8 (41)	2 (2)	–	6 (5)	5 (1)	6 (49)
Hospital clinic patients: self-administered questionnaire	37 (178)	32 (28)	59 (65)	63 (49)	18 (4)	42 (324)
Total GP patients	55 (263)	66 (57)	41 (45)	31 (24)	77 (17)	52 (406) ^a
Total hospital patients	45 (219)	34 (30)	59 (65)	69 (54)	23 (5)	48 (373)
No. of respondents	62 (482)	11 (87)	14 (110)	10 (78)	3 (22)	779

a $p<0.001$.

Chapter 5

Psychometric properties and factor analysis of expectations questionnaires by mode of administration

Research questions

- What are the psychometric properties of the developed expectations questionnaire?
- How does mode of questionnaire administration (face-to-face interview or self-administration) affect the expectations elicited?

In this chapter we detail the psychometric properties of the questionnaire. After discussing questionnaire burden and item non-response, the chapter considers the reliability of the questionnaire, in particular the reliability of the pre-consultation 'real' and 'ideal' elements and the post-consultation 'expectations met' element. Within each of these elements, there were a number of subscales related to specific expectation aspects (e.g. concerned with space, process, outcomes) and this chapter assesses the reliability of these subscales. Furthermore, the chapter specifically considers the issue of mode of administration (face-to-face or self-administration) and finds little difference – meaning that in further analysis the data acquired through the two modes may be merged.

Psychometric testing

Gold standard psychometric tests were used to assess the properties of the expectations measures.²⁸⁷ As previously discussed, the patient expectations pre- and post-visit questionnaires were designed and then refined using results from the exploratory interviews and initial field testing, comparisons with results of the narrative review and existing models and consultations with patients' representatives. The face and content validity of the resulting questionnaire were subsequently assessed by members of the advisory group and the lay representative.

Patients were asked to complete the pre-visit questionnaire immediately before their consultation followed by the post-visit questionnaire immediately afterwards. The expectation item distributions are shown in *Chapter 8* [maximum endorsement criteria were satisfied (>0.80), suggesting no item redundancy].

Questionnaire burden

Although the post-visit questionnaire took only about 10 minutes to complete, the mean length of time taken to complete the pre-visit questionnaire for the total sample was 21.07 [standard deviation (SD) 53.10] minutes. The length of time taken to complete the pre-visit questionnaire by mode of administration for the primary care (GP) and hospital samples was 20.76 (SD 3.807) minutes for GP interview patients, 21.74 (SD 81.047) minutes for GP self-administered patients, 20.82 (SD 4.489) minutes for hospital interview patients, 20.50 (SD 9.759) minutes for hospital

self-administered patients, 21.54 (SD 74.37) minutes for total GP patients and 20.54 (SD 9.232) minutes for total hospital patients.

Item non-response

Complete sets of items (with no item non-response) were required for the reliability statistics. Item non-response to the pre-visit questionnaire ranged from 1% to 10% of the 833 matched pre and post samples. The criterion for acceptability is up to 5% item non-response, or up to and including 10% for sensitive or difficult topics. The pre-visit item response rate reached acceptability according to this criterion. However, the post-visit questionnaire item non-response rate, at 22–24% of the sample, failed the acceptability criterion. As the post-visit questionnaire was relatively short, the high item non-response rate at post visit reflected the burden of the request to complete the questionnaire immediately (although respondents in surgeries and clinics were given freepost envelopes for the return of questionnaires in case they left without handing them in to the fieldworker), as well as the burden of administering two questionnaires within a very short time frame.

As stated earlier, the subscale reliability statistics required complete sets of the items (with no item non-response for the 27 items tested). To assess any resulting item–response bias, the descriptive statistics were conducted twice – on all respondents to an item and on those with complete items only. The results were comparable. There were no differences between respondents with complete cases and those without – by age, sex, tenure or ethnicity. The distributions of respondents, by characteristics, are given in *Chapters 7 and 8*.

Pre- and post-visit reliability statistics

Mode of administration: interviews compared with self-completion for both groups

The reliability statistics are shown in *Boxes 2–6*. The Cronbach's alphas for the items forming the ideal, realistic and post-visit expectations subscales (27 items each) exceeded the threshold of $\alpha = 0.70$ in each administration mode. Some of the small subscale domain alphas fell slightly below the acceptability threshold (0.70), which is likely to reflect their smaller number of items (alpha is sensitive to the number of items). The split-half reliability statistics met threshold criteria. For the different expectation type subscales (see *Box 4*), we tested whether reliability could be improved by removing items (generally there were few improvements and any improvements were small).

Reliability intercorrelation matrices

The expectation items were also summed by the six expectation type domains. These were:

1. structure of health care (1–4)
2. process of health care (5–10)
3. doctor–patient communication style (11–15)
4. treatment process – clinical procedures performed (16–20; 22–26 for post-visit questionnaire, dichotomised as 0/1 ‘yes/no’)
5. doctor–patient approach to information (21–26; 16–21 for post-visit questionnaire)
6. health outcome expectancies (27–29).

The numbers in brackets following each expectation type domain indicate the question numbers in the pre-visit and post-visit questionnaires.

BOX 2 Reliability statistics: Cronbach's alphas by expectation type [pre-visit ideal and realistic expectations and post-visit experiences (expectations met) (27 items each)] and by sample

Total sample

- (a) Pre-visit ideal expectations subscale: α 0.882 ($n=714$)
- (b) Pre-visit realistic expectations subscale: α 0.907 ($n=698$)
- (c) Post-visit expectations: α 0.877 ($n=629$)

Type of expectation by sample type

Pre-visit ideal expectations subscale

- GP interview: α 0.749
- GP self-administration: α 0.933
- Hospital interview: α 0.750
- Hospital self-administration: α 0.885

Pre-visit realistic expectations subscale

- GP interview: α 0.795
- GP self-administration: α 0.933
- Hospital interview: α 0.810
- Hospital self-administration: α 0.917

Post-visit expectations

- GP interview: α 0.817
- GP self-administration: α 0.931
- Hospital interview: α 0.795
- Hospital self-administration: α 0.868

In the following analysis, the psychometric properties of these subscales are explored.

Pre-visit questionnaire

Ideal expectations subscales

The item–item correlations within ideal expectation types and by mode of questionnaire administration are shown in *Tables 16A–F*.

Table 16A shows that items 1a and 2a (easy to find where to go and easy to get around) had item–item correlations that approached or slightly exceeded the 0.75 threshold for item redundancy (except for the hospital interview sample). However, as these items tapped different aspects of structure it was decided to retain them. *Table 16C* shows that items 12a and 14a (doctor respectful/treats with dignity and doctor clear/easy to understand) and items 13a and 14a (doctor knowledgeable/understands my problem and doctor clear/easy to understand) also slightly exceeded the 0.75 threshold, but only among the hospital interview sample, and hence it was decided to retain these items as the patient interviews suggested that these were important to patients.

Within the ideal expectation subscales, most item–item correlations exceeded the 0.20 threshold supporting their homogeneity. The exceptions are shown in *Table 16D* (about the various procedures expected during the consultation), mainly among the GP interview sample, perhaps because of the small numbers interviewed or the small number of sites they represented.

BOX 3 Reliability statistics: Cronbach's alphas for expectation type subscales: total sample 27 items (subscale alphas reported along with any improvements from item removal)

Pre-visit

Total sample ($n = 695-714/833$ valid for this analysis)

Ideal

Structure (four items: 1–4): α 0.732

Process (four items: 5–10): α 0.695

Doctor–patient communication style (five items: 11–15): α 0.804

Procedures undertaken (five items: 16–20): α 0.748

Doctor–patient approach to information (six items: 21–26): α 0.764 (if item 26 removed – ‘opportunity to discuss problems in life’ – α increases very slightly to 0.794)

Outcomes (three items: 27–29): α 0.739

Realistic

Structure (four items: 1–4): α 0.739

Process (four items: 5–10): α 0.668

Doctor–patient communication style (five items: 11–15) α 0.810

Procedures undertaken (five items: 16–20) α 0.769

Doctor–patient approach to information (six items: 21–26): α 0.797

Outcomes (three items: 27–29): α 0.781

Post visit

Total sample ($n = 731-747/833$ valid for this analysis)

Structure (four items: 1–4): α 0.749

Process (four items: 5–10): α 0.694 (if item 7 removed – ‘seen on time’ – α increases to 0.745)

Doctor–patient communication style (five items: 11–15): α 0.875 (if item 15 removed – ‘doctor involved me in decisions’ – α increases very slightly to 0.880)

Doctor–patient approach to information (six items: 16–21): α 0.851 (if item 19 removed – ‘given opportunity to discuss problems in life’ – α increases marginally to 0.857)

Procedures undertaken (five items: 22–26): not applicable as items dichotomised ‘yes/no’ (0/1) at post visit

Outcomes (three items: 27–29): α 0.840

Note: Expectations items had a 5-point response scale: ‘strongly agree’ (1), ‘agree’ (2), ‘neither agree nor disagree’ (3), ‘disagree’ (4), ‘strongly disagree’ (5); lower scores indicate positive expectations and higher scores indicate negative expectations (except for post-visit items on procedures, which were dichotomised ‘yes/no’; % calculated separately as dichotomous)

BOX 4 Pre-visit ideal subscale reliability statistics by mode of administration

Items 1a–29a minus 8+9 (27 items, 5-point response scale)

GP interview

$n = 74$ (68 valid for analysis): mean 45.50, SD 10.32; α 0.749 (split-half reliability: part 1, 14 items, part 2, 13 items: correlation between forms 0.270)

GP self-administration

$n = 360$ (286 valid for analysis): mean 39.66, SD 11.32; α 0.933 (split-half reliability: correlation between forms 0.736)

Hospital interview

$n = 54$ (all valid for analysis): mean 45.15, SD 9.26; α 0.840 (split-half reliability: correlation between forms 0.248)

Hospital self-administration

$n = 345$ cases (306 valid for analysis): mean 41.85, SD 9.85; α 0.885 (split-half reliability: correlation between forms 0.669)

Total sample

$n = 833$ (714 valid for analysis): mean 41.57, SD 10.63; α 0.917 (split-half reliability: correlation between forms 0.543)

Note: cases with missing items were not included in reliability statistics

BOX 5 Pre-visit realistic subscale reliability statistics by mode of administration

Items 1b–29b minus 8+9 (27 items, 5-point response scale)

GP interview

$n = 74$ (68 valid for analysis): mean 59.44, SD 13.30; α 0.795 (split-half reliability: part 1, 14 items, part 2, 13 items: correlation between forms 0.306)

GP self-administration

$n = 360$ (277 valid for analysis): mean 51.74, SD 14.68; α 0.933 (split-half reliability: correlation between forms 0.733)

Hospital interview

$n = 54$ (all valid for analysis): mean 61.46, SD 12.95; α 0.810 (split-half reliability: correlation between forms 0.424)

Hospital self-administration

$n = 345$ (300 valid for analysis): mean 56.27, SD 14.88; α 0.917 (split-half reliability: correlation between forms 0.758)

Total sample

$n = 833$ (695 valid for analysis): mean 54.72, SD 14.49; α 0.902 (split-half reliability: correlation between forms 0.688)

Note: cases with missing items were not included in reliability statistics

BOX 6 Post-visit experiences (expectations met) subscale reliability statistics by mode of administration

Items 1c–29c minus 8+9 (27 items, 5-point response scale)

GP interview

$n=74$ (71 valid for analysis): mean 42.30, SD 10.81; α 0.817 (split-half reliability: part 1, 14 items, part 2, 13 items: correlation between forms 0.528)

GP self-administration

$n=360$ (229 valid for analysis): mean 44.61, SD 14.37; α 0.931 (split-half reliability: correlation between forms 0.670)

Hospital interview

$n=54$ (all valid for analysis): mean 43.61, SD 10.88; α 0.795 (split-half reliability: correlation between forms 0.541)

Hospital self-administration

$n=345$ (275 valid for analysis): mean 48.51, SD 10.77; α 0.868 (split-half reliability: correlation between forms 0.530)

Total sample:

Post-visit 27-item scale (including the five 'yes/no' procedures)

$n=833$ (629 valid for analysis): mean 45.97, SD 12.42; α 0.890 (split-half reliability: correlation between forms 0.595)

Post-visit 22-item scale (excluding five 'yes/no' procedures)

$n=833$ (653 valid for analysis): mean 43.26, SD 12.21; α 0.901 (split-half reliability: correlation between forms 0.595)

Thus, inclusion or exclusion of the five 'yes/no' dichotomous procedure items made little difference to the reliability statistics of the scale, and the reliability table showing Cronbach's alpha if items removed showed that their removal did not improve the total scale alpha either

Note: cases with missing items for the subscale were not included in reliability statistics

TABLE 16A Structure of health care: ideal expectations items 1a–4a – interitem correlation matrix for subscales

Expectation item	1a. Easy to find where to go when there	2a. Easy to get around inside building	3a. Clean inside	4a. Enough space in waiting room
1a. Easy to find where to go when there				
GP interview	–	0.776	0.419	0.419
GP self-administered		0.726	0.322	0.459
Hospital interview		0.567	0.298	0.365
Hospital self-administered		0.736	0.360	0.272
Total sample		0.727	0.357	0.364
2a. Easy to get around inside building				
GP interview	0.776	–	0.425	0.440
GP self-administered	0.726		0.296	0.451
Hospital interview	0.567		0.204	0.238
Hospital self-administered	0.736		0.303	0.212
Total sample	0.727		0.315	0.330
3a. Clean inside				
GP interview	0.419	0.425	–	0.501
GP self-administered	0.322	0.296		0.411
Hospital interview	0.298	0.204		0.529
Hospital self-administered	0.360	0.303		0.262
Total sample	0.357	0.315		0.352
4a. Enough space in waiting room				
GP interview	0.419	0.440	0.501	–
GP self-administered	0.459	0.451	0.411	
Hospital interview	0.365	0.238	0.529	
Hospital self-administered	0.272	0.212	0.262	
Total sample	0.364	0.330	0.352	

Item correlations with rest of full scale: GP interview: –0.156 to 0.656; GP self-administered: 0.031 to 0.625; hospital interview: –0.073 to 0.800; hospital self-administered: –0.032 to 0.443; total: 0.046 to 0.407.

TABLE 16B Process of health care: ideal expectations items 5a–7a and 10a – interitem correlation matrix for subscales

Expectation item	5a. Clear information about where to go	6a. Given an appointment for a convenient date/time	7a. Seen on time	10a. Reception staff helpful
5a. Clear information about where to go				
GP interview	–	0.420	0.497	0.351
GP self-administered		0.284	0.263	0.279
Hospital interview		0.600	0.357	0.632
Hospital self-administered		0.357	0.314	0.285
Total sample		0.342	0.298	0.309
6a. Given appointment for convenient date/time				
GP interview	0.420	–	0.208	0.222
GP self-administered	0.284		0.432	0.435
Hospital interview	0.600		0.313	0.451
Hospital self-administered	0.357		0.480	0.322
Total sample	0.342		0.445	0.376
7a. Seen on time				
GP interview	0.497	0.208	–	0.389
GP self-administered	0.263	0.432		0.448
Hospital interview	0.357	0.313		0.405
Hospital self-administered	0.314	0.480		0.252
Total sample	0.298	0.445		0.333
10a. Reception staff helpful				
GP interview	0.351	0.222	0.389	–
GP self-administered	0.279	0.435	0.448	
Hospital interview	0.632	0.451	0.405	
Hospital self-administered	0.285	0.322	0.252	
Total sample	0.309	0.376	0.333	

Item correlations with rest of full scale: GP interview: –0.065 to 0.602; GP self-administered: 0.159 to 0.568; hospital interview: –0.307 to 0.714; hospital self-administered: 0.052 to 0.443; total: 0.101 to 0.383.

TABLE 16C Doctor–patient communication style: ideal expectations items 11a–15a – interitem correlation matrix for subscales

Expectation item	11a. Doctor helpful	12a. Doctor respectful and treats me with dignity	13a. Doctor knowledgeable about/understands my health condition/problem	14a. Doctor clear and easy to understand	15a. Doctor involves me in decisions about my treatment
11a. Doctor helpful					
GP interview	–	0.583	0.571	0.383	0.369
GP self-administered		0.753	0.607	0.629	0.469
Hospital interview		1	0.559	0.780	0.269
Hospital self-administered		0.367	0.457	0.210	0.220
Total sample		0.569	0.539	0.433	0.334
12a. Doctor respectful and treats me with dignity					
GP interview	0.583	–	0.574	0.543	0.159
GP self-administered	0.753		0.670	0.668	0.592
Hospital interview	1		0.559	0.780	0.269
Hospital self-administered	0.367		0.508	0.210	0.237
Total sample	0.569		0.589	0.444	0.379
13a. Doctor knowledgeable about/understands my health condition/problem					
GP interview	0.571	0.574	–	0.362	0.141
GP self-administered	0.607	0.670		0.526	0.618
Hospital interview	0.559	0.559		0.780	0.166
Hospital self-administered	0.457	0.508		0.356	0.281
Total sample	0.539	0.589		0.451	0.402
14a. Doctor clear and easy to understand					
GP interview	0.383	0.543	0.362	–	0.408
GP self-administered	0.629	0.668	0.526		0.599
Hospital interview	0.780	0.780	0.780		0.269
Hospital self-administered	0.210	0.210	0.356		0.318
Total sample	0.433	0.444	0.451		0.431
15a. Doctor involves me in decisions about treatment					
GP interview	0.369	0.159	0.141	0.408	–
GP self-administered	0.469	0.592	0.618	0.599	
Hospital interview	0.269	0.269	0.166	0.269	
Hospital self-administered	0.220	0.237	0.281	0.318	
Total sample	0.334	0.379	0.402	0.431	

Item correlations with rest of full scale: GP interview: –0.116 to 0.543; GP self-administration: 0.174 to 0.573; hospital interview: –0.022 to 0.602; hospital self-administration: 0.059 to 0.382; total: 0.098 to 0.516.

TABLE 16D Consultation and treatment procedures: ideal expectations items 16a–20a – interitem correlation matrix for subscales

Expectation item	16a. Physical examination	17a. Tests/investigations	18a. Given diagnosis or have previous diagnosis confirmed	19a. A new, changed or repeat prescription	20a. A referral to another doctor/specialist/therapist
16a. Physical examination					
GP interview	–	0.169	0.441	0.033	0.271
GP self-administered		0.576	0.411	0.380	0.335
Hospital interview		0.524	0.496	0.333	0.170
Hospital self-administered		0.249	0.191	0.201	0.140
Total sample		0.444	0.447	0.33	0.311
17a. Tests/investigations					
GP interview	0.169	–	0.002	–0.041	0.216
GP self-administered	0.576		0.549	0.430	0.536
Hospital interview	0.524		0.439	0.253	0.272
Hospital self-administered	0.249		0.587	0.228	0.206
Total sample	0.444		0.452	0.316	0.372
18a. Given diagnosis or have previous diagnosis confirmed					
GP interview	–0.083	0.441	–	0.163	0.218
GP self-administered	0.411	0.549		0.511	0.470
Hospital interview	0.496	0.439		0.280	0.136
Hospital self-administered	0.191	0.587		0.190	0.200
Total sample	0.447	0.452		0.365	0.332
19a. A new, changed or repeat prescription					
GP interview	0.033	0.041	0.163	–	–0.110
GP self-administered	0.380	0.430	0.511		0.439
Hospital interview	0.333	0.253	0.280		0.317
Hospital self-administered	0.201	0.228	0.190		0.425
Total sample	0.330	0.316	0.365		0.389
20a. A referral to another doctor/specialist/therapist					
GP interview	0.271	0.216	0.218	–0.110	–
GP self-administered	0.335	0.536	0.470	0.439	
Hospital interview	0.170	0.272	0.136	0.317	
Hospital self-administered	0.140	0.206	0.200	0.425	
Total sample	0.311	0.372	0.332	0.389	

Item correlations with rest of full scale: GP interview: –0.212 to 0.602; GP self-administered: 0.135 to 0.57; hospital interview: –0.312 to 0.387; hospital self-administered: 0.056 to 0.417; total: 0.059 to 0.539.

TABLE 16E Doctor–patient approach to information: ideal expectations items 21a–26a – interitem correlation matrix for subscales

Expectation item	21a. Reassurance about my condition	22a. Advice about my health/condition	23a. What caused my condition/problem	24a. How to manage the condition/symptoms/pain	25a. The benefits/side effects or complications/risks of treatment	26a. Given the opportunity to discuss problems in my life
21a. Reassurance about my condition						
GP interview	–	0.416	0.337	0.441	0.171	–0.011
GP self-administered		0.444	0.417	0.489	0.380	0.293
Hospital interview		0.490	0.194	0.333	–0.006	0.287
Hospital self-administered		0.362	0.381	0.369	0.345	0.170
Total sample		0.414	0.359	0.418	0.274	0.214
22a. Advice about health/condition						
GP interview	0.416	–	0.332	0.503	0.385	0.172
GP self-administered	0.444		0.594	0.660	0.570	0.416
Hospital interview	0.490		0.312	0.451	0.218	0.172
Hospital self-administered	0.362		0.493	0.492	0.371	0.077
Total sample	0.414		0.448	0.539	0.433	0.229
23a. What caused my condition/problem						
GP interview	0.337	0.332	–	0.459	0.274	0.081
GP self-administered	0.417	0.594		0.590	0.515	0.383
Hospital interview	0.194	0.312		0.375	0.257	0.294
Hospital self-administered	0.381	0.493		0.687	0.546	0.248
Total sample	0.359	0.448		0.545	0.412	0.290
24a. How to manage condition/symptoms/pain						
GP interview	0.441	0.503	0.459	–	0.414	0.008
GP self-administered	0.489	0.660	0.590		0.751	0.451
Hospital interview	0.333	0.451	0.375		0.433	0.344
Hospital self-administered	0.369	0.492	0.687		0.520	0.173
Total sample	0.418	0.539	0.545		0.555	0.266
25a. The benefits/side effects or complications/risks of treatment						
GP interview	0.171	0.385	0.274	0.414	–	0.092
GP self-administered	0.380	0.570	0.515	0.751		0.463
Hospital interview	–0.006	0.218	0.257	0.433		–0.089
Hospital self-administered	0.345	0.371	0.546	0.520		0.306
Total sample	0.274	0.433	0.412	0.555		0.279

continued

TABLE 16E Doctor–patient approach to information: ideal expectations items 21a–26a – interitem correlation matrix for subscales (*continued*)

Expectation item	21a. Reassurance about my condition	22a. Advice about my health/condition	23a. What caused my condition/problem	24a. How to manage the condition/symptoms/pain	25a. The benefits/side effects or complications/risks of treatment	26a. Given the opportunity to discuss problems in my life
26a. Given the opportunity to discuss problems in my life						
GP interview	–0.011	0.172	0.081	0.008	0.092	–
GP self-administered	0.293	0.416	0.383	0.451	0.463	
Hospital interview	0.287	0.172	0.294	0.344	–0.089	
Hospital self-administered	0.170	0.077	0.248	0.173	0.306	
Total sample	0.214	0.229	0.290	0.266	0.279	

Item correlations with rest of full scale: GP interview: –0.219 to 0.543; GP self-administration: 0.031 to 0.491; hospital interview: –0.312 to 0.476; hospital self-administration: 0.054 to 0.383; total: 0.054 to 0.416.

TABLE 16F Treatment outcomes: ideal expectations items 27a–29a – interitem correlation matrix for subscales

Expectation item	27a. Improved quality of life	28a. A reduction in my symptoms/problems	29a. Increased chances of improvements to my health/staying healthy
27a. Improved quality of life			
GP interview	–	0.529	0.328
GP self-administered		0.645	0.612
Hospital interview		0.374	0.430
Hospital self-administered		0.421	0.579
Total sample		0.509	0.544
28a. A reduction in my symptoms/problems			
GP interview	0.529	–	0.264
GP self-administered	0.645		0.400
Hospital interview	0.347		0.309
Hospital self-administered	0.421		0.450
Total sample	0.509		0.378
29a. Increased chances of improvements to my health/staying healthy			
GP interview	0.328	0.264	–
GP self-administered	0.612	0.400	
Hospital interview	0.430	0.309	
Hospital self-administered	0.579	0.450	
Total sample	0.544	0.378	

Item correlations with rest of full scale: GP interview: –0.063 to 0.407; GP self-administration: 0.213 to 0.711; hospital interview: –0.127 to 0.602; hospital self-administration: 0.076 to 0.412; total: 0.073 to 0.395.

Realistic expectations subscales

Tables 17A–F show the item–item correlations within the realistic expectation types and by mode of questionnaire administration. None of the item–item correlations exceeded the threshold for item redundancy. The item–item correlations exceeded the 0.20 threshold supporting their homogeneity, except for some of the items within the subscales for GP interview patients, again perhaps because of the small numbers interviewed or the small number of sites they represented.

TABLE 17A Structure of health care: realistic expectations items 1b–4b – interitem correlation matrix for subscales

Expectation item	1b. Easy to find where to go when there	2b. Easy to get around inside building	3b. Clean inside	4b. Enough space in waiting room
1b. Easy to find where to go when there				
GP interview	–	0.212	0.036	0.134
GP self-administered		0.639	0.346	0.378
Hospital interview		0.548	0.109	0.316
Hospital self-administered		0.546	0.273	0.338
Total sample		0.572	0.289	0.389
2b. Easy to get around inside building				
GP interview	0.212	–	0.394	0.393
GP self-administered	0.639		0.419	0.472
Hospital interview	0.548		0.279	0.164
Hospital self-administered	0.546		0.356	0.320
Total sample	0.572		0.401	0.407
3b. Clean inside				
GP interview	0.036	0.394	–	0.523
GP self-administered	0.346	0.419		0.418
Hospital interview	0.109	0.279		0.112
Hospital self-administered	0.273	0.356		0.285
Total sample	0.289	0.401		0.364
4b. Enough space in waiting room				
GP interview	0.134	0.393	0.523	–
GP self-administered	0.378	0.472	0.418	
Hospital interview	0.316	0.164	0.112	
Hospital self-administered	0.338	0.320	0.285	
Total sample	0.389	0.407	0.364	

Item–item correlations with rest of full scale: GP interview: 0.019 to 0.523; GP self-administration: 0.092 to 0.639; hospital interview: –0.058 to 0.449; hospital self-administration: 0.179 to 0.412; total: 0.115 to 0.374.

TABLE 17B Process of health care: realistic expectations items 5b–7b and 10b – interitem correlation matrix for subscales

Expectation item	5b. Clear information about where to go	6b. Given an appointment for a convenient date/time	7b. Seen on time	10b. Reception staff helpful
5b. Clear information about where to go				
GP interview	–	0.313	0.288	0.340
GP self-administered		0.341	0.289	0.426
Hospital interview		0.310	0.189	0.405
Hospital self-administered		0.220	0.284	0.233
Total sample		0.251	0.262	0.316
6b. Given appointment for convenient date/time				
GP interview	0.313	–	0.644	0.433
GP self-administered	0.341		0.504	0.465
Hospital interview	0.310		0.006	0.289
Hospital self-administered	0.220		0.494	0.298
Total sample	0.251		0.471	0.373
7b. Seen on time				
GP interview	0.288	0.644	–	0.361
GP self-administered	0.289	0.504		0.351
Hospital interview	0.189	0.066		0.127
Hospital self-administered	0.284	0.494		0.314
Total sample	0.262	0.471		0.300
10b. Reception staff helpful				
GP interview	0.340	0.433	0.361	–
GP self-administered	0.426	0.465	0.351	
Hospital interview	0.405	0.289	0.127	
Hospital self-administered	0.233	0.298	0.314	
Total sample	0.316	0.373	0.300	

Item correlations with rest of full scale: GP interview: 0.033 to 0.665; GP self-administration: 0.111 to 0.554; hospital interview: 0.011 to 0.405; hospital self-administration: 0.182 to 0.511; total: 0.157 to 0.320.

TABLE 17C Doctor–patient communication style: realistic expectations items 11b–15b – interitem correlation matrix for subscales

Expectation item	11b. Doctor helpful	12b. Doctor respectful and treats me with dignity	13b. Doctor knowledgeable about/understands my health condition/problem	14b. Doctor clear and easy to understand	15b. Doctor involves me in decisions about my treatment
11b. Doctor helpful					
GP interview	–	0.593	0.665	0.342	0.547
GP self-administered		0.797	0.561	0.429	0.449
Hospital interview		0.398	0.498	0.333	0.469
Hospital self-administered		0.477	0.612	0.511	0.290
Total sample		0.59	0.588	0.447	0.385
12b. Doctor respectful and treats me with dignity					
GP interview	0.593	–	0.508	0.451	0.430
GP self-administered	0.797		0.613	0.458	0.446
Hospital interview	0.398		0.560	0.369	0.278
Hospital self-administered	0.477		0.550	0.273	0.275
Total sample	0.590		0.557	0.361	0.325
13b. Doctor knowledgeable about/understands my health condition/problem					
GP interview	0.665	0.508	–	0.385	0.567
GP self-administered	0.561	0.613		0.432	0.555
Hospital interview	0.498	0.560		0.223	0.203
Hospital self-administered	0.612	0.550		0.494	0.327
Total sample	0.588	0.557		0.431	0.438
14b. Doctor clear and easy to understand					
GP interview	0.342	0.451	0.385	–	0.179
GP self-administered	0.429	0.458	0.432		0.677
Hospital interview	0.333	0.369	0.223		0.243
Hospital self-administered	0.511	0.273	0.494		0.337
Total sample	0.447	0.361	0.431		0.442
15b. Doctor involves me in decisions about my treatment					
GP interview	0.547	0.430	0.567	0.179	–
GP self-administered	0.449	0.446	0.555	0.677	
Hospital interview	0.469	0.278	0.203	0.243	
Hospital self-administered	0.290	0.275	0.327	0.337	
Total sample	0.385	0.325	0.438	0.442	

Item correlations with rest of full scale: GP interview: 0.029 to 0.468; GP self-administration: 0.111 to 0.797; hospital interview: 0.059 to 0.469; hospital self-administration: 0.114 to 0.531; total: 0.094 to 0.432.

TABLE 17D Consultation and treatment procedures: realistic expectations items 16b–20b – interitem correlation matrix for subscales

Expectation item	16b. Physical examination	17b. Tests/investigations	18b. Given diagnosis or have a previous diagnosis confirmed	19b. A new, changed or repeat prescription	20b. A referral to another doctor/specialist/therapist
16b. Physical examination					
GP interview	–	0.137	0.344	0.077	0.238
GP self-administered		0.511	0.333	0.459	0.463
Hospital interview		0.501	0.393	0.233	0.238
Hospital self-administered		0.416	0.415	0.321	0.234
Total sample		0.422	0.418	0.316	0.347
17b. Tests/investigations					
GP interview	0.137	–	0.195	0.107	0.232
GP self-administered	0.511		0.486	0.498	0.588
Hospital interview	0.501		0.453	0.327	0.217
Hospital self-administered	0.416		0.459	0.247	0.283
Total sample	0.422		0.373	0.321	0.403
18. Given diagnosis or have a previous diagnosis confirmed					
GP interview	0.344	0.195	–	0.119	0.179
GP self-administered	0.333	0.486		0.423	0.372
Hospital interview	0.393	0.453		0.380	0.235
Hospital self-administered	0.415	0.459		0.257	0.263
Total sample	0.418	0.373		0.366	0.333
19b. A new, changed or repeat prescription					
GP interview	0.077	0.107	0.119	–	0.214
GP self-administered	0.459	0.498	0.423		0.566
Hospital interview	0.233	0.327	0.380		0.474
Hospital self-administered	0.321	0.247	0.257		0.423
Total sample	0.316	0.321	0.366		0.419
20b. A referral to another doctor/specialist/therapist					
GP interview	0.238	0.232	0.179	0.214	–
GP self-administered	0.463	0.588	0.372	0.566	
Hospital interview	0.238	0.217	0.235	0.474	
Hospital self-administered	0.234	0.283	0.263	0.423	
Total sample	0.347	0.403	0.333	0.419	

Item correlations with rest of full scale: GP interview: –0.116 to 0.335; GP self-administration: 0.171 to 0.588; hospital interview: –0.045 to 0.501; hospital self-administration: 0.157 to 0.401; total: 0.094 to 0.310.

TABLE 17E Doctor–patient approach to information: realistic expectations items 21b–26b – interitem correlation matrix for subscales

Expectation item	21b. Reassurance about my condition	22b. Advice about my health/condition	23b. What caused my condition/problem	24b. How to manage the condition/symptoms/pain	25b. The benefits/side effects or complications/risks of treatment	26b. Given the opportunity to discuss problems in my life
21b. Reassurance about my condition						
GP interview	–	0.370	0.336	0.248	0.062	0.047
GP self-administered		0.481	0.470	0.522	0.542	0.397
Hospital interview		0.400	0.121	0.196	0.243	0.281
Hospital self-administered		0.490	0.407	0.482	0.322	0.305
Total sample		0.455	0.374	0.434	0.347	0.294
22b. Advice about my health/condition						
GP interview	0.370	–	0.299	0.497	0.353	0.138
GP self-administered	0.481		0.531	0.582	0.531	0.371
Hospital interview	0.400		0.246	0.383	0.448	0.210
Hospital self-administered	0.490		0.520	0.468	0.330	0.250
Total sample	0.455		0.448	0.499	0.41	0.266
23b. What caused my condition/problem						
GP interview	0.336	0.299	–	0.407	0.218	0.146
GP self-administered	0.470	0.531		0.570	0.538	0.427
Hospital interview	0.121	0.246		0.471	0.305	0.309
Hospital self-administered	0.407	0.520		0.637	0.388	0.366
Total sample	0.374	0.448		0.541	0.384	0.356
24b. How to manage the condition/symptoms/pain						
GP interview	0.248	0.497	0.407	–	0.421	0.185
GP self-administered	0.522	0.582	0.570		0.603	0.313
Hospital interview	0.196	0.383	0.471		0.530	0.174
Hospital self-administered	0.482	0.468	0.637		0.459	0.315
Total sample	0.434	0.499	0.541		0.503	0.276
25b. The benefits/side effects or complications/risks of treatment						
GP interview	0.062	0.353	0.218	0.421	–	0.083
GP self-administered	0.542	0.531	0.538	0.603		0.433
Hospital interview	0.243	0.448	0.305	0.530		–0.063
Hospital self-administered	0.322	0.330	0.388	0.459		0.441
Total sample	0.347	0.410	0.384	0.503		0.326
26b. Given the opportunity to discuss problems in my life						
GP interview	0.047	0.138	0.146	0.185	0.083	–
GP self-administered	0.397	0.371	0.427	0.313	0.433	
Hospital interview	0.281	0.210	0.309	0.174	–0.063	
Hospital self-administered	0.305	0.250	0.366	0.315	0.441	
Total sample	0.294	0.266	0.356	0.276	0.326	

Item correlations with rest of full scale: GP interview: –0.007 to 0.42; GP self-administration: 0.157 to 0.542; hospital interview: –0.066 to 0.318; hospital self-administration: 0.138 to 0.553; total: 0.097 to 0.440.

TABLE 17F Treatment outcomes: realistic expectations items 27b–29b – interitem correlation matrix for subscales

Expectation item	27b. Improved quality of life	28b. A reduction in my symptoms/problems	29b. Increased chances of improvements to my health/staying healthy
27b. Improved quality of life			
GP interview	–	0.614	0.619
GP self-administered		0.702	0.571
Hospital interview		0.432	0.627
Hospital self-administered		0.367	0.392
Total sample		0.541	0.506
28b. A reduction in my symptoms/problems			
GP interview	0.614	–	0.539
GP self-administered	0.702		0.477
Hospital interview	0.432		0.381
Hospital self-administered	0.367		0.685
Total sample	0.541		0.586
29b. Increased chances of improvements to my health/staying healthy			
GP interview	0.619	0.539	–
GP self-administered	0.571	0.477	
Hospital interview	0.627	0.381	
Hospital self-administered	0.392	0.685	
Total sample	0.506	0.586	

Item correlations with rest of full scale: GP interview: –0.063 to 0.407; GP self-administration: –0.186 to 0.401; hospital interview: –0.086 to 0.408; hospital self-administration: 0.104 to 0.502; total: 0.013 to 0.513.

Post-visit subscales

Tables 18A–E show that most of the item–item correlations for post-visit subscales met the minimum and maximum threshold criteria for reliability, except for some items within the interview samples (probably reflecting these small sample sizes).

TABLE 18A Structure of health care: post-visit met expectations items 1c–4c – interitem correlation matrix for subscales

Expectation item	1c. Easy to find where to go when there	2c. Easy to get around inside building	3c. Clean inside	4c. Enough space in waiting room
1c. Easy to find where to go when there				
GP interview	–	0.449	0.420	0.427
GP self-administered		0.608	0.469	0.496
Hospital interview		0.190	0.068	0.239
Hospital self-administered		0.409	0.324	0.253
Total sample		0.484	0.353	0.364
2c. Easy to get around inside building				
GP interview	0.449	–	0.338	0.267
GP self-administered	0.608		0.628	0.657
Hospital interview	0.190		0.322	0.287
Hospital self-administered	0.409		0.289	0.233
Total sample	0.484		0.416	0.398
3c. Clean inside				
GP interview	0.420	0.338	–	0.506
GP self-administered	0.469	0.628		0.757
Hospital interview	0.068	0.322		0.292
Hospital self-administered	0.324	0.289		0.448
Total sample	0.353	0.416		0.489
4c. Enough space in waiting room				
GP interview	0.427	0.267	0.506	–
GP self-administered	0.496	0.657	0.757	
Hospital interview	0.239	0.287	0.292	
Hospital self-administered	0.253	0.233	0.448	
Total sample	0.364	0.398	0.489	

Item correlations with rest of full scale: GP interview: –0.62 to 0.484; GP self-administration: –0.152 to 0.607; hospital interview: –0.050 to 0.331; hospital self-administration: –0.025 to 0.514; total: –0.004 to 0.445.

TABLE 18B Process of health care: post-visit met expectations items 5c–7c and 10c – interitem correlation matrix for subscales

Expectation item	5c. Clear information about where to go	6.c Given an appointment for a convenient date/time	7c. Seen on time	10c. Reception staff helpful
5c. Clear information about where to go				
GP interview	–	0.261	0.038	0.429
GP self-administered		0.618	0.337	0.572
Hospital interview		0.354	–0.030	0.303
Hospital self-administered		0.416	0.281	0.440
Total sample		0.481	0.225	0.493
6c. Given an appointment for a convenient date/time				
GP interview	0.261	–	0.304	0.495
GP self-administered	0.618		0.404	0.576
Hospital interview	0.354		0.056	0.197
Hospital self-administered	0.416		0.354	0.374
Total sample	0.481		0.32	0.473
7c. Seen on time				
GP interview	0.038	0.304	–	0.026
GP self-administered	0.337	0.404		0.345
Hospital interview	–0.030	0.056		0.263
Hospital self-administered	0.281	0.354		0.370
Total sample	0.225	0.320		0.277
10c. Reception staff helpful				
GP interview	0.429	0.495	0.026	–
GP self-administered	0.572	0.576	0.345	
Hospital interview	0.303	0.197	0.263	
Hospital self-administered	0.440	0.374	0.370	
Total sample	0.493	0.473	0.277	

Item correlations with rest of full scale: GP interview: –0.023 to 0.668; GP self-administration: –0.040 to 0.572; hospital interview: –0.135 to 0.397; hospital self-administration: –0.006 to 0.514; total: 0.002 to 0.417.

TABLE 18C Doctor–patient communication style: post-visit met expectations items 11c–15c – interitem correlation matrix for subscales

Expectation item	11c. Doctor helpful	12c. Doctor respectful and treats me with dignity	13c. Doctor knowledgeable about/understands my health condition/problem	14c. Doctor clear and easy to understand	15c. Doctor involves me in decisions about my treatment
11c. Doctor helpful					
GP interview	–	0.665	0.668	0.627	0.426
GP self-administered		0.882	0.754	0.783	0.682
Hospital interview		0.675	0.784	0.460	0.493
Hospital self-administered		0.659	0.429	0.373	0.273
Total sample		0.759	0.634	0.596	0.486
12c. Doctor respectful/treated me with dignity					
GP interview	0.295	–	0.614	0.769	0.507
GP self-administered	0.882		0.704	0.825	0.698
Hospital interview	0.675		0.504	0.372	0.368
Hospital self-administered	0.659		0.436	0.316	0.310
Total sample	0.759		0.593	0.577	0.486
13c. Doctor knowledgeable about/understands my health condition/problem					
GP interview	0.668	0.614	–	0.612	0.398
GP self-administered	0.754	0.704		0.766	0.621
Hospital interview	0.784	0.504		0.383	0.341
Hospital self-administered	0.429	0.436		0.494	0.441
Total sample	0.634	0.593		0.635	0.514
14c. Doctor clear and easy to understand					
GP interview	0.627	0.769	0.612	–	0.563
GP self-administered	0.783	0.825	0.766		0.691
Hospital interview	0.460	0.372	0.383		0.180
Hospital self-administered	0.373	0.316	0.494		0.472
Total sample	0.596	0.577	0.635		0.546
15c. Doctor involves me in decisions about my treatment					
GP interview	0.426	0.507	0.398	0.563	–
GP self-administered	0.682	0.698	0.621	0.691	
Hospital interview	0.493	0.368	0.341	0.180	
Hospital self-administered	0.273	0.310	0.441	0.472	
Total sample	0.486	0.486	0.514	0.546	

Post-visit: Item correlations with rest of full scale: GP interview: –0.025 to 0.489; GP self-administration: –0.029 to 0.643; hospital interview: –0.004 to 0.435; hospital self-administration: –0.004 to 0.445; total: –0.015 to 0.414.

TABLE 18D Doctor–patient approach to information: post-visit met expectations items 16c–21c – interitem correlation matrix for subscales

Expectation item	16c. What caused my condition/problem	17c. How to manage the condition/symptoms/pain	18c. The benefits/side effects or complications/risks of treatment	19c. Given the opportunity to discuss problems in my life	20c. Reassurance about my condition	21c. Advice about my health/condition
16c. What caused my condition/problem						
GP interview	–	0.500	0.286	0.077	0.503	0.308
GP self-administered		0.789	0.638	0.428	0.658	0.598
Hospital interview		0.307	0.224	0.348	0.281	0.267
Hospital self-administered		0.715	0.598	0.353	0.363	0.494
Total sample		0.624	0.510	0.324	0.455	0.45
17c. How to manage the condition/symptoms						
pain	0.500	–	0.302	0.246	0.616	0.410
GP interview	0.789		0.703	0.475	0.706	0.691
GP self-administered	0.307		0.457	0.063	0.053	0.588
Hospital interview	0.715		0.675	0.332	0.291	0.607
Hospital self-administered	0.624		0.569	0.319	0.468	0.592
18c. The benefits/side effects or complications/risks of treatment						
GP interview	0.286	0.302	–	0.095	0.249	0.287
GP self-administered	0.638	0.703		0.501	0.656	0.696
Hospital interview	0.224	0.457		–0.056	0.015	0.320
Hospital self-administered	0.598	0.675		0.460	0.409	0.747
Total sample	0.510	0.569		0.334	0.414	0.590
19c. Given the opportunity to discuss problems in my life						
GP interview	0.077	0.246	0.095	–	0.465	0.380
GP self-administered	0.428	0.475	0.501		0.573	0.573
Hospital interview	0.348	–0.063	–0.056		0.406	0.201
Hospital self-administered	0.353	0.332	0.460		0.392	0.426
Total sample	0.324	0.319	0.334		0.464	0.429
20c. Reassurance about my condition						
GP interview	0.503	0.616	0.249	0.465	–	0.530
GP self-administered	0.658	0.706	0.656	0.573		0.829
Hospital interview	0.281	0.053	0.015	0.406		0.156
Hospital self-administered	0.363	0.291	0.409	0.392		0.447
Total sample	0.455	0.468	0.414	0.464		0.569

TABLE 18D Doctor–patient approach to information: post-visit met expectations items 16c–21c – interitem correlation matrix for subscales (*continued*)

Expectation item	16c. What caused my condition/problem	17c. How to manage the condition/symptoms/pain	18c. The benefits/side effects or complications/risks of treatment	19c. Given the opportunity to discuss problems in my life	20c. Reassurance about my condition	21c. Advice about my health/condition
21c. Advice about my health/condition						
GP interview	0.308	0.410	0.287	0.380	0.530	–
GP self-administered	0.598	0.691	0.696	0.573	0.829	
Hospital interview	0.267	0.588	0.320	0.201	0.156	
Hospital self-administered	0.494	0.607	0.747	0.426	0.447	
Total sample	0.450	0.592	0.590	0.429	0.569	

Item correlations with rest of full scale: GP interview: –0.001 to 0.403; GP self-administration: –0.083 to 0.570; hospital interview: –0.014 to 0.517; hospital self-administration: –0.032 to 0.448; total: –0.001 to 0.409.

TABLE 18E Treatment outcomes: post-visit met expectations items 27c–29c – interitem correlation matrix for subscales

Expectation item	27c. Improved quality of life	28c. A reduction in my symptoms/problems	29c. Increased chances of improvements to my health/staying healthy
27c. Improved quality of life			
GP interview	–	0.502	0.292
GP self-administered		0.676	0.700
Hospital interview		0.667	0.767
Hospital self-administered		0.492	0.525
Total sample		0.575	0.595
28c. A reduction in my symptoms/problems			
GP interview	0.502	–	0.276
GP self-administered	0.676		0.661
Hospital interview	0.667		0.757
Hospital self-administered	0.492		0.76
Total sample	0.575		0.659
29c. Increased chances of improvements to my health/staying healthy			
GP interview	0.292	0.276	–
GP self-administered	0.700	0.661	
Hospital interview	0.767	0.757	
Hospital self-administered	0.525	0.76	
Total sample	0.595	0.659	

Item correlations with rest of full scale: GP interview: –0.045 to 0.421; GP self-administration: –0.015 to 0.462; hospital interview: –0.046 to 0.490; hospital self-administration: –0.035 to 0.262; total: –0.003 to 0.336.

Item–total correlations and Cronbach’s alphas if item deleted

Table 19 shows the corrected item–total correlations for the ideal and realistic expectations and the post-visit experiences (expectations met) questionnaire. The Cronbach’s alphas for subscales are shown for each item if removed; alphas are not consistently or substantially improved by any removals.

If item–total correlations of < 0.2 (or some use < 0.3) are achieved, this suggests that the scale may be measuring something other than that intended. The overall majority met the threshold criteria, with just a small number in one of the subsamples failing to reach 0.3, probably because of small subsample sizes.

Mode of administration

Table 20 shows the mean (and SD) responses to the expectations scale items by mode of administration. [Lower means equate with stronger agreement with the items (‘strongly agree’ = 1, ‘strongly disagree’ = 5).] The table also shows, for information, the responses to the original items 8 and 9 (given choice of hospitals, given choice of doctors) that the ethics committee had suggested for inclusion given current government health policy promoting patient choice. However, these items were excluded from scaled responses as they did not apply to all patients (i.e. those who were not referred on and in cases in which there was only one doctor so choice was not applicable).

Total sample

For each item, the means for the ideal expectations were consistently lower than the means for the realistic expectations, indicating, as would be expected, that ideal expectations were higher than expectations of what would take place in reality.

Post-visit item means were either in-between those for ideal and realistic expectations or slightly higher, indicating some unmet expectations, particularly for items 22–25 (advice about health/condition, cause of condition, how to manage condition, benefits/side effects).

GP patient sample

Most of the means for the GP sample were comparable by mode of administration, although the interview sample had a markedly higher mean (lower expectation) than the self-administration sample for the realistic expectation about whether they would be seen on time and whether the reception staff would be helpful; the interview sample also had higher ideal and realistic means (lower expectations) for whether they would be given any of the five listed procedures (physical examination, tests/investigations, diagnosis, prescription or referral).

With the exception of item 2 (easy to get around inside the building), all means for realistic expectations were higher than those for ideal expectations, indicating that patients’ expectations of what would happen in reality were lower than their ideals or hopes about what would happen.

TABLE 19 Reliability: item–total subscale statistics and Cronbach’s alphas if item deleted, by mode of administration, type of patient and totals

Expectation item	(a) Ideal expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(b) Realistic expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted) ^{a,b}
Structure of health care			
<i>1. Easy to find where to go when there</i>			
GP interview	0.139 (0.748)	0.178 (0.794)	0.352 (0.813)
GP self-administered	0.380 (0.933)	0.359 (0.931)	0.469 (0.929)
Hospital interview	0.159 (0.748)	0.328 (0.805)	0.514 (0.778)
Hospital self-administered	0.454 (0.881)	0.438 (0.915)	0.254 (0.867)
Total	0.365 (0.879)	0.389 (0.900)	0.390 (0.877)
<i>2. Easy to get around inside building</i>			
GP interview	0.157 (0.748)	0.226 (0.792)	0.387 (0.811)
GP self-administered	0.348 (0.933)	0.468 (0.930)	0.505 (0.929)
Hospital interview	0.026 (0.753)	0.254 (0.808)	0.179 (0.796)
Hospital self-administered	0.449 (0.881)	0.489 (0.915)	0.439 (0.863)
Total	0.333 (0.880)	0.440 (0.899)	0.444 (0.886)
<i>3. Clean inside</i>			
GP interview	0.309 (0.746)	0.427 (0.785)	0.401 (0.811)
GP self-administered	0.520 (0.932)	0.526 (0.929)	0.557 (0.928)
Hospital interview	0.137 (0.749)	0.233 (0.808)	0.270 (0.791)
Hospital self-administered	0.449 (0.879)	0.432 (0.916)	0.417 (0.863)
Total	0.456 (0.878)	0.462 (0.899)	0.456 (0.886)
<i>4. Enough space in waiting room</i>			
GP interview	0.347 (0.743)	0.487 (0.784)	0.499 (0.811)
GP self-administered	0.415 (0.933)	0.402 (0.931)	0.562 (0.928)
Hospital interview	0.156 (0.748)	0.338 (0.804)	0.141 (0.802)
Hospital self-administered	0.322 (0.884)	0.498 (0.915)	0.421 (0.863)
Total	0.329 (0.880)	0.446 (0.899)	0.386 (0.887)
Process of health care			
<i>5. Clear information about where to go</i>			
GP interview	0.076 (0.750)	0.218 (0.792)	0.282 (0.814)
GP self-administered	0.474 (0.932)	0.510 (0.929)	0.636 (0.927)
Hospital interview	0.206 (0.747)	0.395 (0.802)	0.445 (0.786)
Hospital self-administered	0.440 (0.881)	0.389 (0.916)	0.508 (0.861)
Total	0.386 (0.879)	0.402 (0.900)	0.527 (0.884)

continued

TABLE 19 Reliability: item–total subscale statistics and Cronbach’s alphas if item deleted, by mode of administration, type of patient and totals (*continued*)

Expectation item	(a) Ideal expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(b) Realistic expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted) ^{a,b}
<i>6. Given an appointment for a convenient date/time</i>			
GP interview	0.226 (0.746)	0.439 (0.782)	0.366 (0.811)
GP self-administered	0.638 (0.930)	0.494 (0.930)	0.649 (0.927)
Hospital interview	0.408 (0.742)	0.289 (0.806)	0.282 (0.791)
Hospital self-administered	0.434 (0.881)	0.490 (0.915)	0.466 (0.862)
Total	0.467 (0.877)	0.453 (0.899)	0.514 (0.884)
<i>7. Seen on time</i>			
GP interview	0.128 (0.749)	0.431 (0.783)	0.110 (0.831)
GP self-administered	0.449 (0.933)	0.410 (0.931)	0.393 (0.932)
Hospital interview	0.174 (0.747)	0.260 (0.807)	0.172 (0.801)
Hospital self-administered	0.318 (0.884)	0.530 (0.914)	0.375 (0.866)
Total	0.326 (0.880)	0.463 (0.899)	0.311 (0.892)
<i>10. Reception staff helpful</i>			
GP interview	0.351 (0.744)	0.363 (0.786)	0.327 (0.813)
GP self-administered	0.586 (0.931)	0.617 (0.928)	0.590 (0.928)
Hospital interview	0.281 (0.745)	0.296 (0.806)	0.248 (0.792)
Hospital self-administered	0.453 (0.881)	0.455 (0.915)	0.457 (0.862)
Total	0.445 (0.878)	0.477 (0.898)	0.475 (0.885)
Doctor–patient communication style			
<i>11. Doctor helpful</i>			
GP interview	0.414 (0.745)	0.490 (0.783)	0.645 (0.805)
GP self-administered	0.602 (0.931)	0.700 (0.927)	0.762 (0.925)
Hospital interview	0.329 (0.745)	0.398 (0.803)	0.573 (0.781)
Hospital self-administered	0.340 (0.883)	0.607 (0.913)	0.522 (0.860)
Total	0.420 (0.879)	0.600 (0.897)	0.652 (0.881)
<i>12. Doctor respectful and treats me with dignity</i>			
GP interview	0.299 (0.746)	0.435 (0.787)	0.566 (0.810)
GP self-administered	0.681 (0.930)	0.651 (0.928)	0.768 (0.925)
Hospital interview	0.329 (0.745)	0.284 (0.806)	0.529 (0.788)
Hospital self-administered	0.468 (0.881)	0.545 (0.914)	0.466 (0.862)
Total	0.489 (0.877)	0.532 (0.898)	0.600 (0.883)

TABLE 19 Reliability: item–total subscale statistics and Cronbach's alphas if item deleted, by mode of administration, type of patient and totals (*continued*)

Expectation item	(a) Ideal expectations: corrected item–total correlation (Cronbach's alpha if item deleted) ^a	(b) Realistic expectations: corrected item–total correlation (Cronbach's alpha if item deleted) ^a	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach's alpha if item deleted) ^{a,b}
<i>13. Doctor knowledgeable about/understands my health condition/problem</i>			
GP interview	0.417 (0.743)	0.530 (0.780)	0.524 (0.806)
GP self-administered	0.677 (0.930)	0.619 (0.928)	0.768 (0.925)
Hospital interview	0.358 (0.745)	0.435 (0.801)	0.588 (0.781)
Hospital self-administered	0.514 (0.880)	0.649 (0.912)	0.574 (0.859)
Total	0.529 (0.877)	0.592 (0.896)	0.667 (0.881)
<i>14. Doctor clear and easy to understand</i>			
GP interview	0.219 (0.747)	0.408 (0.786)	0.606 (0.810)
GP self-administered	0.632 (0.930)	0.548 (0.929)	0.778 (0.925)
Hospital interview	0.301 (0.746)	0.388 (0.802)	0.361 (0.790)
Hospital self-administered	0.492 (0.880)	0.543 (0.914)	0.558 (0.860)
Total	0.480 (0.878)	0.498 (0.891)	0.654 (0.882)
<i>15. Doctor involves me in decisions about my treatment</i>			
GP interview	0.131 (0.749)	0.234 (0.792)	0.476 (0.806)
GP self-administered	0.722 (0.929)	0.545 (0.929)	0.731 (0.925)
Hospital interview	0.000 (0.754)	0.248 (0.807)	0.502 (0.778)
Hospital self-administered	0.497 (0.880)	0.447 (0.915)	0.541 (0.860)
Total	0.493 (0.877)	0.423 (0.900)	0.618 (0.882)
Consultation and treatment procedures			
<i>16. Physical examination</i>			
GP interview	0.359 (0.738)	0.219 (0.796)	Not applicable as scores were dichotomised: 'yes/no' (0/1)
GP self-administered	0.502 (0.932)	0.561 (0.929)	
Hospital interview	0.387 (0.734)	0.380 (0.802)	
Hospital self-administered	0.340 (0.885)	0.465 (0.915)	
Total	0.399 (0.880)	0.458 (0.899)	
<i>17. Tests/investigations</i>			
GP interview	0.075 (0.765)	–0.161 (0.816)	Not applicable as scores were dichotomised: 'yes/no' (0/1)
GP self-administered	0.621 (0.930)	0.599 (0.928)	
Hospital interview	0.351 (0.738)	0.295 (0.806)	
Hospital self-administered	0.553 (0.878)	0.543 (0.914)	
Total	0.441 (0.878)	0.557 (0.899)	

continued

TABLE 19 Reliability: item–total subscale statistics and Cronbach’s alphas if item deleted, by mode of administration, type of patient and totals (*continued*)

Expectation item	(a) Ideal expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(b) Realistic expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted) ^{a,b}
<i>18. Given diagnosis or have a previous diagnosis confirmed</i>			
GP interview	0.474 (0.726)	0.384 (0.785)	Not applicable as scores were dichotomised: ‘yes/no’ (0/1)
GP self-administered	0.671 (0.929)	0.545 (0.929)	
Hospital interview	0.468 (0.726)	0.586 (0.790)	
Hospital self-administered	0.559 (0.878)	0.521 (0.914)	
Total	0.541 (0.875)	0.552 (0.897)	
<i>19. A new, changed or repeat prescription</i>			
GP interview	0.122 (0.761)	0.098 (0.803)	Not applicable as scores were dichotomised: ‘yes/no’ (0/1)
GP self-administered	0.532 (0.932)	0.588 (0.928)	
Hospital interview	0.296 (0.744)	0.307 (0.806)	
Hospital self-administered	0.382 (0.884)	0.423 (0.916)	
Total	0.395 (0.881)	0.438 (0.900)	
<i>20. A referral to another doctor/specialist/therapist</i>			
GP interview	0.234 (0.749)	0.221 (0.794)	Not applicable as scores were dichotomised: ‘yes/no’ (0/1)
GP self-administered	0.523 (0.932)	0.566 (0.929)	
Hospital interview	0.246 (0.750)	0.192 (0.812)	
Hospital self-administered	0.378 (0.885)	0.457 (0.915)	
Total	0.413 (0.880)	0.459 (0.899)	
Doctor–patient approach to information			
<i>21. Reassurance about my condition</i>			
GP interview	0.460 (0.731)	0.319 (0.788)	0.463 (0.806)
GP self-administered	0.505 (0.932)	0.642 (0.928)	0.719 (0.925)
Hospital interview	0.411 (0.732)	0.404 (0.801)	0.435 (0.784)
Hospital self-administered	0.547 (0.898)	0.648 (0.912)	0.511 (0.860)
Total	0.492 (0.876)	0.585 (0.896)	0.559 (0.883)
<i>22. Advice about my health/condition</i>			
GP interview	0.559 (0.723)	0.321 (0.788)	0.463 (0.806)
GP self-administered	0.722 (0.029)	0.672 (0.927)	0.697 (0.926)
Hospital interview	0.412 (0.736)	0.278 (0.806)	0.332 (0.789)
Hospital self-administered	0.517 (0.880)	0.619 (0.913)	0.594 (0.858)
Total	0.575 (0.875)	0.560 (0.897)	0.540 (0.884)

TABLE 19 Reliability: item–total subscale statistics and Cronbach’s alphas if item deleted, by mode of administration, type of patient and totals (*continued*)

Expectation item	(a) Ideal expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(b) Realistic expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted) ^{a,b}
<i>23. What caused my condition/problem</i>			
GP interview	0.560 (0.717)	0.412 (0.783)	0.567 (0.800)
GP self-administered	0.650 (0.930)	0.561 (0.929)	0.743 (0.925)
Hospital interview	0.430 (0.730)	0.420 (0.800)	0.347 (0.788)
Hospital self-administered	0.577 (0.878)	0.615 (0.912)	0.596 (0.858)
Total	0.545 (0.875)	0.543 (0.897)	0.637 (0.881)
<i>24. How to manage the condition/symptoms/pain</i>			
GP interview	0.528 (0.724)	0.400 (0.784)	0.292 (0.816)
GP self-administered	0.728 (0.929)	0.688 (0.927)	0.645 (0.927)
Hospital interview	0.551 (0.721)	0.360 (0.803)	0.284 (0.792)
Hospital self-administered	0.581 (0.878)	0.616 (0.912)	0.577 (0.858)
Total	0.609 (0.873)	0.578 (0.896)	0.488 (0.885)
<i>25. The benefits/side effects or complications/risks of treatment</i>			
GP interview	0.347 (0.737)	0.290 (0.790)	0.306 (0.817)
GP self-administered	0.696 (0.929)	0.712 (0.927)	0.536 (0.929)
Hospital interview	0.361 (0.738)	0.423 (0.800)	0.260 (0.795)
Hospital self-administered	0.571 (0.878)	0.518 (0.914)	0.394 (0.864)
Total	0.561 (0.874)	0.534 (0.897)	0.416 (0.888)
<i>26. Given the opportunity to discuss problems in my life</i>			
GP interviews	0.117 (0.760)	0.279 (0.792)	0.718 (0.793)
GP self-administered	0.535 (0.933)	0.513 (0.930)	0.720 (0.925)
Hospital interview	0.281 (0.745)	0.240 (0.809)	0.452 (0.782)
Hospital self-administered	0.283 (0.888)	0.482 (0.915)	0.451 (0.862)
Total	0.376 (0.881)	0.442 (0.900)	0.584 (0.883)
Treatment outcomes			
<i>27. Improved quality of life</i>			
GP interviews	0.486 (0.732)	0.643 (0.774)	0.258 (0.815)
GP self-administered	0.685 (0.929)	0.618 (0.928)	0.566 (0.928)
Hospital interview	0.330 (0.740)	0.392 (0.802)	0.537 (0.777)
Hospital self-administered	0.479 (0.880)	0.416 (0.916)	0.376 (0.865)
Total	0.536 (0.876)	0.467 (0.899)	0.462 (0.886)

continued

TABLE 19 Reliability: item–total subscale statistics and Cronbach’s alphas if item deleted, by mode of administration, type of patient and totals (*continued*)

Expectation item	(a) Ideal expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(b) Realistic expectations: corrected item–total correlation (Cronbach’s alpha if item deleted) ^a	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted) ^{a,b}
<i>28. A reduction in my symptoms/problems</i>			
GP interview	0.507 (0.730)	0.494 (0.781)	0.295 (0.814)
GP self-administered	0.520 (0.932)	0.560 (0.929)	0.594 (0.928)
Hospital interview	0.257 (0.743)	0.348 (0.804)	0.400 (0.785)
Hospital self-administered	0.422 (0.881)	0.581 (0.913)	0.324 (0.866)
Total	0.443 (0.878)	0.506 (0.898)	0.432 (0.886)
<i>29. Increased chances of improvements to my health/staying healthy</i>			
GP interview	0.422 (0.734)	0.465 (0.782)	0.563 (0.802)
GP self-administered	0.559 (0.931)	0.560 (0.929)	0.625 (0.927)
Hospital interview	0.339 (0.742)	0.393 (0.803)	0.529 (0.779)
Hospital self-administered	0.517 (0.880)	0.620 (0.913)	0.419 (0.863)
Total	0.490 (0.877)	0.233 (0.902)	0.537 (0.884)

a See Boxes 2–6 for subscale domain alphas and by sample.

b Post-visit 27-item scale: α 0.890; post-visit 22-item scale (with the five dichotomous ‘yes/no’ procedure items removed): α 0.901. Items 8 and 9 excluded from subscales because they did not apply to all patients.

TABLE 20 Pre- and post-visit reliability of items by mode of administration and total sample^{a,b}

Expectation item	GP interview, mean (SD)	GP self-administered, mean (SD)	Hospital interview, mean (SD)	Hospital self-administered, mean (SD)	Total, mean (SD)	Skew, kurtosis (total sample) ^c
<i>Structure of health care</i>						
<i>1. Easy to find where to go when there</i>						
(a) Hope for this ideally	1.28 (0.45)	1.29 (0.49)	1.28 (0.45)	1.47 (0.62)	1.36 (0.55)	1.41, 2.37
(b) Expect this in reality	1.99 (0.97)	1.50 (0.64)	2.46 (1.36)	1.92 (0.89)	1.78 (0.89)	1.28, 1.60
(c) It was (post)	1.23 (0.46)	1.41 (0.72)	1.78 (1.21)	1.78 (0.80)	1.57 (0.80)	1.77, 3.63
<i>2. Easy to get around inside building</i>						
(a) Hope for this ideally	1.26 (0.47)	1.34 (0.55)	1.31 (0.61)	1.50 (0.59)	1.40 (0.57)	1.31, 1.84
(b) Expect this in reality	1.15 (0.95)	1.57 (0.77)	2.41 (1.37)	2.02 (1.03)	1.84 (0.98)	1.15, 0.63
(c) It was (post)	1.30 (0.61)	1.44 (0.74)	1.81 (1.13)	1.98 (0.85)	1.68 (0.85)	1.41, 1.87
<i>3. Clean inside</i>						
(a) Hope for this ideally	1.10 (0.30)	1.30 (0.56)	1.07 (0.26)	1.42 (0.63)	1.31 (0.57)	2.13, 5.94
(b) Expect this in reality	1.75 (0.94)	1.45 (0.67)	2.00 (0.89)	1.81 (0.94)	1.67 (0.86)	1.29, 1.23
(c) It was (post)	1.32 (0.60)	1.41 (0.58)	1.54 (0.79)	1.59 (0.74)	1.49 (0.67)	1.47, 2.67
<i>4. Enough space in waiting room</i>						
(a) Hope for this ideally	1.30 (0.49)	1.34 (0.59)	1.22 (0.42)	1.52 (0.73)	1.40 (0.64)	1.89, 4.73
(b) Expect this in reality	1.81 (0.84)	1.60 (0.79)	2.56 (1.33)	2.24 (1.06)	1.95 (1.01)	0.92, 0.06
(c) There was (post)	1.23 (0.43)	1.44 (0.65)	2.59 (1.45)	1.88 (0.96)	1.68 (0.92)	1.55, 2.20

TABLE 20 Pre- and post-visit reliability of items by mode of administration and total sample^{a,b} (*continued*)

Expectation item	GP interview, mean (SD)	GP self-administered, mean (SD)	Hospital interview, mean (SD)	Hospital self-administered, mean (SD)	Total, mean (SD)	Skew, kurtosis (total sample) ^c
Process of health care						
<i>5. Clear information about where to go</i>						
(a) Hope for this ideally	1.25 (0.47)	1.33 (0.58)	1.11 (0.32)	1.40 (0.65)	1.34 (0.59)	1.91, 4.33
(b) Expect this in reality	1.75 (1.00)	1.59 (0.73)	1.72 (0.96)	1.98 (1.04)	1.78 (0.93)	1.14, 0.63
(c) There was (post)	1.59 (0.96)	1.65 (0.87)	1.43 (0.66)	1.65 (0.73)	1.63 (0.81)	1.48, 2.37
<i>6. Given appointment for a convenient date/time</i>						
(a) Hope for this ideally	1.19 (0.43)	1.46 (0.76)	1.15 (0.41)	1.45 (0.78)	1.41 (0.74)	2.32, 6.48
(b) Expect this in reality	2.81 (1.27)	2.23 (1.06)	2.33 (1.33)	2.17 (0.96)	2.27 (1.07)	0.69, -0.26
(c) I was (post)	1.72 (1.20)	1.83 (1.05)	1.56 (0.98)	11.68 (0.86)	1.80 (0.99)	1.28, 1.15
<i>7. Seen on time</i>						
(a) Hope for this ideally	1.33 (0.50)	1.50 (0.75)	1.30 (0.54)	1.39 (0.70)	1.43 (0.70)	1.98, 4.60
(b) Expect this in reality	3.11 (1.30)	2.52 (1.13)	3.52 (1.23)	2.69 (1.10)	2.72 (1.17)	0.24, -0.97
(c) I was (post)	2.80 (1.63)	2.34 (1.24)	2.85 (1.52)	2.59 (1.27)	2.53 (1.33)	0.40, -1.11
<i>8. Given a choice of hospitals to go to if referred on (not included in scale)</i>						
(a) Hope for this ideally	1.57 (0.95)	1.48 (0.67)	1.56 (0.97)	1.72 (0.89)	1.60 (0.82)	1.43, 2.07
(b) Expect this in reality	2.34 (1.10)	2.10 (0.96)	2.35 (1.35)	2.47 (1.07)	2.29 (1.06)	0.59, -0.26
(c) I was (post)	2.83 (1.56)	2.53 (1.15)	3.30 (1.38)	2.29 (1.11)	2.46 (1.19)	0.41, -0.75
<i>9. Given a choice of doctors to consult (not included in scale)</i>						
(a) Hope for this ideally	1.56 (1.02)	1.61 (0.77)	2.17 (1.15)	1.99 (0.97)	1.80 (0.93)	1.13, 0.81
(b) Expect this in reality	2.58 (1.35)	2.28 (1.05)	3.13 (1.13)	2.75 (1.10)	2.56 (1.14)	0.32, -0.78
(c) I was (post)	2.89 (1.70)	2.68 (1.25)	3.87 (1.26)	2.95 (1.04)	2.90 (1.26)	-0.02, -1.02
<i>10. Reception staff helpful</i>						
(a) Hope for this ideally	1.17 (0.38)	1.35 (0.59)	1.17 (0.38)	1.48 (0.73)	1.38 (0.63)	2.10, 6.33
(b) Expect this in reality	2.31 (1.21)	1.89 (0.98)	1.61 (0.83)	2.05 (1.06)	1.97 (1.04)	1.03, 0.37
(c) They were (post)	1.93 (1.17)	1.81 (0.95)	1.46 (0.69)	1.90 (0.86)	1.84 (0.93)	1.21, 1.47
<i>11. Doctor helpful</i>						
(a) Hope for this ideally	1.07 (0.26)	1.24 (0.48)	1.09 (0.29)	1.30 (0.49)	1.24 (0.47)	2.81, 6.78
(b) Expect this in reality	1.55 (0.89)	1.60 (0.75)	1.65 (0.76)	1.73 (0.81)	1.66 (0.79)	1.34, 2.05
(c) Doctor was (post)	1.32 (0.58)	1.55 (0.82)	1.31 (0.75)	1.89 (0.88)	1.65 (0.85)	1.44, 1.93
<i>12. Doctor respectful and treats me with dignity</i>						
(a) Hope for this ideally	1.10 (0.68)	1.29 (0.53)	1.09 (0.29)	1.44 (0.60)	1.32 (0.55)	1.87, 5.27
(b) Expect this in reality	1.38 (0.68)	1.49 (0.71)	1.63 (0.88)	1.85 (0.86)	1.64 (0.81)	1.40, 2.05
(c) Doctor was (post)	1.24 (0.43)	1.49 (0.78)	1.22 (0.42)	2.06 (0.96)	1.67 (0.88)	1.35, 1.39
<i>13. Doctor knowledgeable about/understands my health condition/problem</i>						
(a) Hope for this ideally	1.17 (0.41)	1.28 (0.56)	1.09 (0.29)	1.35 (0.62)	1.29 (0.56)	2.12, 4.89
(b) Expect this in reality	1.81 (1.02)	1.75 (0.94)	1.80 (0.96)	1.83 (0.87)	1.79 (0.92)	1.19, 1.01
(c) Doctor was (post)	1.42 (0.74)	1.61 (0.82)	1.28 (0.69)	1.94 (0.79)	1.70 (0.82)	1.16, 1.29
<i>14. Doctor clear and easy to understand</i>						
(a) Hope for this ideally	1.17 (0.41)	1.34 (0.54)	1.09 (0.29)	1.35 (0.55)	1.31 (0.52)	1.55, 2.45
(b) Expect this in reality	1.58 (0.82)	1.72 (0.82)	1.89 (1.04)	1.81 (0.87)	1.76 (0.86)	1.10, 0.82
(c) Doctor was (post)	1.19 (0.39)	1.51 (0.74)	1.28 (0.56)	1.76 (0.78)	1.57 (0.74)	1.42, 2.31

continued

TABLE 20 Pre- and post-visit reliability of items by mode of administration and total sample^{a,b} (continued)

Expectation item	GP interview, mean (SD)	GP self-administered, mean (SD)	Hospital interview, mean (SD)	Hospital self-administered, mean (SD)	Total, mean (SD)	Skew, kurtosis (total sample) ^c
<i>15. Doctor involves me in decisions about my treatment</i>						
(a) Hope for this ideally	1.26 (0.53)	1.35 (0.60)	1.28 (0.63)	1.51 (0.77)	1.40 (0.68)	1.96, 4.35
(b) Expect this in reality	1.85 (1.10)	1.93 (0.98)	1.96 (1.13)	1.84 (0.89)	1.88 (0.96)	1.35, 0.46
(c) Doctor did (post)	1.55 (0.90)	1.61 (0.82)	1.87 (1.29)	2.15 (0.91)	1.89 (0.96)	0.97, 0.51
Consultation and treatment procedures						
<i>16. Physical examination</i>						
(a) Hope for this ideally	2.65 (1.75)	1.69 (0.82)	3.07 (1.44)	1.74 (0.92)	1.90 (1.11)	1.32, 1.09
(b) Expect this in reality	2.79 (1.68)	2.18 (1.04)	3.15 (1.39)	2.09 (0.95)	2.27 (1.15)	0.73, -0.22
(c) I was given (post) ^d	51 (38), 49 (36)	41 (125), 59 (179)	31 (17), 69 (37)	35 (107), 65 (198)	39 (287), 61 (450)	N/A, see % (n)
<i>17. Tests/investigations</i>						
(a) Hope for this ideally	2.79 (1.69)	1.58 (0.74)	2.54 (1.42)	1.54 (0.69)	1.74 (1.00)	1.71, 2.82
(b) Expect this in reality	2.89 (1.59)	1.85 (0.89)	2.65 (1.35)	2.08 (1.01)	2.10 (1.10)	0.99, 0.40
(c) I was given (post) ^d	53 (39), 47 (35)	50 (147), 50 (148)	24 (13), 76 (41)	56 (170), 44 (135)	51 (369), 49 (359)	N/A, see % (n)
<i>18. Given diagnosis or have a previous diagnosis confirmed</i>						
(a) Hope for this ideally	2.34 (1.58)	1.53 (0.73)	2.44 (1.51)	1.55 (0.66)	1.68 (0.94)	1.80, 3.38
(b) Expect this in reality	2.69 (1.56)	1.88 (1.00)	2.96 (1.49)	1.81 (0.84)	2.00 (1.10)	1.69, 6.10
(c) I was given (post) ^d	49 (36), 51 (38)	38 (114), 62 (188)	46 (25), 54 (29)	41 (123), 59 (180)	41 (298), 59 (435)	N/A, see % (n)
<i>19. A new, changed or repeat prescription</i>						
(a) Hope for this ideally	2.93 (1.73)	1.77 (0.88)	2.28 (1.57)	2.14 (1.03)	2.14 (1.19)	0.91, -0.08
(b) Expect this in reality	3.07 (1.68)	1.88 (0.89)	3.37 (1.46)	2.25 (1.03)	2.25 (1.17)	0.7, -0.19
(c) I was given (post) ^d	32 (23), 68 (50)	43 (129), 57 (171)	69 (37), 31 (17)	56 (170), 44 (132)	49 (359), 51 (370)	N/A, see % (n)
<i>20. A referral to another doctor/specialist/therapist</i>						
(a) Hope for this ideally	2.85 (1.64)	1.91 (0.99)	3.31 (1.60)	2.31 (1.11)	2.27 (1.23)	0.58, -0.76
(b) Expect this in reality	3.03 (1.50)	2.08 (0.94)	3.44 (1.45)	2.56 (1.00)	2.46 (1.14)	0.42, -0.56
(c) I was given (post) ^d	53 (39), 47 (34)	64 (191), 36 (107)	54 (29), 46 (25)	69 (211), 31 (93)	65 (470), 35 (259)	N/A, see % (n)
<i>Total procedures performed at post visit</i>						
0	1 (1)	3 (9)	4 (2)	5 (14)	4 (26)	
1	23 (17)	20 (54)	7 (4)	21 (60)	20 (135)	
2	20 (15)	29 (79)	31 (17)	28 (84)	28 (195)	
3	27 (20)	29 (79)	28 (15)	28 (83)	28 (197)	
4	23 (17)	11 (30)	26 (14)	13 (39)	14 (100)	
All 5 performed	4 (3)	9 (24)	4 (2)	5 (13)	6 (42)	
<i>21. Reassurance about my condition</i>						
(a) Hope for this ideally	1.64 (1.01)	1.43 (0.66)	1.74 (1.15)	1.42 (0.61)	1.46 (0.73)	1.93, 4.71
(b) Expect this in reality	2.04 (1.12)	1.93 (0.93)	2.20 (1.17)	2.09 (0.95)	2.03 (0.98)	0.83, 0.11
(c) I was given (post)	1.85 (1.12)	2.04 (1.04)	1.89 (1.21)	2.07 (0.98)	2.02 (1.04)	0.95, 0.42

TABLE 20 Pre- and post-visit reliability of items by mode of administration and total sample^{a,b} (*continued*)

Expectation item	GP interview, mean (SD)	GP self-administered, mean (SD)	Hospital interview, mean (SD)	Hospital self-administered, mean (SD)	Total, mean (SD)	Skew, kurtosis (total sample) ^c
<i>22. Advice about my health/condition</i>						
(a) Hope for this ideally	1.70 (1.13)	1.39 (0.58)	1.37 (0.71)	1.40 (0.55)	1.42 (0.65)	2.80, 6.55
(b) Expect this in reality	1.91 (1.16)	1.66 (0.78)	1.57 (0.79)	1.72 (0.85)	1.70 (0.85)	1.38, 2.02
(c) I was given (post)	2.24 (1.37)	2.00 (1.01)	1.63 (0.98)	2.04 (0.96)	2.01 (1.03)	0.98, 0.46
<i>23. What caused my condition/problem</i>						
(a) Hope for this ideally	2.34 (1.61)	1.46 (0.71)	2.24 (1.55)	1.51 (0.72)	1.62 (0.96)	1.942, 3.71
(b) Expect this in reality	2.69 (1.55)	2.01 (1.03)	2.65 (1.44)	1.93 (1.04)	2.08 (1.15)	0.89, -0.18
(c) I was given (post)	2.73 (1.42)	2.07 (1.06)	2.72 (1.41)	2.31 (0.88)	2.28 (1.08)	0.64, -0.19
<i>24. How to manage condition/symptoms/pain</i>						
(a) Hope for this ideally	1.76 (1.19)	1.41 (0.65)	1.65 (1.18)	1.54 (0.71)	1.51 (0.79)	1.99, 4.80
(b) Expect this in reality	2.04 (1.20)	1.80 (0.84)	1.87 (1.18)	1.98 (1.05)	1.90 (1.00)	1.71, 0.61
(c) I was given (post)	2.03 (1.19)	1.98 (1.01)	2.00 (1.18)	2.33 (0.89)	2.13 (1.01)	0.71, -0.06
<i>25. The benefits/side effects or complications/risks of treatment</i>						
(a) Hope for this ideally	1.83 (1.26)	1.47 (0.75)	1.41 (0.84)	1.59 (0.79)	1.55 (0.84)	1.90, 3.90
(b) Expect this in reality	2.10 (1.38)	1.85 (0.92)	1.74 (1.12)	1.99 (1.06)	1.92 (1.05)	1.07, 0.34
(c) I was given (post)	2.68 (1.34)	2.19 (1.10)	2.37 (1.29)	2.16 (0.90)	2.24 (1.08)	0.64, -0.22
<i>26. Given the opportunity to discuss problems in my life</i>						
(a) Hope for this ideally	2.60 (1.63)	2.03 (1.07)	2.81 (1.51)	2.18 (1.05)	2.20 (1.18)	0.69, -0.48
(b) Expect this in reality	3.00 (1.65)	2.53 (1.16)	3.07 (1.33)	2.60 (1.14)	2.64 (1.22)	0.17, -1.04
(c) I was given (post)	2.60 (1.57)	2.63 (1.23)	3.09 (1.52)	2.78 (1.07)	2.72 (1.23)	0.11, -0.98
Treatment outcomes						
<i>27. Improved quality of life</i>						
(a) Hope for this ideally	1.52 (0.86)	1.54 (0.74)	1.33 (0.70)	1.46 (0.64)	1.49 (0.71)	1.52, 2.43
(b) Expect this in reality	1.91 (1.10)	2.04 (0.92)	1.80 (1.02)	1.91 (0.95)	1.95 (0.96)	0.74, -0.16
(c) I expect (post)	1.82 (0.94)	1.97 (0.87)	1.87 (1.15)	2.24 (0.95)	2.06 (0.95)	0.64, -0.13
<i>28. A reduction in my symptoms/problems</i>						
(a) Hope for this ideally	1.49 (0.89)	1.42 (0.62)	1.46 (0.91)	1.37 (0.64)	1.41 (0.68)	2.79, 5.79
(b) Expect this in reality	2.01 (1.14)	1.98 (0.87)	1.89 (1.02)	2.12 (0.91)	2.04 (0.93)	0.75, 0.26
(c) I expect (post)	1.93 (1.10)	1.94 (0.85)	2.04 (1.21)	2.14 (0.91)	2.03 (0.94)	0.76, 0.22
<i>29. Increased chances of improvements to my health/staying healthy</i>						
(a) Hope for this ideally	1.51 (0.92)	1.51 (0.65)	1.22 (0.50)	1.47 (0.61)	1.48 (0.66)	1.43, 2.48
(b) Expect this in reality	1.94 (1.14)	1.92 (0.82)	1.56 (0.74)	2.14 (0.92)	1.99 (0.91)	0.71, 0.06
(c) I expect (post)	1.91 (0.95)	2.00 (0.87)	1.78 (1.06)	2.25 (0.88)	2.08 (0.91)	0.63, 0.12
No. of all pre and post respondents	71–74	285–332	54	285–345	695–805	

N/A, not applicable.

a Expectations items used a five-point response scale: 'strongly agree' (1), 'agree' (2), 'neither agree nor disagree' (3), 'disagree' (4), 'strongly disagree' (5); lower scores indicate positive expectations, higher scores indicate negative expectations (except for post-visit items on procedures received, which were dichotomised as 'yes/no'; % calculated separately as dichotomous).

b Items 8 and 9 (given choice of hospital and given choice of doctor) excluded from scale because they did not apply to all patients.

c Skew: distribution of scores at high end indicates distribution is peaked; 0 represents a perfectly normal distribution, although this is rarely achieved in patient-based research. Kurtosis: if distribution is flat this indicates too many cases at the extremes. Although there are methods of reducing skew and kurtosis, with large samples skew and kurtosis make little difference to analyses.²⁸⁸

d Data expressed as yes [% (n)], no [% (n)].

Most means for the post-visit scaled items fell between those for the ideal and realistic expectations. The most marked exceptions to this for both the GP interview and the GP self-administration questionnaire samples were at items 22, 23 and 25 (advice about health/condition, causes of condition, benefits/side effects) for which means were higher post visit indicating unmet expectations.

Hospital patient sample

Most of the means for the hospital sample were also comparable by mode of administration, although the means were notably higher post visit for the interview sample for items 4, 8 and 9 (enough space in the waiting room, given a choice of hospitals and given a choice of doctors; items 8 and 9 not included in scaling because they did not apply to all patients), indicating that expectations were less likely to be met. Also, the interview sample had a higher mean for the realistic expectation (i.e. lower expectations) about being seen on time (item 7).

Most means for the post-visit scaled items fell between those for the ideal and realistic expectations, with consistent exceptions for items 9, 22–25 and 27–29 (choice of doctors, advice about health/condition, causes of condition, how to manage condition, benefits/side effects, improved quality of life, reduction in symptoms, improvements to health) for which post means were very slightly higher for both modes of administration, suggesting unmet expectations. The skew was judged acceptable for all items (± 1.00).

Summary

Although the smaller numbers of interviewees and their clinic sites appeared to affect the strength of their item–item correlations, in contrast to self-administration respondents, the setting itself (clinic or home) of the self-administration mode did not significantly influence responses within hospital or primary care groups. The reliability of the expectations measures by mode of questionnaire administration met criteria of acceptability overall. This provides more evidence for the validity of the instrument, and its utility across a variety of settings and contexts.

Chapter 6

Psychometric properties by patient type and exploratory factor analysis

Research questions

- What are the psychometric properties of the developed expectations questionnaire?
- How do the psychometric properties of the expectations measures compare in different health-care settings?

In this chapter we continue to examine the psychometric properties of the questionnaires. In particular, we consider the impact of different health-care settings (GP vs hospital), finding good reliability across the different settings for the questionnaires and their specific subscales. The chapter concludes with an exploratory factor analysis.

Reliability statistics: pre- and post-visit questionnaires

Chapter 5 reported in detail on reliability by mode of questionnaire administration and site. The three expectations subscales all met the Cronbach's alpha threshold of 0.70 for acceptability by expectation type: pre-visit ideal expectations 0.917, pre-visit realistic expectations 0.902 and post-visit experiences (met expectations) 0.890. All subscale alphas met the threshold criteria.

GP compared with hospital patient questionnaires

As stated earlier, there were 27 items in each of the ideal expectations, realistic expectations and post-visit experiences (expectations met) measures. *Table 21* shows that the split-half reliability correlation statistics, by subscale and by patient sample (GP, hospital, total), were acceptable. Scale Cronbach's alphas all met the 0.70 threshold for acceptability by expectation type and by patient sample. This supports the internal consistency of the measures.

Means (standard deviations) and summaries of item–item and item correlations

Table 22 shows the item means (and SDs) and summaries of the item correlation statistics for the GP, hospital and total patient samples.

Table 23 shows the item–total correlations and alphas for item removal. Item–total correlations of <0.2 (some use <0.3 as the threshold) suggest that the scale may be measuring something other than that intended. The item–total correlations were moderately strong, except in the case of three items in one of the three samples tested, which exceeded the minimum acceptability criteria of 0.3 for homogeneity. The remaining three items were all well above 0.2 and were retained. None of the item–item correlations approached or exceeded the 0.75 threshold for item redundancy. Cronbach's alphas (internal consistency) were not improved overall by item removal.

TABLE 21 Reliability statistics (internal consistency and split-half) by patient sample and type of expectation

GP patients	Hospital patients	Total sample
Ideal: $n=354/434$ valid for analysis Mean 46.78, SD 11.36; Cronbach's alpha, 27 items: 0.900 (split-half reliability: part 1, 14 items, part 2, 13 items, correlation between forms 0.566)	Ideal: $n=344/399$ valid for analysis Mean 42.35, SD 9.82; Cronbach's alpha, 27 items: 0.859 (split-half reliability: part 1, 14 items, part 2, 13 items, correlation between forms 0.519)	Ideal: $n=714/833$ valid for analysis Mean 41.57, SD 10.63; Cronbach's alpha, 27 items: 0.917 (split-half reliability: part 1, 14 items, part 2, 13 items, correlation between forms 0.543)
Realistic: $n=345/434$ valid for analysis Mean 53.26, SD 14.73; Cronbach's alpha, 27 items: 0.911 (split-half reliability: correlation between forms 0.649)	Realistic: $n=354/399$ valid for analysis Mean 57.06, SD 14.71; Cronbach's alpha, 27 items: 0.902 (split-half reliability: correlation between forms 0.714)	Realistic: $n=695/833$ valid for analysis Mean 54.72, SD 14.49; Cronbach's alpha, 27 items: 0.902 (split-half reliability: correlation between forms 0.688)
Post visit: $n=300$ Mean 44.06, SD 13.63; Cronbach's alpha, 27 items: 0.917 (split-half reliability: correlation between forms 0.643)	Post visit: $n=329$ Mean 47.71, SD 10.93; Cronbach's alpha, 27 items: 0.902 (split-half reliability: correlation between forms 0.540)	Post visit: $n=629$ Mean 45.97, SD 12.42; Cronbach's alpha, 27 items: 0.890 (split-half reliability: correlation between forms 0.595)

TABLE 22 Means (SDs) and summaries of item–item correlations by expectation items for the GP, hospital and total patient samples

Expectation item	GP patients	Hospital patients	Total sample
Structure of health care (items 1–4)			
	Item–item correlations within subscale Ideal: 0.311 to 0.732 Realistic: 0.267 to 0.513 Post: 0.458 to 0.708	Item–item correlations within subscale Ideal: 0.224 to 0.715 Realistic: 0.291 to 0.552 Post: 0.216 to 0.384	Item–item correlations within subscale Ideal: 0.315 to 0.727 Realistic: 0.289 to 0.407 Post: 0.353 to 0.489
	Subscale item correlations with other subscale items Ideal: –0.017 to 0.618 Realistic: 0.037 to 0.482 Post: 0.193 to 0.536	Subscale item correlations with other subscale items Ideal: –0.048 to 0.378 Realistic: 0.096 to 0.377 Post: 0.010 to 0.388	Subscale item correlations with other subscale items Ideal: 0.046 to 0.407 Realistic: 0.115 to 0.374 Post: –0.004 to 0.445
1. Easy to find where to go when there			
(a) Hope for this ideally	1.27 (0.48)	1.43 (0.60)	1.36 (0.55)
(b) Expect this in reality	1.57 (0.74)	2.05 (1.00)	1.78 (0.89)
(c) It was (post)	1.41 (0.73)	1.82 (0.87)	1.57 (0.80)
2. Easy to get around inside building			
(a) Hope for this ideally	1.30 (0.52)	1.47 (0.59)	1.40 (0.57)
(b) Expect this in reality	1.59 (0.82)	2.14 (1.11)	1.84 (0.98)
(c) It was (post)	1.43 (0.74)	2.00 (0.90)	1.68 (0.85)
3. Clean inside			
(a) Hope for this ideally	1.26 (0.54)	1.36 (0.59)	1.31 (0.57)
(b) Expect this in reality	1.54 (0.75)	1.87 (0.95)	1.67 (0.86)
(c) It was (post)	1.42 (0.62)	1.60 (0.76)	1.49 (0.67)
4. Enough space in waiting room			
(a) Hope for this ideally	1.31 (0.56)	1.47 (0.70)	1.40 (0.64)
(b) Expect this in reality	1.64 (0.81)	2.34 (1.12)	1.95 (1.01)
(c) There was (post)	1.41 (0.64)	1.98 (1.08)	1.68 (0.92)

TABLE 22 Means (SDs) and summaries of item–item correlations by expectation items for the GP, hospital and total patient samples (*continued*)

Expectation item	GP patients	Hospital patients	Total sample
<i>Process of health care (items 5–7, 10)</i>			
	Item–item correlations within subscale	Item–item correlations within subscale	Item–item correlations within subscale
	Ideal: 0.291 to 0.618	Ideal: 0.262 to 0.466	Ideal: 0.298 to 0.445
	Realistic: 0.329 to 0.468	Realistic: 0.226 to 0.277	Realistic: 0.251 to 0.471
	Post: 0.239 to 0.551	Post: 0.215 to 0.437	Post: 0.225 to 0.493
	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items
	Ideal: 0.094 to 0.667	Ideal: 0.036 to 0.461	Ideal: 0.101 to 0.383
	Realistic: 0.073 to 0.478	Realistic: 0.062 to 0.387	Realistic: 0.157 to 0.320
	Post: 0.156 to 0.397	Post: 0.069 to 0.423	Post: 0.002 to 0.417
<i>5. Clear information about where to go</i>			
(a) Hope for this ideally	1.30 (0.56)	1.35 (0.63)	1.34 (0.59)
(b) Expect this in reality	1.64 (0.80)	2.00 (1.05)	1.78 (0.93)
(c) was (post)	1.71 (0.93)	1.63 (0.74)	1.63 (0.81)
<i>6. Given an appointment for a convenient date/time</i>			
(a) Hope for this ideally	1.40 (0.74)	1.39 (0.73)	1.41 (0.74)
(b) Expect this in reality	2.39 (1.11)	2.23 (1.02)	2.27 (1.07)
(c) I was (post)	1.89 (1.13)	1.806 (0.89)	1.80 (0.99)
<i>7. Seen on time</i>			
(a) Hope for this ideally	1.45 (0.69)	1.35 (0.65)	1.43 (0.70)
(b) Expect this in reality	2.68 (1.17)	2.84 (1.16)	2.72 (1.17)
(c) I was (post)	2.57 (1.37)	2.66 (1.29)	2.53 (1.33)
<i>10. Reception staff helpful</i>			
(a) Hope for this ideally	1.31 (0.55)	1.44 (0.71)	1.38 (0.63)
(b) Expect this in reality	2.03 (1.06)	2.04 (1.06)	1.97 (1.04)
(c) They were (post)	1.97 (0.04)	1.88 (0.86)	1.84 (0.93)
<i>Doctor–patient communication style (items 11–15)</i>			
	Item–item correlations within subscale	Item–item correlations within subscale	Item–item correlations within subscale
	Ideal: 0.460 to 0.750	Ideal: 0.325 to 0.680	Ideal: 0.334 to 0.589
	Realistic: 0.408 to 0.592	Realistic: 0.270 to 0.594	Realistic: 0.325 to 0.588
	Post: 0.583 to 0.864	Post: 0.306 to 0.699	Post: 0.486 to 0.759
	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items
	Ideal: 0.131 to 0.424	Ideal: 0.008 to 0.449	Ideal: 0.059 to 0.539
	Realistic: 0.150 to 0.399	Realistic: 0.107 to 0.474	Realistic: 0.094 to 0.432
	Post: 0.121 to 0.536	Post: 0.005 to 0.428	Post: –0.015 to 0.414
<i>11. Doctor helpful</i>			
(a) Hope for this ideally	1.21 (0.46)	1.27 (0.48)	1.24 (0.47)
(b) Expect this in reality	1.59 (0.77)	1.74 (0.81)	1.66 (0.79)
(c) Doctor was (post)	1.59 (0.86)	1.83 (0.88)	1.65 (0.85)

continued

TABLE 22 Means (SDs) and summaries of item–item correlations by expectation items for the GP, hospital and total patient samples (*continued*)

Expectation item	GP patients	Hospital patients	Total sample
<i>12. Doctor respectful and treats me with dignity</i>			
(a) Hope for this ideally	1.26 (0.51)	1.39 (0.59)	1.32 (0.55)
(b) Expect this in reality	1.48 (0.72)	1.85 (0.88)	1.64 (0.81)
(c) Doctor was (post)	1.51 (0.79)	1.98 (0.95)	1.67 (0.88)
<i>13. Doctor knowledgeable about/understands my health condition/problem</i>			
(a) Hope for this ideally	1.26 (0.55)	1.32 (0.59)	1.29 (0.56)
(b) Expect this in reality	1.78 (0.97)	1.85 (0.89)	1.79 (0.92)
(c) Doctor was (post)	1.64 (0.85)	1.88 (0.81)	1.70 (0.82)
<i>14. Doctor clear and easy to understand</i>			
(a) Hope for this ideally	1.29 (0.52)	1.32 (0.52)	1.31 (0.52)
(b) Expect this in reality	1.73 (0.85)	1.83 (0.90)	1.76 (0.86)
(c) Doctor was (post)	1.51 (0.75)	1.70 (0.75)	1.57 (0.74)
<i>15. Doctor involves me in decisions about my treatment</i>			
(a) Hope for this ideally	1.33 (0.59)	1.48 (0.76)	1.40 (0.68)
(b) Expect this in reality	1.99 (1.04)	1.88 (0.93)	1.88 (0.96)
(c) Doctor did (post)	1.75 (0.96)	2.12 (0.99)	1.89 (0.96)
Consultation and treatment procedures (items 16–20) [post-visit not shown due to dichotomous coding 'yes/no' (0/1), see % (n)]			
	Item–item correlations within subscale	Item–item correlations within subscale	Item–item correlations within subscale
	Ideal: 0.314 to 0.488	Ideal: 0.124 to 0.586	Ideal: 0.311 to 0.447
	Realistic: 0.279 to 0.502	Realistic: 0.328 to 0.486	Realistic: 0.316 to 0.422
	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items
	Ideal: 0.017 to 0.277	Ideal: 0.021 to 0.423	Ideal: 0.054 to 0.416
	Realistic: 0.058 to 0.370	Realistic: 0.082 to 0.368	Realistic: 0.094 to 0.310
<i>16. Physical examination</i>			
(a) Hope for this ideally	1.90 (1.13)	1.96 (1.13)	1.90 (1.11)
(b) Expect this in reality	2.37 (1.22)	2.31 (1.09)	2.27 (1.15)
(c) I was given (post) ^a	43 (163), 57 (215)	35 (124), 65 (235)	39 (287), 61 (450)
<i>17. Tests/investigations</i>			
(a) Hope for this ideally	1.84 (1.12)	1.69 (0.92)	1.74 (1.00)
(b) Expect this in reality	2.11 (1.15)	2.22 (1.09)	2.10 (1.10)
(c) I was given (post) ^a	50 (186), 50 (183)	51 (183), 49 (176)	51 (369), 49 (359)
<i>18. Given diagnosis or have a previous diagnosis confirmed</i>			
(a) Hope for this ideally	1.69 (1.02)	1.69 (0.90)	1.68 (0.94)
(b) Expect this in reality	2.08 (1.19)	2.02 (1.05)	2.00 (1.10)
(c) I was given (post) ^a	40 (150), 60 (226)	41 (148), 59 (209)	41 (298), 59 (435)
<i>19. A new, changed, or repeat prescription</i>			
(a) Hope for this ideally	2.01 (1.20)	2.32 (1.20)	2.14 (1.19)
(b) Expect this in reality	2.17 (1.19)	2.47 (1.16)	2.25 (1.17)
(c) I was given (post) ^a	41 (152), 59 (221)	58 (207), 42 (149)	58 (207), 42 (149)

TABLE 22 Means (SDs) and summaries of item–item correlations by expectation items for the GP, hospital and total patient samples (*continued*)

Expectation item	GP patients	Hospital patients	Total sample
<i>20. A referral to another doctor/specialist/therapist</i>			
(a) Hope for this ideally	2.12 (1.21)	2.49 (1.25)	2.27 (1.23)
(b) Expect this in reality	2.23 (1.12)	2.74 (1.11)	2.46 (1.14)
(c) I was given (post) ^a	62 (230), 38 (141)	67 (240), 33 (118)	65 (470), 35 (259)
Total procedures performed at post visit	Mean (SD) (<i>n</i> =348): 2.53 (1.25)	Mean (SD) (<i>n</i> =347): 2.44 (1.21)	Mean (SD) (<i>n</i> =695): 2.48 (1.23)
0	3 (10) ^b	5 (16) ^b	4 (26) ^b
1	20 (27) ^b	19 (64) ^b	20 (135) ^b
2	27 (94) ^b	29 (101) ^b	28 (195) ^b
3	28 (99) ^b	28 (98) ^b	28 (197) ^b
4	14 (47) ^b	15 (53) ^b	14 (100) ^b
All 5 performed	8 (27) ^b	4 (15) ^b	6 (42) ^b
Doctor–patient approach to information (items 21–26)			
	Item–item correlations within subscale	Item–item correlations within subscale	Item–item correlations within subscale
	Ideal: 0.310 to 0.621	Ideal: 0.231 to 0.477	Ideal: 0.214 to 0.555
	Realistic: 0.278 to 0.558	Realistic: 0.230 to 0.574	Realistic: 0.266 to 0.503
	Post: 0.296 to 0.721	Post: 0.210 to 0.620	Post: 0.319 to 0.624
	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items
	Ideal: 0.081 to 0.457	Ideal: 0.104 to 0.369	Ideal: 0.098 to 0.516
	Realistic: 0.052 to 0.478	Realistic: 0.119 to 0.511	Realistic: 0.097 to 0.440
	Post: 0.121 to 0.536	Post: 0.057 to 0.381	Post: –0.001 to 0.409
<i>21. Reassurance about my condition</i>			
(a) Hope for this ideally	1.47 (0.75)	1.47 (0.73)	1.46 (0.73)
(b) Expect this in reality	1.99 (0.99)	2.15 (0.99)	2.03 (0.98)
(c) I was given (post)	2.10 (1.10)	2.05 (1.01)	2.02 (1.04)
<i>22. Advice about my health/condition</i>			
(a) Hope for this ideally	1.45 (0.74)	1.39 (0.58)	1.42 (0.65)
(b) Expect this in reality	1.74 (0.89)	1.72 (0.85)	1.70 (0.85)
(c) I was given (post)	2.14 (1.13)	1.98 (0.97)	2.01 (1.03)
<i>23. What caused my condition/problem</i>			
(a) Hope for this ideally	1.65 (1.02)	1.62 (0.93)	1.62 (0.96)
(b) Expect this in reality	2.20 (1.20)	2.06 (1.15)	2.08 (1.15)
(c) I was given (post)	2.34 (1.18)	2.383 (0.98)	2.28 (1.08)
<i>24. How to manage the condition/symptoms/pain</i>			
(a) Hope for this ideally	1.49 (0.81)	1.56 (0.80)	1.51 (0.79)
(b) Expect this in reality	1.88 (0.93)	1.99 (1.09)	1.90 (1.00)
(c) I was given (post)	2.11 (1.09)	2.30 (0.95)	2.13 (1.01)
<i>25. The benefits/side effects or complications/risks of treatment</i>			
(a) Hope for this ideally	1.55 (0.89)	1.56 (0.81)	1.55 (0.84)
(b) Expect this in reality	1.96 (1.05)	1.97 (1.08)	1.92 (1.05)
(c) I was given (post)	2.38 (1.19)	2.18 (0.97)	2.24 (1.08)

continued

TABLE 22 Means (SDs) and summaries of item–item correlations by expectation items for the GP, hospital and total patient samples (*continued*)

Expectation item	GP patients	Hospital patients	Total sample
<i>26. Given the opportunity to discuss problems in my life</i>			
(a) Hope for this ideally	2.17 (1.23)	2.31 (1.16)	2.20 (1.18)
(b) Expect this in reality	2.72 (1.26)	2.71 (1.17)	2.64 (1.22)
(c) I was given (post)	2.72 (1.13)	2.86 (1.15)	2.72 (1.23)
Treatment outcomes (items 27–29)			
	Item–item correlations within subscale	Item–item correlations within subscale	Item–item correlations within subscale
	Ideal: 0.356 to 0.609	Ideal: 0.398 to 0.560	Ideal: 0.378 to 0.544
	Realistic: 0.295 to 0.676	Realistic: 0.380 to 0.641	Realistic: 0.506 to 0.586
	Post: 0.547 to 0.624	Post: 0.533 to 0.751	Post: 0.575 to 0.659
	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items	Subscale item correlations with other subscale items
	Ideal: 0.173 to 0.456	Ideal: 0.079 to 0.413	Ideal: 0.073 to 0.395
	Realistic: 0.115 to 0.455	Realistic: 0.096 to 0.472	Realistic: 0.013 to 0.513
	Post: 0.156 to 0.450	Post: 0.027 to 0.389	Post: 0.003 to 0.336
<i>27. Improved quality of life</i>			
(a) Hope for this ideally	1.54 (0.76)	1.45 (0.66)	1.49 (0.71)
(b) Expect this in reality	2.06 (0.96)	1.89 (0.97)	1.95 (0.96)
(c) I expect (post)	1.98 (0.90)	2.19 (1.00)	2.06 (0.95)
<i>28. A reduction in my symptoms/problems</i>			
(a) Hope for this ideally	1.44 (0.69)	1.39 (0.69)	1.41 (0.68)
(b) Expect this in reality	2.02 (0.93)	2.10 (0.93)	2.04 (0.93)
(c) I expect (post)	1.99 (0.93)	2.13 (0.97)	2.03 (0.94)
<i>29. Increased chances of improvements to my health/staying healthy</i>			
(a) Hope for this ideally	1.52 (0.72)	1.43 (0.59)	1.48 (0.66)
(b) Expect this in reality	1.96 (0.89)	2.07 (0.93)	1.99 (0.91)
(c) I expect (post)	2.03 (0.92)	2.19 (0.93)	2.08 (0.91)

a Data expressed as yes [% (n)], no [% (n)].

b Data expressed as % (n).

Items 8 and 9 not included in scales as they did not apply to all patients.

TABLE 23 Reliability: corrected item–total subscale statistics and Cronbach’s alphas if item deleted by patient sample.

Expectation item	(a) Ideal hope: corrected item–total correlation (Cronbach’s alpha if item deleted)	(b) Expect in reality: corrected item–total correlation (Cronbach’s alpha if item deleted)	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted)
Structure of health care			
<i>1. Easy to find where to go when there</i>			
GP	0.329 (0.899)	0.338 (0.909)	0.457 (0.911)
Hospital	0.397 (0.845)	0.420 (0.900)	0.305 (0.854)
Total	0.365 (0.879)	0.389 (0.900)	0.390 (0.887)
<i>2. Easy to get around inside building</i>			
GP	0.295 (0.899)	0.421 (0.908)	0.490 (0.910)
Hospital	0.362 (0.846)	0.452 (0.899)	0.390 (0.851)
Total	0.333 (0.880)	0.440 (0.899)	0.444 (0.886)
<i>3. Clean inside</i>			
GP	0.441 (0.897)	0.510 (0.907)	0.528 (0.910)
Hospital	0.466 (0.843)	0.410 (0.900)	0.392 (0.851)
Total	0.456 (0.878)	0.462 (0.899)	0.456 (0.886)
<i>4. Enough space in waiting room</i>			
GP	0.385 (0.898)	0.419 (0.908)	0.555 (0.909)
Hospital	0.280 (0.848)	0.473 (0.899)	0.282 (0.855)
Total	0.329 (0.880)	0.446 (0.899)	0.386 (0.887)
Process of health care			
<i>5. Clear information about where to go</i>			
GP	0.391 (0.898)	0.438 (0.908)	0.562 (0.909)
Hospital	0.379 (0.845)	0.368 (0.901)	0.508 (0.848)
Total	0.386 (0.879)	0.402 (0.900)	0.527 (0.884)
<i>6. Given an appointment for a convenient date/time</i>			
GP	0.531 (0.895)	0.496 (0.907)	0.586 (0.908)
Hospital	0.393 (0.844)	0.448 (0.899)	0.443 (0.849)
Total	0.467 (0.877)	0.453 (0.899)	0.514 (0.884)
<i>7. Seen on time</i>			
GP	0.368 (0.898)	0.433 (0.908)	0.306 (0.916)
Hospital	0.291 (0.847)	0.498 (0.898)	0.317 (0.856)
Total	0.326 (0.880)	0.463 (0.899)	0.311 (0.892)
<i>10. Reception staff helpful</i>			
GP	0.504 (0.896)	0.569 (0.905)	0.522 (0.909)
Hospital	0.400 (0.844)	0.402 (0.900)	0.445 (0.849)
Total	0.445 (0.878)	0.477 (0.898)	0.475 (0.885)
Doctor–patient communication style			
<i>11. Doctor helpful</i>			
GP	0.519 (0.897)	0.627 (0.905)	0.745 (0.906)
Hospital	0.301 (0.847)	0.568 (0.898)	0.544 (0.846)
Total	0.420 (0.879)	0.600 (0.897)	0.652 (0.881)

continued

TABLE 23 Reliability: corrected item–total subscale statistics and Cronbach’s alphas if item deleted by patient sample. (continued)

Expectation item	(a) Ideal hope: corrected item–total correlation (Cronbach’s alpha if item deleted)	(b) Expect in reality: corrected item–total correlation (Cronbach’s alpha if item deleted)	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach’s alpha if item deleted)
<i>12. Doctor respectful and treats me with dignity</i>			
GP	0.573 (0.895)	0.582 (0.906)	0.738 (0.906)
Hospital	0.401 (0.845)	0.487 (0.899)	0.474 (0.848)
Total	0.489 (0.877)	0.532 (0.898)	0.600 (0.883)
<i>13. Doctor knows about/understands my health condition/problem</i>			
GP	0.597 (0.895)	0.583 (0.905)	0.727 (0.906)
Hospital	0.461 (0.843)	0.607 (0.897)	0.586 (0.846)
Total	0.529 (0.877)	0.592 (0.896)	0.667 (0.881)
<i>14. Doctor clear and easy to understand</i>			
GP	0.523 (0.896)	0.485 (0.907)	0.745 (0.906)
Hospital	0.429 (0.845)	0.515 (0.898)	0.545 (0.847)
Total	0.480 (0.878)	0.498 (0.891)	0.654 (0.882)
<i>15. Doctor involves me in decisions about treatment</i>			
GP	0.594 (0.895)	0.453 (0.908)	0.685 (0.906)
Hospital	0.419 (0.844)	0.417 (0.900)	0.535 (0.846)
Total	0.493 (0.877)	0.423 (0.900)	0.618 (0.882)
Consultation and treatment procedures			
<i>16. Physical examination</i>			
GP	0.450 (0.898)	0.476 (0.906)	N/A
Hospital	0.346 (0.848)	0.448 (0.899)	
Total	0.399 (0.880)	0.458 (0.899)	
<i>17. Tests/investigations</i>			
GP	0.435 (0.898)	0.401 (0.909)	N/A
Hospital	0.452 (0.842)	0.504 (0.898)	
Total	0.441 (0.878)	0.557 (0.899)	
<i>18. Given diagnosis or have a previous diagnosis confirmed</i>			
GP	0.583 (0.894)	0.516 (0.906)	N/A
Hospital	0.480 (0.841)	0.509 (0.898)	
Total	0.541 (0.875)	0.552 (0.897)	
<i>19. A new, changed or repeat prescription</i>			
GP	0.417 (0.899)	0.452 (0.908)	N/A
Hospital	0.364 (0.847)	0.406 (0.900)	
Total	0.395 (0.881)	0.438 (0.900)	
<i>20. A referral to another doctor/specialist/therapist</i>			
GP	0.459 (0.898)	0.482 (0.907)	N/A
Hospital	0.349 (0.849)	0.413 (0.900)	
Total	0.413 (0.880)	0.459 (0.899)	

TABLE 23 Reliability: corrected item–total subscale statistics and Cronbach's alphas if item deleted by patient sample. (continued)

Expectation item	(a) Ideal hope: corrected item–total correlation (Cronbach's alpha if item deleted)	(b) Expect in reality: corrected item–total correlation (Cronbach's alpha if item deleted)	(c) Post-visit experiences (expectations met): corrected item–total correlation (Cronbach's alpha if item deleted)
<i>21. Reassurance about my condition</i>			
GP	0.489 (0.896)	0.563 (0.905)	0.714 (0.905)
Hospital	0.492 (0.842)	0.602 (0.896)	0.454 (0.849)
Total	0.492 (0.876)	0.585 (0.896)	0.584 (0.883)
<i>22. Advice about my health/condition</i>			
GP	0.647 (0.893)	0.579 (0.905)	0.634 (0.907)
Hospital	0.474 (0.843)	0.559 (0.898)	0.511 (0.847)
Total	0.575 (0.875)	0.560 (0.897)	0.559 (0.883)
<i>23. What caused my condition/problem</i>			
GP	0.581 (0.894)	0.534 (0.906)	0.534 (0.908)
Hospital	0.326 (0.849)	0.580 (0.897)	0.580 (0.848)
Total	0.545 (0.875)	0.543 (0.897)	0.543 (0.884)
<i>24. How to manage the condition/symptoms/pain</i>			
GP	0.654 (0.892)	0.612 (0.905)	0.697 (0.906)
Hospital	0.551 (0.839)	0.563 (0.897)	0.551 (0.846)
Total	0.609 (0.873)	0.578 (0.896)	0.637 (0.881)
<i>25. The benefits/side effects or complications/risks of treatment</i>			
GP	0.595 (0.893)	0.597 (0.905)	0.534 (0.909)
Hospital	0.514 (0.840)	0.484 (0.899)	0.480 (0.848)
Total	0.561 (0.874)	0.534 (0.897)	0.488 (0.885)
<i>26. Given the opportunity to discuss problems in my life</i>			
GP	0.442 (0.899)	0.458 (0.908)	0.472 (0.911)
Hospital	0.300 (0.850)	0.450 (0.900)	0.337 (0.854)
Total	0.376 (0.881)	0.442 (0.900)	0.416 (0.888)
Treatment outcomes			
<i>27. Improved quality of life</i>			
GP	0.623 (0.893)	0.587 (0.907)	0.502 (0.910)
Hospital	0.435 (0.844)	0.402 (0.900)	0.418 (0.850)
Total	0.536 (0.876)	0.467 (0.899)	0.462 (0.886)
<i>28. A reduction in my symptoms/problems</i>			
GP	0.502 (0.896)	0.525 (0.906)	0.515 (0.910)
Hospital	0.379 (0.845)	0.523 (0.898)	0.339 (0.853)
Total	0.443 (0.878)	0.506 (0.898)	0.432 (0.886)
<i>29. Increased chances of improvements to my health/staying healthy</i>			
GP	0.506 (0.896)	0.514 (0.906)	0.609 (0.908)
Hospital	0.465 (0.843)	0.537 (0.898)	0.455 (0.849)
Total	0.490 (0.877)	0.233 (0.902)	0.537 (0.884)

N/A, not applicable.

Cronbach's alpha, 27 items per subscale: (a) ideal: GP 0.900, hospital 0.859, total 0.917; (b) realistic: GP 0.911, hospital 0.902, total 0.902; (c) post visit: GP 0.917, hospital 0.902, total 0.890.

Items 8 and 9 excluded from scales because they did not apply to all patients.

Values of <0.3 suggest that the scale may be measuring something other than that intended.

Reliability statistics: subscales

Table 24 examines the subscale reliability statistics by GP and hospital sample. It shows means of items within subscales, item–total correlations and Cronbach’s alphas if item is deleted. The item means within subscales were again generally similar between samples. The item–total correlations all well exceeded the acceptability threshold. Cronbach’s alpha was not improved, or more than slightly improved (e.g. item 27 pre-visit realistic expectations), by item removal.

The interitem correlations for pre-visit ideal and realistic expectations and post-visit experiences (expectations met) by subscale domain are shown in Tables 25A–Q. These show that all correlations were moderate to strong, supporting the internal consistency (reliability) of the domains. (Note that correlations were not conducted for post-visit procedures performed as dichotomous coding – i.e. items 16–20.)

TABLE 24 Reliability within subscales: GP and hospital patients

Expectation item	GP, mean (SD) within subscale	Hospital, mean (SD) within subscale	GP, corrected item–total correlation within subscale	Hospital, corrected item–total correlation within subscale	GP, Cronbach’s alpha if item deleted within subscale	Hospital, Cronbach’s alpha if item deleted within subscale
<i>Structure of health care (items 1–4)</i>						
	Ideal: 5.17 (1.61)	Ideal: 5.76 (1.80)			Ideal: α 0.767	Ideal: α 0.688
	Realistic: 6.33 (2.31)	Realistic: 8.27 (2.97)			Realistic: α 0.740	Realistic: α 0.686
	Post visit: 5.61 (2.18)	Post visit: 7.31 (2.47)			Post visit: α 0.849	Post visit: α 0.615
<i>1. Easy to find where to go when there</i>						
(a) Hope for this ideally	1.28 (0.48)	1.44 (0.60)	0.647	0.609	0.674	0.537
(b) Expect this in reality	1.58 (0.73)	2.02 (0.99)	0.497	0.542	0.700	0.575
(c) It was (post)	1.39 (0.69)	1.78 (0.87)	0.632	0.401	0.833	0.541
<i>2. Easy to get around inside building</i>						
(a) Hope for this ideally	1.32 (0.52)	1.48 (0.59)	0.640	0.558	0.672	0.570
(b) Expect this in reality	1.59 (0.81)	2.10 (1.10)	0.631	0.556	0.621	0.559
(c) It was (post)	1.42 (0.72)	1.96 (0.90)	0.717	0.398	0.796	0.542
<i>3. Clean inside</i>						
(a) Hope for this ideally	1.26 (0.53)	1.37 (0.60)	0.433	0.410	0.781	0.661
(b) Expect this in reality	1.52 (0.74)	1.85 (0.94)	0.468	0.382	0.716	0.671
(c) It was (post)	1.40 (0.62)	1.59 (0.75)	0.704	0.459	0.796	0.513
<i>4. Enough space in waiting room</i>						
(a) Hope for this ideally	1.31 (0.56)	1.48 (0.70)	0.568	0.345	0.712	0.715
(b) Expect this in reality	1.64 (0.81)	2.30 (1.11)	0.540	0.405	0.677	0.664
(c) There was (post)	1.40 (0.62)	1.99 (1.08)	0.712	0.354	0.798	0.592

TABLE 24 Reliability within subscales: GP and hospital patients (*continued*)

Expectation item	GP, mean (SD) within subscale	Hospital, mean (SD) within subscale	GP, corrected item–total correlation within subscale	Hospital, corrected item–total correlation within subscale	GP, Cronbach's alpha if item deleted within subscale	Hospital, Cronbach's alpha if item deleted within subscale
<i>Process of health care (items 5–7, 10)</i>						
	Ideal: 5.49 (1.88)	Ideal: 5.53 (1.96)			Ideal: α 0.709	Ideal: α 0.686
	Realistic: 8.67 (3.10)	Realistic: 9.05 (2.88)			Realistic: α 0.731	Realistic: α 0.601
	Post visit: 7.74 (3.23)	Post visit: 7.92 (2.69)			Post visit: α 0.729	Post-visit: α 0.642
<i>5. Clear information about where to go</i>						
(a) Hope for this ideally	1.31 (0.56)	1.35 (0.62)	0.400	0.458	0.699	0.629
(b) Expect this in reality	1.65 (0.79)	1.98 (1.04)	0.418	0.329	0.727	0.568
(c) There was (post)	1.64 (0.88)	1.63 (0.73)	0.563	0.455	0.657	0.570
<i>6. Given an appointment for a convenient date/time</i>						
(a) Hope for this ideally	1.40 (0.72)	1.40 (0.75)	0.518	0.544	0.634	0.569
(b) Expect this in reality	2.37 (1.11)	2.22 (1.02)	0.612	0.431	0.614	0.494
(c) I was (post)	1.82 (1.08)	1.79 (0.88)	0.644	0.458	0.593	0.552
<i>7. Seen on time</i>						
(a) Hope for this ideally	1.47 (0.71)	1.36 (0.66)	0.536	0.473	0.621	0.618
(b) Expect this in reality	2.64 (1.18)	2.82 (1.16)	0.544	0.411	0.661	0.507
(c) I was (post)	2.43 (1.34)	2.64 (1.30)	0.370	0.368	0.788	0.666
<i>10. Reception staff helpful</i>						
(a) Hope for this ideally	1.32 (0.56)	1.43 (0.70)	0.550	0.408	0.621	0.661
(b) Expect this in reality	2.02 (1.05)	2.02 (1.05)	0.536	0.358	0.663	0.547
(c) They were (post)	1.85 (1.00)	1.85 (0.86)	0.580	0.502	0.637	0.526
<i>Doctor–patient communication style (items 11–15)</i>						
	Ideal: 6.36 (2.14)	Ideal: 6.75 (2.03)			Ideal: α 0.878	Ideal: α 0.717
	Realistic: 8.48 (3.37)	Realistic: 9.07 (3.16)			Realistic: α 0.845	Realistic: α 0.770
	Post visit: 7.71 (3.49)	Post visit: 9.43 (3.29)			Post visit: α 0.922	Post visit: α 0.802
<i>11. Doctor helpful</i>						
(a) Hope for this ideally	1.21 (0.46)	1.27 (0.47)	0.726	0.494	0.851	0.669
(b) Expect this in reality	1.59 (0.77)	1.72 (0.80)	0.692	0.654	0.805	0.696
(c) Doctor was (post)	1.51 (0.81)	1.82 (0.89)	0.850	0.657	0.894	0.742
<i>12. Doctor respectful/treats me with dignity</i>						
(a) Hope for this ideally	1.25 (0.50)	1.38 (0.58)	0.790	0.516	0.834	0.653
(b) Expect this in reality	1.47 (0.71)	1.83 (0.87)	0.700	0.529	0.807	0.732
(c) Doctor was (post)	1.45 (0.74)	1.94 (0.95)	0.864	0.625	0.893	0.752

continued

TABLE 24 Reliability within subscales: GP and hospital patients (*continued*)

Expectation item	GP, mean (SD) within subscale	Hospital, mean (SD) within subscale	GP, corrected item–total correlation within subscale	Hospital, corrected item–total correlation within subscale	GP, Cronbach's alpha if item deleted within subscale	Hospital, Cronbach's alpha if item deleted within subscale
<i>13. Doctor knowledgeable about/understand my health condition/problem</i>						
(a) Hope for this ideally	1.26 (0.54)	1.32 (0.59)	0.702	0.599	0.854	0.618
(b) Expect this in reality	1.76 (0.94)	1.83 (0.89)	0.678	0.648	0.808	0.690
(c) Doctor was (post)	1.59 (0.82)	1.86 (0.81)	0.774	0.653	0.910	0.746
<i>14. Doctor clear and easy to understand</i>						
(a) Hope for this ideally	1.30 (0.51)	1.32 (0.53)	0.710	0.451	0.852	0.679
(b) Expect this in reality	1.70 (0.82)	1.82 (0.90)	0.590	0.506	0.831	0.741
(c) Doctor was (post)	1.46 (0.71)	1.70 (0.77)	0.850	0.577	0.897	0.769
<i>15. Doctor involves me in decisions about my treatment</i>						
(a) Hope for this ideally	1.34 (0.59)	1.47 (0.76)	0.646	0.382	0.871	0.728
(b) Expect this in reality	1.95 (1.01)	1.86 (0.91)	0.655	0.401	0.818	0.777
(c) Doctor did (post)	1.70 (0.91)	2.11 (0.97)	0.694	0.451	0.930	0.811
Consultation and treatment procedures (items 16–20)						
	Ideal: 9.50 (4.04)	Ideal: 10.13 (3.77)			Ideal: α 0.765	Ideal: α 0.732
	Realistic: 10.85 (4.13)	Realistic: 11.60 (3.95)			Realistic: α 0.756	Realistic: α 0.768
	Post visit: N/A	Post visit: N/A			Post visit: N/A	Post visit: N/A
<i>16. Physical examination</i>						
(a) Hope for this ideally	1.89 (1.13)	1.95 (1.12)	0.560	0.481	0.714	0.691
(b) Expect this in reality	2.32 (1.21)	2.28 (1.09)	0.524	0.559	0.712	0.719
(c) I was given (post)	–	–	–	–	–	–
<i>17. Tests/investigations</i>						
(a) Hope for this ideally	1.82 (1.10)	1.70 (0.91)	0.554	0.570	0.716	0.664
(b) Expect this in reality	2.08 (1.13)	2.19 (1.08)	0.549	0.533	0.703	0.728
(c) I was given (post)	–	–	–	–	–	–
<i>18. Given diagnosis or have a previous diagnosis confirmed</i>						
(a) Hope for this ideally	1.68 (1.01)	1.69 (0.90)	0.580	0.521	0.710	0.681
(b) Expect this in reality	2.05 (1.17)	2.00 (1.04)	0.496	0.581	0.722	0.712
(c) I was given (post)	–	–	–	–	–	–
<i>19. A new, changed or repeat prescription</i>						
(a) Hope for this ideally	2.00(1.19)	2.32(1.20)	0.456	0.509	0.751	0.680
(b) Expect this in reality	2.13 (1.17)	2.44 (1.16)	0.462	0.539	0.734	0.726
(c) I was given (post)	–	–	–	–	–	–
<i>20. A referral to another doctor/specialist/therapist</i>						
(a) Hope for this ideally	2.10 (1.20)	2.47 (1.25)	0.535	0.431	0.723	0.716
(b) Expect this in reality	2.28 (1.19)	2.70 (1.12)	0.587	0.484	0.690	0.745
(c) I was given (post)	–	–	–	–	–	–
Total procedures performed at post-visit (range 0–5)	2.52 (1.25)	2.44 (1.21)				

TABLE 24 Reliability within subscales: GP and hospital patients (*continued*)

Expectation item	GP, mean (SD) within subscale	Hospital, mean (SD) within subscale	GP, corrected item–total correlation within subscale	Hospital, corrected item–total correlation within subscale	GP, Cronbach's alpha if item deleted within subscale	Hospital, Cronbach's alpha if item deleted within subscale
Doctor–patient approach to information (items 21–26)						
	Ideal: 9.75 (3.83)	Ideal: 9.87 (3.31)			Ideal: α 0.792	Ideal: α 0.727
	Realistic: 12.36 (4.51)	Realistic: 12.48 (4.40)			Realistic: α 0.807	Realistic: α 0.787
	Post visit: 13.37 (5.46)	Post visit: 13.72 (4.33)			Post visit: α 0.879	Post visit: α 0.810
21. Reassurance about my condition						
(a) Hope for this ideally	1.47 (0.74)	1.47 (0.73)	0.480	0.441	0.775	0.697
(b) Expect this in reality	1.98 (1.00)	2.12 (0.99)	0.551	0.519	0.781	0.759
(c) I was given (post)	2.05 (1.07)	2.06 (1.02)	0.777	0.475	0.844	0.801
22. Advice about my health/condition						
(a) Hope for this ideally	1.45 (0.73)	1.39 (0.57)	0.651	0.480	0.743	0.695
(b) Expect this in reality	1.73 (0.88)	1.71 (0.84)	0.620	0.550	0.769	0.756
(c) I was given (post)	2.07 (1.10)	1.99 (0.97)	0.751	0.680	0.847	0.756
23. What caused my condition/problem						
(a) Hope for this ideally	1.64 (1.01)	1.61 (0.93)	0.576	0.590	0.753	0.647
(b) Expect this in reality	2.17 (1.18)	2.04 (1.14)	0.614	0.593	0.766	0.741
(c) I was given (post)	2.24 (1.18)	2.37 (0.98)	0.671	0.577	0.86	0.778
24. How to manage the condition/symptoms/pain						
(a) Hope for this ideally	1.49 (0.80)	1.56 (0.80)	0.701	0.619	0.728	0.645
(b) Expect this in reality	1.87 (0.93)	1.97 (1.08)	0.654	0.641	0.760	0.728
(c) I was given (post)	2.04 (1.07)	2.28 (0.94)	0.767	0.615	0.846	0.771
25. The benefits/side effects or complications/risks of treatment						
(a) Hope for this ideally	1.54 (0.88)	1.50 (0.80)	0.606	0.478	0.746	0.685
(b) Expect this in reality	1.94 (1.04)	1.97 (1.08)	0.602	0.511	0.769	0.761
(c) I was given (post)	2.31 (1.17)	2.19 (0.97)	0.661	0.654	0.862	0.762
26. Given the opportunity to discuss problems in my life						
(a) Hope for this ideally	2.16 (1.22)	2.29 (1.15)	0.394	0.302	0.817	0.765
(b) Expect this in reality	2.67 (1.26)	2.68 (1.17)	0.427	0.440	0.817	0.781
(c) I was given (post)	2.66 (1.30)	2.84 (1.16)	0.532	0.454	0.888	0.811
Treatment outcomes (items 27–29)						
	Ideal: 4.49 (1.78)	Ideal: 4.27 (1.54)			Ideal: α 0.760	Ideal: α 0.708
	Realistic: 5.98 (2.38)	Realistic: 6.04 (5.25)			Realistic: α 0.823	Realistic: α 0.742
	Post visit: 5.90 (2.33)	Post visit: 6.49 (2.51)			Post visit: α 0.834	Post visit: α 0.841

continued

TABLE 24 Reliability within subscales: GP and hospital patients (*continued*)

Expectation item	GP, mean (SD) within subscale	Hospital, mean (SD) within subscale	GP, corrected item–total correlation within subscale	Hospital, corrected item–total correlation within subscale	GP, Cronbach's alpha if item deleted within subscale	Hospital, Cronbach's alpha if item deleted within subscale
<i>27. Improved quality of life</i>						
(a) Hope for this ideally	1.54 (0.77)	1.44 (0.65)	0.694	0.567	0.550	0.566
(b) Expect this in reality	2.04 (0.96)	1.89 (0.96)	0.742	0.458	0.688	0.782
(c) I expect (post)	1.96 (0.89)	2.19 (0.99)	0.722	0.622	0.741	0.861
<i>28. A reduction in my symptoms/problems</i>						
(a) Hope for this ideally	1.44 (0.68)	1.39 (0.68)	0.575	0.459	0.696	0.707
(b) Expect this in reality	2.00 (0.93)	2.09 (0.93)	0.683	0.615	0.750	0.599
(c) I expect (post)	1.95 (0.91)	2.13 (0.96)	0.692	0.730	0.772	0.754
<i>29. Increased chances of improvements to my health/staying healthy</i>						
(a) Hope for this ideally	1.52 (0.71)	1.44 (0.60)	0.514	0.562	0.762	0.581
(b) Expect this in reality	1.94 (0.89)	2.06 (0.93)	0.613	0.637	0.817	0.573
(c) I expect (post)	1.99 (0.90)	2.18 (0.92)	0.668	0.771	0.795	0.717

N/A, not applicable.

Items 8 and 9 excluded from scales because they did not apply to all patients.

TABLE 25A Reliability: interitem correlation matrix for subscales: ideal expectations items 1a–4a, structure of health care

Expectation item	1a. Easy to find where to go when there	2a. Easy to get around inside building	3a. Clean inside	4a. Enough space in waiting room
<i>1a. Easy to find where to go when there</i>				
GP	–	0.726	0.328	0.461
Hospital		0.701	0.366	0.282
Total		0.727	0.357	0.364
<i>2a. Easy to get around inside building</i>				
GP	0.726	–	0.322	0.470
Hospital	0.701		0.303	0.256
Total	0.727		0.315	0.330
<i>3a. Clean inside</i>				
GP	0.328	0.322	–	0.428
Hospital	0.366	0.303		0.288
Total	0.357	0.315		0.352
<i>4a. Enough space in waiting room</i>				
GP	0.461	0.470	0.428	–
Hospital	0.282	0.256	0.288	
Total	0.364	0.330	0.352	

TABLE 25B Reliability: interitem correlation matrix for subscales: realistic expectations items 1b–4b, structure of health care

Expectation item	1b. Easy to find where to go when there	2b. Easy to get around inside building	3b. Clean inside	4b. Enough space in waiting room
1b. Easy to find where to go when there				
GP	–	0.543	0.273	0.354
Hospital		0.562	0.258	0.359
Total		0.572	0.289	0.389
2b. Easy to get around inside building				
GP	0.543	–	0.411	0.475
Hospital	0.562		0.357	0.310
Total	0.572		0.401	0.407
3b. Clean inside				
GP	0.273	0.411	–	0.427
Hospital	0.258	0.357		0.272
Total	0.289	0.401		0.364
4b. Enough space in waiting room				
GP	0.354	0.475	0.427	–
Hospital	0.359	0.310	0.272	
Total	0.389	0.407	0.364	

TABLE 25C Reliability: interitem correlation matrix for subscales: post-visit experiences (expectations met) items 1c–4c, structure of health care

Expectation item	1c. Easy to find where to go when there	2c. Easy to get around inside building	3c. Clean inside	4c. Enough space in waiting room
1c. Easy to find where to go when there				
GP	–	0.619	0.500	0.514
Hospital		0.383	0.283	0.224
Total		0.484	0.353	0.364
2c. Easy to get around inside building				
GP	0.619	–	0.595	0.602
Hospital	0.383		0.310	0.203
Total	0.484		0.416	0.398
3c. Clean inside				
GP	0.500	0.595	–	0.709
Hospital	0.283	0.310		0.381
Total	0.353	0.416		0.489
4c. Enough space in waiting room				
GP	0.514	0.602	0.709	–
Hospital	0.224	0.203	0.381	
Total sample	0.364	0.398	0.489	

TABLE 25D Reliability: interitem correlation matrix for subscales: ideal expectations items 5a–7a and 10a, process of health care

Expectation item	5a. Clear information about where to go	6a. Given an appointment for a convenient date/time	7a. Seen on time	10a. Reception staff helpful
5a. Clear information on where to go				
GP	–	0.311	0.319	0.327
Hospital		0.387	0.326	0.325
Total		0.342	0.278	0.309
6a. Given an appointment for a convenient date/time				
GP	0.311	–	0.431	0.439
Hospital	0.387		0.465	0.347
Total	0.342		0.445	0.376
7a. Seen on time				
GP	0.319	0.431	–	0.467
Hospital	0.326	0.465		0.271
Total	0.298	0.445		0.333
10a. Reception staff helpful				
GP	0.327	0.439	0.467	–
Hospital	0.325	0.347	0.271	
Total	0.309	0.376	0.333	

TABLE 25E Reliability: interitem correlation matrix for subscales: realistic expectations items 5b–7b and 10b, process of health care

Expectation item	5b. Clear information about where to go	6b. Given an appointment for a convenient date/time	7b. Seen on time	10b. Reception staff helpful
5b. Clear information about where to go				
GP	–	0.323	0.294	0.398
Hospital		0.220	0.234	0.271
Total		0.251	0.262	0.316
6b. Given convenient appointment				
GP	0.323	–	0.555	0.473
Hospital	0.220		0.407	0.275
Total	0.251		0.471	0.373
7b. Seen on time				
GP	0.294	0.555	–	0.384
Hospital	0.234	0.407		0.237
Total	0.262	0.471		0.300
10b. Reception staff helpful				
GP	0.398	0.473	0.384	–
Hospital	0.271	0.275	0.237	
Total	0.316	0.373	0.300	

TABLE 25F Reliability: interitem correlation matrix for subscales: post-visit experiences (expectations met) items 5c–7c and 10c, process of health care

Expectation item	5c. Clear information about where to go	6c. Given convenient appointment	7c. Seen on time	10c. Reception staff helpful
5c. Clear information about where to go				
GP	–	0.552	0.257	0.554
Hospital		0.415	0.219	0.448
Total		0.481	0.225	0.493
6c. Given convenient appointment				
GP	0.552	–	0.382	0.568
Hospital	0.415		0.294	0.359
Total	0.481		0.320	0.473
7c. Seen on time				
GP	0.257	0.382	–	0.282
Hospital	0.219	0.294		0.336
Total	0.225	0.320		0.277
10c. Reception staff helpful				
GP	0.554	0.568	0.282	–
Hospital	0.448	0.359	0.336	
Total	0.493	0.473	0.277	

TABLE 25G Reliability: interitem correlation matrix for subscales: ideal expectations items 11a–15a, doctor–patient communication style

Expectation item	11a. Doctor helpful	12a. Doctor respectful and treats me with dignity	13a. Doctor knowledgeable about/understands my health condition/problem	14a. Doctor clear and easy to understand	15a. Doctor involves me in decisions about my treatment
11a. Doctor helpful					
GP	–	0.756	0.599	0.616	0.471
Hospital		0.426	0.484	0.280	0.246
Total		0.569	0.539	0.433	0.334
12a. Doctor respectful and treats me with dignity					
GP	0.756	–	0.660	0.654	0.549
Hospital	0.426		0.532	0.278	0.263
Total	0.569		0.589	0.444	0.379
13a. Doctor knowledgeable about/understands my health condition/problem					
GP	0.599	0.660	–	0.522	0.575
Hospital	0.484	0.532		0.403	0.293
Total	0.539	0.589		0.451	0.402
14a. Doctor clear and easy to understand					
GP	0.616	0.654	0.522	–	0.594
Hospital	0.280	0.278	0.403		0.335
Total	0.433	0.444	0.451		0.431
15a. Doctor involves me in decisions about my treatment					
GP	0.471	0.549	0.575	0.594	–
Hospital	0.246	0.263	0.293	0.335	
Total	0.334	0.379	0.402	0.431	

TABLE 25H Reliability: interitem correlation matrix for subscales: realistic expectations items 11b–15b, doctor–patient communication style

Expectation item	11b. Doctor helpful	12b. Doctor respectful and treats me with dignity	13b. Doctor knowledgeable about/understands my health condition/problem	14b. Doctor clear and easy to understand	15b. Doctor involves me in decisions about my treatment
11b. Doctor helpful					
GP	–	0.760	0.590	0.418	0.491
Hospital		0.480	0.587	0.481	0.322
Total		0.590	0.588	0.447	0.385
12b. Doctor respectful and treats me with dignity					
GP	0.760	–	0.589	0.462	0.461
Hospital	0.480		0.544	0.290	0.278
Total	0.590		0.557	0.361	0.325
13b. Doctor knowledgeable about/understands my health condition/problem					
GP	0.590	0.589	–	0.439	0.566
Hospital	0.587	0.544		0.434	0.320
Total	0.588	0.557		0.431	0.438
14b. Doctor clear and easy to understand					
GP	0.418	0.462	0.439	–	0.582
Hospital	0.481	0.290	0.434		0.324
Total	0.447	0.361	0.431		0.442
15b. Doctor involves me in decisions about my treatment					
GP	0.491	0.461	0.566	0.582	–
Hospital	0.322	0.278	0.320	0.324	
Total	0.385	0.325	0.438	0.442	

TABLE 25I Reliability: interitem correlation matrix for subscales: post-visit experiences (expectations met) items 11c–15c, doctor–patient communication style

Expectation item	11c. Doctor helpful	12c. Doctor respectful and treats me with dignity	13c. Doctor knowledgeable about/understands my health condition/problem	14c. Doctor clear and easy to understand	15c. Doctor involves me in decisions about my treatment
11c. Doctor helpful					
GP	–	0.874	0.731	0.779	0.624
Hospital		0.699	0.522	0.442	0.318
Total		0.759	0.634	0.596	0.486
12c. Doctor respectful and treats me with dignity					
GP	0.874	–	0.694	0.824	0.649
Hospital	0.699		0.509	0.398	0.306
Total	0.759		0.593	0.577	0.486
13c. Doctor knowledgeable about/understands my health condition/problem					
GP	0.731	0.694	–	0.744	0.608
Hospital	0.522	0.508		0.535	0.421
Total	0.634	0.593		0.635	0.514
14c. Doctor clear and easy to understand					
GP	0.779	0.824	0.744	–	0.652
Hospital	0.442	0.398	0.535		0.417
Total	0.596	0.577	0.635		0.546
15c. Doctor involves me in decisions about my treatment					
GP	0.624	0.649	0.608	0.652	–
Hospital	0.318	0.306	0.421	0.417	
Total	0.486	0.486	0.514	0.546	

TABLE 25J Reliability: interitem correlation matrix for subscales: ideal expectations items 16a–20a, procedures

Expectation item	16a. Physical examination	17a. Tests/investigations	18a. Given diagnosis or have a previous diagnosis confirmed	19a. A new, changed or repeat prescription	20a. A referral to another doctor/specialist/therapist
16a. Physical examination					
GP	–	0.460	0.489	0.324	0.388
Hospital		0.448	0.401	0.345	0.247
Total		0.444	0.447	0.330	0.311
17a. Tests/investigations					
GP	0.460	–	0.363	0.333	0.470
Hospital	0.448		0.585	0.335	0.305
Total	0.444		0.452	0.316	0.372
18. Given diagnosis or have a previous diagnosis confirmed					
GP	0.489	0.363	–	0.423	0.422
Hospital	0.401	0.585		0.316	0.254
Total	0.447	0.452		0.365	0.332
19a. A new, changed or repeat prescription					
GP	0.324	0.333	0.423	–	0.313
Hospital	0.345	0.335	0.316		0.448
Total	0.330	0.316	0.365		0.389
20a. A referral to another doctor/specialist/therapist					
GP	0.388	0.470	0.422	0.313	–
Hospital	0.247	0.305	0.254	0.448	
Total	0.311	0.372	0.332	0.389	

TABLE 25K Reliability: interitem correlation matrix for subscales: realistic expectations items 16b–20b, procedures

Expectation item	16b. Physical examination	17b. Tests/investigations	18b. Given diagnosis or have a previous diagnosis confirmed	19b. A new, changed or repeat prescription	20b. A referral to another doctor/specialist/therapist
16b. Physical examination					
GP interview	–	0.417	0.386	0.298	0.437
Hospital		0.472	0.487	0.388	0.310
Total		0.422	0.418	0.316	0.347
17b. Tests/investigations					
GP	0.417	–	0.314	0.348	0.524
Hospital	0.472		0.487	0.324	0.312
Total	0.422		0.373	0.321	0.403
18b. Given diagnosis or have a previous diagnosis confirmed					
GP	0.386	0.314	–	0.383	0.382
Hospital	0.487	0.487		0.394	0.339
Total	0.418	0.373		0.366	0.333
19b. A new, changed or repeat prescription					
GP	0.298	0.348	0.383	–	0.352
Hospital	0.388	0.324	0.394		0.488
Total	0.316	0.321	0.366		0.419
20b. A referral to another doctor/specialist/therapist					
GP	0.437	0.524	0.382	0.352	–
Hospital	0.310	0.312	0.339	0.448	
Total	0.347	0.403	0.333	0.419	

TABLE 25L Reliability: interitem correlation matrix for subscales: ideal expectations items 21a–26a, doctor–patient approach to information

Expectation item	21a. Reassurance about my condition	22a. Advice about my health/condition	23a. What caused my condition/problem	24a. How to manage condition/symptoms/pain	25a. The benefits/side effects or complications/risks of treatment	26a. Given the opportunity to discuss problems in my life
21a. Reassurance about my condition						
GP	–	0.441	0.390	0.482	0.324	0.211
Hospital		0.398	0.334	0.370	0.244	0.227
Total		0.414	0.359	0.418	0.274	0.214
22a. Advice about my health/condition						
GP	0.441	–	0.490	0.603	0.505	0.340
Hospital	0.398		0.404	0.484	0.348	0.098
Total	0.414		0.448	0.539	0.433	0.229
23a. What caused my condition/problem						
GP	0.390	0.490	–	0.543	0.427	0.301
Hospital	0.334	0.404		0.550	0.398	0.304
Total sample	0.359	0.448		0.545	0.412	0.290
24a. How to manage the condition/symptoms/pain						
GP	0.482	0.603	0.543	–	0.625	0.303
Hospital	0.370	0.484	0.550		0.493	0.223
Total	0.418	0.539	0.545		0.555	0.266
25a. The benefits/side effects/complications/risks of treatment						
GP	0.324	0.505	0.427	0.625	–	0.347
Hospital	0.244	0.348	0.398	0.493		0.197
Total	0.274	0.433	0.412	0.555		0.279
26a. Given the opportunity to discuss problems in my life						
GP	0.211	0.340	0.301	0.303	0.347	–
Hospital	0.227	0.098	0.304	0.223	0.197	
Total	0.214	0.229	0.290	0.266	0.279	

TABLE 25M Reliability: interitem correlation matrix for subscales: realistic expectations items 21b–26b, doctor–patient approach to information

Expectation item	21b. Reassurance about my condition	22b. Advice about my health/condition	23b. What caused my condition/problem	24b. How to manage condition/symptoms/pain	25b. The benefits/side effects or complications/risks of treatment	26b. Given the opportunity to discuss problems in my life
21b. Reassurance about my condition						
GP	–	0.451	0.438	0.453	0.407	0.308
Hospital		0.478	0.354	0.432	0.311	0.318
Total		0.455	0.374	0.434	0.347	0.294
22b. Advice about my health/condition						
GP	0.451	–	0.471	0.565	0.484	0.317
Hospital	0.478		0.446	0.459	0.349	0.243
Total	0.455		0.448	0.499	0.410	0.266
23b. What caused my condition/problem						
GP	0.438	0.471	–	0.533	0.450	0.365
Hospital	0.354	0.446		0.571	0.339	0.383
Total	0.374	0.448		0.541	0.384	0.356
24b. How to manage the condition/symptoms/pain						
GP	0.453	0.565	0.533	–	0.557	0.294
Hospital	0.432	0.459	0.571		0.483	0.297
Total	0.434	0.499	0.541		0.503	0.276
25b. The benefits/side effects or complications/risks of treatment						
GP	0.407	0.484	0.450	0.557	–	0.335
Hospital	0.311	0.349	0.339	0.483		0.352
Total	0.347	0.410	0.384	0.503		0.326
26b. Given the opportunity to discuss problems in my life						
GP	0.308	0.317	0.365	0.294	0.335	–
Hospital	0.318	0.243	0.383	0.297	0.352	
Total	0.294	0.266	0.356	0.276	0.326	

TABLE 25N Reliability: interitem correlation matrix for subscales: post-visit experiences (expectations met) items 21c–26c, doctor–patient approach to information

Expectation item	21c. Reassurance about my condition	22c. Advice about my health/condition	23c. What caused my condition/problem	24c. How to manage the condition/symptoms/pain	25c. The benefits/side effects or complications/risks of treatment	26c. Given the opportunity to discuss problems in my life
21c. Reassurance about my condition						
GP	0.580	0.689	0.528	0.542	–	0.737
Hospital	0.327	0.267	0.330	0.408		0.433
Total	0.455	0.468	0.414	0.464		0.569
22c. Advice about my health/condition						
GP	0.536	0.629	0.578	0.511	0.737	–
Hospital	0.401	0.613	0.636	0.372	0.433	
Total	0.450	0.592	0.590	0.429	0.569	
23c. What caused my condition/problem						
GP	–	0.712	0.573	0.337	0.580	0.536
Hospital		0.555	0.491	0.355	0.327	0.401
Total		0.624	0.510	0.324	0.455	0.450
24c. How to manage the condition/symptoms/pain						
GP	0.712	–	0.598	0.422	0.689	0.629
Hospital	0.555		0.597	0.241	0.267	0.613
Total	0.624		0.569	0.319	0.468	0.592
25c. The benefits/side effects or complications/risks of treatment						
GP	0.573	0.598	–	0.408	0.528	0.578
Hospital	0.491	0.597		0.331	0.330	0.636
Total	0.510	0.569		0.334	0.414	0.590
26c. Given the opportunity to discuss problems in my life						
GP	0.337	0.422	0.408	–	0.542	0.511
Hospital	0.355	0.241	0.331		0.408	0.372
Total	0.324	0.319	0.334		0.464	0.429

TABLE 25O Reliability: interitem correlation matrix for subscales: ideal expectations items 27a–29a, treatment outcomes

Expectation item	27a. Improved quality of life	28a. A reduction in my symptoms/problems	29a. Increased chances of improvements to my health/staying healthy
27a. Improved quality of life			
GP	–	0.620	0.535
Hospital		0.409	0.549
Total		0.509	0.544
28a. A reduction in my symptoms/problems			
GP	0.620	–	0.380
Hospital	0.409		0.398
Total	0.509		0.378
29a. Increased chances of improvements to my health/staying healthy			
GP	0.535	0.380	–
Hospital	0.549	0.398	
Total	0.544	0.378	

TABLE 25P Reliability: interitem correlation matrix for subscales: realistic expectations items 27b–29b, treatment outcomes

Expectation item	27b Improved quality of life	28b A reduction in my symptoms/problems	29b Increased chances of improvements to my health/staying healthy
27b. Improved quality of life			
GP	–	0.692	0.602
Hospital		0.402	0.428
Total		0.541	0.506
28b. A reduction in my symptoms/problems			
GP	0.692	–	0.525
Hospital	0.402		0.642
Total	0.541		0.586
29b. Increased chances of improvements to my health/staying healthy			
GP	0.602	0.525	–
Hospital	0.428	0.642	
Total	0.506	0.586	

TABLE 25Q Reliability: interitem correlation matrix for subscales: post-visit experiences (expectations met) items 27c–29c, treatment outcomes

Expectation item	27c. Improved quality of life	28c. A reduction in my symptoms/problems	29c. Increased chances of improvements to my health/staying healthy
27c. Improved quality of life			
GP	–	0.659	0.628
Hospital		0.559	0.607
Total		0.575	0.595
28c. A reduction in my symptoms/problems			
GP	0.659	–	0.589
Hospital	0.559		0.757
Total	0.575		0.659
29c. Increased chances of improvements to my health/staying healthy			
GP	0.628	0.589	–
Hospital	0.607	0.757	
Total	0.595	0.659	

Intersubscale reliability

Table 26 shows the intersubscale reliability correlations by site. This shows that all achieved a value of at least 0.200 except for the ideal–met expectations correlation for hospital patients only, which fell slightly short of this criterion (0.156). The remaining correlations were all moderate to strong. However, the table supports the finding that, as expected, pre-visit realistic expectations correlated significantly more highly than ideal expectations with post-visit experiences, supporting validity.

The means that for the total sample for the summed ideal, realistic and post-visit expectations were 41.570 (SD 10.633), 55.185 (SD 14.828) and 45.970 (SD 12.415) respectively. This confirms most of the item mean findings that post-visit met expectation means were higher than pre-visit ideal expectation means but lower than pre-visit realistic expectation means, indicating that not all patients' ideal expectations were met during the visit, although their realistic expectations were on average exceeded.

TABLE 26 Reliability: total scale intercorrelations by sample type

Expectation type	Pre-visit ideal expectations	Pre-visit realistic expectations	Post-visit expectations met
<i>Pre-visit ideal expectations</i>			
GP patient	–	0.549	0.240
Hospital patient	–	0.539	0.156
Total patient	–	0.543	0.206
<i>Pre-visit realistic expectations</i>			
GP patient	0.549	–	0.448
Hospital patient	0.539	–	0.335
Total patient	0.543	–	0.397
Post visit expectations met			
GP patient	0.240	0.448	–
Hospital patient	0.156	0.335	–
Total patient	0.206	0.397	–

Ideal, realistic and post-visit expectations are all minus items 8 and 9 as these did not apply to all patients.

Post-test total included five procedures dichotomised as 'yes/no' (0/1).

No. of complete cases: GP, 268/434; hospital, 312/399; total, 580/833.

Summed subscale domain reliability

The reliability scores for the pre-visit ideal, realistic and post-visit met expectations subscales were summed within their domains. *Table 27* shows the means (SDs) for these by site. Although many of the subscale domain means were similar between GP and hospital patients, hospital patients had very slightly higher mean scores than GP patients for their ideal treatment procedures (i.e. procedures carried out during the consultation), suggesting that their expectations were slightly lower. They also had slightly higher mean scores (lower expectations) for most of the realistic expectations, particularly for the structure of health care. The post-visit mean scores were notably higher for hospital than for GP patients for the structure of health care and for doctor–patient communication style. These mean differences are consistent with the differences in distributions between these groups, particularly for ideal, realistic and post-visit structure of health care and doctor–patient communication style, reported in earlier chapters.

Table 28 shows the reliability intercorrelations between the pre-visit ideal and realistic domains. Most correlations were > 0.3 , with the most notable exceptions being the weaker correlations between ideal and realistic treatment processes (procedures performed) and the structure of health care and the process of health care.

Table 29 shows the reliability intercorrelations between the post-visit domains. All except treatment process met the acceptability criteria of a minimum of 0.20 for consistency (probably reflecting the more clinical assessment – but caution is also needed because of its dichotomous-ranked coding). None of the comparisons was overcorrelated.

Table 30 shows the intersubscale reliability correlations between the pre-visit ideal and realistic domains and the overall post-visit summed subscale for the total sample. As expected, the correlations were higher between realistic and post-visit expectations than between ideal and post-visit expectations. The strongest correlation was between realistic expectations and post-visit experiences for structure of health care.

TABLE 27 Subscale reliability scores

Subscales	Pre-visit ideal expectations total score, mean (SD)			Pre-visit realistic expectations total score, mean (SD)			Post-visit experiences total score, mean (SD)		
	GP	Hospital	Total	GP	Hospital	Total	GP	Hospital	Total
Structure of health care [items 1–4×5-point response scale (lowest = highest expectations/met)]	5.17 (1.61)	5.76 (1.80)	5.46 (1.73)	6.33 (2.31)	8.27 (2.97)	7.28 (2.82)	5.61 (2.18)	7.32 (2.47)	6.44 (2.47)
Process of health care [5–7 and 10×5-point response scale (lowest = highest expectations/met)]	5.50 (1.88)	5.53 (1.96)	5.51 (1.92)	8.67 (3.10)	9.06 (2.88)	8.86 (3.00)	7.74 (3.23)	7.92 (2.69)	7.83 (2.98)
Doctor–patient communication style [items 11–15×5-point response scale (lowest = highest expectations/met)]	6.36 (2.14)	6.75 (2.03)	6.55 (2.09)	8.48 (3.37)	9.07 (3.16)	8.77 (3.28)	7.71 (3.49)	9.44 (3.29)	8.53 (3.50)
Consultation and treatment procedures [items 16–20×5-point response scale (lowest = highest expectations/met); post visit items 22–26, dichotomised responses: ‘yes’ 0, ‘no’ 1]	9.50 (4.04)	10.13 (3.77)	9.81 (3.92)	10.86 (4.13)	11.60 (3.95)	11.23 (4.06)	2.53 (1.25)	2.44 (1.21)	2.48 (1.23)
Doctor–patient approach to information [items 21–26 (post visit items 16–21)×5-point response scale (lowest = highest expectations/met)]	9.75 (3.83)	9.87 (3.31)	9.81 (3.58)	12.36 (4.51)	12.48 (4.40)	12.42 (4.45)	13.37 (5.46)	13.72 (4.33)	13.54 (4.93)
Outcome expectations [items 27–29×5-point response scale (lowest = highest expectations/met)]	4.49 (1.78)	4.27 (1.54)	4.38 (1.66)	5.98 (2.38)	6.04 (2.29)	6.01 (2.34)	5.90 (2.33)	6.49 (2.51)	9.19 (2.44)

SD, standard deviation.

Total $n=735-767$.

Exploratory factor analysis

Exploratory factor analysis was used to assess the factor structure of the 27-item subscales – ideal expectations, realistic expectations and experiences (met expectations) – to consider the underlying attitude dimensions, the need for further item reduction, whether the items are correctly grouped into subscales, the number of dimensions represented and whether the items in each subscale tap the same construct. The pre-visit ideal and realistic subscales and the post-visit experiences (met expectations) subscales of the questionnaire were all examined. The exercise presented is exploratory. *Box 7* shows the assumptions underlying this technique that need to be satisfied.

Sample size

The total sample of over 800 cases meets the criteria for factor analysis.

Correlation matrix

For each subscale, the exploratory analyses showed that the largest proportion of intercorrelations was > 0.30 , indicating that the use of the procedure is appropriate.²⁸⁸ (The exceptions, as anticipated, were generally with the five post-visit dichotomised – rather than scaled – ‘procedures performed’ items. Factor analysis is not strictly appropriate for dichotomous items, although it is frequently used by statisticians with such items and appears robust.)

TABLE 28 Pre-visit intersubscale reliability correlations: total sample

Pre-visit expectations	Structure of health care (items 1–4), ideal/realistic	Process of health care (items 5–7, 10), ideal/realistic	Doctor–patient communication style (items 11–15), ideal/realistic	Consultation and treatment procedures (items 16–20), ideal/realistic	Doctor–patient approach to information (items 21–26), ideal/realistic	Treatment outcomes (items 27–29), ideal/realistic
Structure of health care (items 1–4)						
Ideal	–/0.439	0.554/0.234	0.502/0.243	0.115/0.090	0.297/0.233	0.274/0.179
Realistic	0.439/–	0.248/0.534	0.251/0.403	0.264/0.373	0.226/0.381	0.063/0.327
Process of health care (items 5–7, 10)						
Ideal	0.554/0.248	–/0.304	0.557/0.284	0.186/0.095	0.377/0.207	0.351/0.145
Realistic	0.234/0.534	0.304/–	0.203/0.490	0.213/0.398	0.202/0.455	0.126/0.384
Doctor–patient communication style (items 11–15)						
Ideal	0.502/0.251	0.557/0.203	–/0.480	0.267/0.191	0.419/0.276	0.461/0.250
Realistic	0.243/0.403	0.284/0.490	0.480/–	0.149/0.413	0.218/0.592	0.212/0.450
Consultation and treatment procedures (items 16–20)						
Ideal	0.115/0.264	0.186/0.213	0.267/0.149	–/0.761	0.575/0.319	0.339/0.102
Realistic	0.090/0.373	0.095/0.398	0.191/0.413	0.761/–	0.402/0.554	0.224/0.351
Doctor–patient approach to information (items 21–26)						
Ideal	0.294/0.226	0.377/0.202	0.419/0.218	0.575/0.402	–/0.606	0.511/0.252
Realistic	0.233/0.381	0.207/0.455	0.276/0.592	0.319/0.554	0.606/–	0.287/0.586
Treatment outcomes (items 27–29)						
Ideal	0.274/0.063	0.351/0.126	0.461/0.212	0.339/0.224	0.511/0.287	–/0.411
Realistic	0.179/0.327	0.145/0.384	0.250/0.450	0.102/0.351	0.252/0.586	0.411/–

TABLE 29 Post-visit experiences (met expectations) intersubscale reliability correlations: total sample^a

Post-visit experiences (met expectations)	Structure of health care (items 1–4), post visit met	Process of health care (items 5–7, 10), post visit met	Doctor–patient communication style (items 11–15), post visit met	Doctor–patient approach to information (items 16–21), post visit met	Treatment outcomes (items 27–29), post visit met
Structure of health care (items 1–4), post visit met	–	0.468	0.521	0.295	0.230
Process of health care (items 5–7, 10), post visit met	0.468	–	0.603	0.376	0.321
Doctor–patient communication style (items 11–15), post visit met	0.521	0.503	–	0.563	0.429
Doctor–patient approach to information (items 16–21), post visit met	0.295	0.376	0.563	–	0.384
Treatment outcomes (items 27–29), post visit met	0.230	0.321	0.429	0.384	–

^a Table excludes treatment procedures (items 22–26) as post visit these items were coded as dichotomous 'yes/no' items.

TABLE 30 Intersubscale correlations between the pre-visit domains and the post-visit subscale^a

Pre-visit subscale	Post-visit experiences subscale
<i>Structure of health care</i>	
Ideal	0.232
Realistic	0.453
<i>Process of health care</i>	
Ideal	0.182
Realistic	0.340
<i>Doctor–patient communication style</i>	
Ideal	0.261
Realistic	0.390
<i>Doctor–patient approach to information</i>	
Ideal	0.157
Realistic	0.304
<i>Treatment outcomes</i>	
Ideal	0.180
Realistic	0.273

a Table excludes treatment procedures (items 16–21 pre visit, items 22–26 post visit) as post visit these items were coded as dichotomous ‘yes/no’ items.

Sampling adequacy

For each subscale, the Kaiser–Meyer–Olkin measure of sampling adequacy was > 0.900 (0.904 ideal, 0.921 realistic, 0.907 experiences – met expectations) (threshold 0.6), and Bartlett’s test of sphericity was significant at 0.001, supporting the appropriateness of the use of the technique. Components for extraction: eigenvalues (> 1.0).

Pre-visit ideal expectations

The first six of the 27 components of the ideal expectations subscale achieved eigenvalues of > 1.0 [between 1.010 (6) and 7.674 (1)], and components 7–27 ranged between 0.911 (7) and 0.260 (27). These six components explained 57.62% of the variance. Component 1 explained most of the variance at 28.42%.

For the ideal subscale, there was a slight break between components 2 and 3, and also a clearer break between the third and fourth components, indicating that components 1 and 2 captured more variance than other components. The data suggest, then, that two components at most should be extracted.

The loadings of the subscale items on all six components are shown in *Table 31*.

All of the items loaded quite strongly on the first component and most were acceptable (well above the 0.40 threshold); the remainder were over 0.30.

Just one item loaded under 0.40 on all components (item 26). Given the opportunity to discuss problems in my life). This could be considered for revision of wording, rather than removal, given its importance to patients based on the results of the pre-pilot and pilot research.

BOX 7 Assumptions underlying use of factor analysis

At least 10 cases per item are required for factor analysis,^{287,289} although at least five cases per item has also been judged to be acceptable.²⁸⁸ A minimum of 300 cases is required for full factor analysis. As well as sample size, the data should meet several assumptions required to justify the use of factor analysis, namely that:

1. The intercorrelation matrix is a measure of association among the variables to be analysed. The correlation coefficient is used as a measure of conceptual similarity of the variables. The correlation matrix should reveal many coefficients > 0.30
2. The Kaiser–Meyer–Olkin measure of sampling adequacy should exceed 0.60.^{286,290,291} The test of sphericity should be statistically significant at $p = 0.001$ to support the factorability of the correlation matrix (suggesting factor analysis is appropriate)
3. Using Kaiser's criterion, the components for extraction should have an eigenvalue of ≥ 1.0 to support the construct validity of the scale. As too many components are usually extracted using Kaiser's criterion, it is also necessary to examine the scree plot of the data. Components above the point of change in the pattern of the plot ('elbow') are retained in theory, although judgement is permitted depending on the aims of the research

It should be noted that, in the social sciences, it is uncommon for variables to meet these assumptions. Moreover, lower order, ordinal and dichotomous variables, rather than more powerful interval and ratio data, are frequently submitted to a factor analysis in social science research. Unless the distributions of the variables are strongly non-normal, factor analysis seems to be robust to minor violations of these assumptions

Pre-visit realistic expectations

The first five of the 27 components of the realistic expectations subscale achieved eigenvalues of > 1.0 [between 1.126 (5) and 8.224 (1)] and the remainder ranged between 0.919 and 0.305. These five components explained 54.59% of the variance. Component 1 explained most of the variance (31.631%).

For the realistic subscale, there was a break between components 2 and 3, and a slight break between the fifth and sixth components, indicating that components 1 and 2 again captured more variance than other components. The data suggest again, then, that one component – or two components at most – should be extracted for this subscale.

The loadings of the subscale items on all five components are shown in *Table 32*.

All of the items loaded strongly on the first component and the majority were acceptable according to standard criteria (well above the 0.40 threshold); the remainder were over 0.30.

Post-visit experiences (met expectations)

The first seven of the 27 components of the experiences (met expectations) subscale achieved eigenvalues of > 1.0 [between 1.032 (7) and 8.044 (1)] and components 8–27 ranged between 0.938 (8) and 0.197 (27). These seven components explained 61.92% of the variance. Component 1 explained most of the variance (29.79%).

For this subscale, there was a break between components 2 and 3 and again between 4 and 5, indicating that components 1 and 2 capture more variance than other components. The data suggest, then, that two components at most should be extracted.

The loadings of the subscale items on all seven components are shown in *Table 33*. The items loaded quite strongly on the first two components, although procedures performed loaded

TABLE 31 Component matrix: ideal subscale components 1–6

Ideal expectations items	Component					
	1	2	3	4	5	6
Structure of health care						
1. Easy to find where to go when there	0.461	−0.418	0.574			
2. Easy to get around inside building	0.448	−0.422	0.546			
3. Clean inside	0.569	−0.373				
4. Enough space in waiting room	0.445	−0.349	0.320			
Process of health care						
5. Clear information about where to go	0.514	−0.422				
6. Given an appointment for a convenient date/time	0.580				−0.471	
7. Seen on time	0.436				−0.372	0.590
10. Reception staff helpful	0.567	−0.303				
Doctor–patient communication style						
11. Doctor helpful	0.560	−0.303				
12. Doctor respectful/treats me with dignity	0.629	−0.302	−0.301			
13. Doctor knowledgeable about/understands my health condition/problem	0.657		−0.388			
14. Doctor clear and easy to understand	0.612					
15. Doctor involves me in decisions about my treatment	0.592					
Consultation and treatment procedures						
16. Physical examination	0.376	0.494				
17. Tests/investigations	0.433	0.445		0.306		
18. Given diagnosis or have a previous diagnosis confirmed	0.529	0.463				
19. A new, changed or repeat prescription	0.377	0.459				
20. A referral to another doctor/specialist/therapist	0.396	0.421			0.325	
Doctor–patient approach to information						
21. Reassurance about my condition	0.537					
22. Advice about my health/condition	0.635					
23. What caused my condition/problem	0.543	0.476				
24. How to manage the condition/symptoms/pain	0.648				−0.316	
25. The benefits/side effects or complications/risks of treatment	0.617					
26. Given the opportunity to discuss problems in my life	0.382	0.318				
Treatment outcomes						
27. Improved quality of life	0.595			−0.495		
28. A reduction in my symptoms/problems	0.507			−0.430		
29. Increased chances of improvements to my health/staying healthy	0.557			−0.425		

across components, as expected, reflecting their factual rather than attitudinal structure and dichotomised response categories. Most were acceptable (well above the 0.40 threshold), with the remainder being > 0.30. Just one item loaded under 0.40 on all components (item 18). Given diagnosis or have a previous diagnosis confirmed). This could be considered for revision of wording, rather than removal, given its importance to patients based on the results of the pre-pilot and pilot research.

TABLE 32 Component matrix: realistic subscale components 1–5

Realistic expectations items	Component				
	1	2	3	4	5
Structure of health care					
1. Easy to find where to go when there	0.449	0.528			
2. Easy to get around inside building	0.495	0.573			
3. Clean inside	0.519	0.364			
4. Enough space in waiting room	0.511	0.462			
Process of health care					
5. Clear information about where to go	0.473	0.475			
6. Given an appointment for a convenient date/time	0.528				0.542
7. Seen on time	0.522				0.555
10. Reception staff helpful	0.546				
Doctor–patient communication style					
11. Doctor helpful	0.656				
12. Doctor respectful and treats me with dignity	0.616		–0.307	–0.344	
13. Doctor knowledgeable about/understands my health condition/ problem	0.647			–0.358	
14. Doctor clear and easy to understand	0.569			–0.367	
15. Doctor involves me in decisions about my treatment	0.510			–0.449	
Consultation and treatment procedures					
16. Physical examination	0.521		0.449		
17. Tests/investigations	0.526		0.467		
18. Given diagnosis or have a previous diagnosis confirmed	0.571		0.386		
19. A new, changed or repeat prescription	0.508		0.464		
20. A referral to another doctor/specialist/therapist	0.521		0.479		
Doctor–patient approach to information					
21. Reassurance about my condition	0.661				
22. Advice about my health/condition	0.640	–0.320			
23. What caused my condition/problem	0.618	–0.357			
24. How to manage the condition/symptoms/pain	0.663				
25. The benefits/side effects or complications/risks of treatment	0.603				
26. Given the opportunity to discuss problems in my life	0.527				0.356
Treatment outcomes					
27. Improved quality of life	0.556			0.335	
28. A reduction in my symptoms/problems	0.599			0.487	
29. Increased chances of improvements to my health/staying healthy	0.600		–0.306	0.412	

TABLE 33 Component matrix: experiences (met expectations) subscale components 1–7

Met expectations items	Component						
	1	2	3	4	5	6	7
Structure of health care							
1. Easy to find where to go when there	0.504	-0.457					
2. Easy to get around inside building	0.549	-0.417				0.310	
3. Clean inside	0.540	-0.436					
4. Enough space in waiting room	0.448	-0.387		0.338			
Process of health care							
5. Clear information about where to go	0.606	-0.333					
6. Given an appointment for a convenient date/time	0.575			0.330		-0.315	
7. Seen on time	0.390			0.427			
10. Reception staff helpful	0.565						
Doctor–patient communication style							
11. Doctor helpful	0.736			-0.364			
12. Doctor respectful and treats me with dignity	0.704			-0.444			
13. Doctor knowledgeable about/understands my health condition/problem	0.755						
14. Doctor clear and easy to understand	0.733						
15. Doctor involves me in decisions about my treatment	0.688						
Consultation and treatment procedures							
16. Physical examination					0.581		
17. Tests/investigations					0.539		0.547
18. Given diagnosis or have a previous diagnosis confirmed	0.314				0.371	0.328	
19. A new, changed or repeat prescription						0.622	
20. A referral to another doctor/specialist/therapist			0.372				0.584
Doctor–patient approach to information							
21. Reassurance about my condition	0.652						
22. Advice about my health/condition	0.633	0.406	-0.340				
23. What caused my condition/problem	0.618	0.340					
24. How to manage the condition/symptoms/pain	0.712	0.304					
25. The benefits/side effects or complications/risks of treatment	0.555	0.423	-0.343				
26. Given the opportunity to discuss problems in my life	0.499						
Treatment outcomes							
27. Improved quality of life	0.500		0.556				
28. A reduction in my symptoms/problems	0.468	0.308	0.621				
29. Increased chances of improvements to my health/staying healthy	0.570		0.564				

Summary

The item means within subscales were again generally similar between samples. The item–total correlations all well exceeded the acceptability threshold. Cronbach’s alpha was not improved, or more than slightly improved (e.g. item 27 pre-visit realistic expectations), by item removal. None of the item–item correlations approached or exceeded the 0.75 threshold for item redundancy. Cronbach’s alphas (internal consistency) were not improved overall by item removal. In sum, the reliability of the expectations measures for GP and hospital patients met criteria of acceptability. *Chapters 7 and 8*, which present the survey results, provide further data supporting the validity of the measures (as will be discussed). As confirmed in earlier analyses, the intercorrelations were higher between realistic and post-visit expectations than between ideal and post-visit expectations.

Chapter 7

Survey results: pre- and post-visit expectations

Research questions

- What are the most common types of met and unmet expectations expressed by patients, and do these vary by health-care setting?
- How do expectations for different health-care settings compare?
- What is the relationship between pre-visit expectation type and post-visit met expectations and patient satisfaction?
- Are expectations influenced by respondents' characteristics, behaviours and circumstances?

Patients' expectations for health care by sample site

Having established the good psychometric properties of the survey instrument, this chapter details the results from the survey in terms of the types of expectations generally held. It begins by looking at the impact of site on expectations (comparing different health-care settings) and then looks at differences due to characteristics such as age and sex as well as patients' other circumstances.

Tables 34A–F show the distributions of expectation items by site (GP or hospital patient sample, the tables showing responses to questions related to the different expectation types). There were many similarities between sites, although some differences also emerged. There were no frequencies > 80% indicating no item redundancy (as noted briefly in *Chapter 5*). Most 'strongly disagree' to 'disagree' responses attracted very small numbers; this reflects the desirability of items and the positive direction of question wording (e.g. it is unlikely that anyone would disagree about ideally expecting the doctor to be respectful). The pilot study had indicated that some respondents became confused by double-negative meanings if wording was reversed, or sceptical about the logic of the questionnaire; hence, positive wording was retained throughout.

Tables 34A–F also show that item response varied from 726 to 808 out of the 833 pairs of pre- and post-visit questionnaires. As stated in *Chapters 4* and *5*, most item non-response occurred in the post-visit questionnaires completed in clinics/surgeries, as patients rushed to complete and return them to the fieldworker.

The GP patients had higher ideal and realistic expectations than hospital patients about it being easy to get around inside the building (item 2) and that there would be enough space in the waiting room (item 4).

GP patients also had higher realistic expectations about the site of the consultation being easy to find (item 1), it being clean inside (item 3) and the doctor treating them with respect and dignity (item 12) and higher ideal expectations about having a choice of doctors to consult when more than one was on site (not included in scaling because it did not apply to all patients). These differences would be expected as GP patients would be more familiar with their consultation site (local GP surgery).

GP patients were also more likely than hospital patients to have their expectations met about the site being easy to find (item 1), finding the doctor helpful (item 11), the doctor treating them with respect and dignity (item 12), the doctor being knowledgeable/understanding about their condition (item 13), the doctor being clear and easy to understand (item 14), the doctor involving them in decisions about their treatment (item 15) and being given full, clear information about how to manage their condition (item 24/17).

TABLE 34A Expectation items by GP, hospital and total patient respondents: structure of health care items

Expectation item	GP patients, % (n)			Hospital patients, % (n)			Total, % (n)		
	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met
1. Easy to find where to go when there									
Strongly agree	73 (289)	53 (214)	70 (278)	60 (228)	34 (132)	42 (153)	66 (517)	44 (346)	56 (431)
Agree	26 (103)	40 (161)	25 (98)	37 (143)	44 (168)	47 (171)	32 (246)	42 (329)	35 (269)
Neither	1 (5)	5 (21)	3 (12)	2 (6)	12 (45)	5 (17)	1 (11)	8 (66)	4 (29)
Disagree	0	2 (8)	2 (7)	1 (5)	9 (33)	5 (20)	1 (5)	5 (41)	4 (27)
Strongly disagree	0	0 (2)	1 (2)	0	2 (7)	1 (5)	0	1 (9)	1 (7)
Total n	397	406	397	382	385	366	779	791	763
2. Easy to get around inside building									
Strongly agree	71 (283)	55 (222)	68 (266)	56 (213)	36 (141)	32 (117)	64 (496)	46 (363)	51 (383)
Agree	27 (107)	34 (136)	25 (96)	40 (151)	37 (142)	50 (181)	33 (258)	35 (278)	37 (277)
Neither	2 (8)	6 (24)	4 (17)	3 (10)	13 (50)	9 (33)	2 (18)	9 (74)	7 (50)
Disagree	0 (2)	5 (20)	2 (8)	1 (3)	12 (47)	8 (29)	1 (5)	8 (67)	5 (37)
Strongly disagree	0	0	1 (2)	0	2 (9)	1 (3)	0	1 (9)	1 (5)
Total n	400	402	389	377	389	363	777	791	752
3. Clean inside									
Strongly agree	77 (305)	60 (245)	65 (258)	68 (258)	45 (173)	54 (199)	73 (563)	53 (418)	60 (457)
Agree	21 (82)	31 (126)	32 (126)	28 (104)	35 (136)	35 (129)	24 (186)	33 (262)	33 (255)
Neither	1 (5)	5 (22)	3 (11)	3 (10)	13 (50)	8 (31)	2 (15)	9 (72)	5 (42)
Disagree	1 (2)	3 (12)	0 (3)	1 (5)	6 (25)	1 (5)	1 (7)	5 (37)	1 (8)
Strongly disagree	0 (1)	0	0	0	1 (3)	1 (2)	0 (1)	0 (3)	0 (2)
Total n	395	405	398	377	387	366	772	792	764
4. Enough space in waiting room									
Strongly agree	71 (282)	52 (211)	66 (256)	61 (230)	28 (108)	40 (145)	66 (512)	41 (319)	53 (401)
Agree	27 (107)	35 (139)	29 (113)	32 (121)	35 (135)	37 (134)	29 (228)	35 (274)	33 (247)
Neither	2 (6)	10 (40)	3 (13)	4 (16)	18 (69)	11 (41)	3 (22)	14 (109)	7 (54)
Disagree	1 (3)	2 (10)	1 (5)	2 (8)	16 (62)	9 (31)	1 (11)	9 (72)	5 (36)
Strongly disagree	0 (1)	0 (2)	0	0 (1)	2 (8)	3 (12)	0 (2)	1 (10)	2 (12)
Total n	399	402	387	376	382	363	775	784	750

TABLE 34B Expectation items by GP, hospital and total patient respondents: process of health care items

Expectation item	GP patients, % (n)			Hospital patients, % (n)			Total sample, % (n)		
	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met
5. Clear information about where to go									
Strongly agree	73 (288)	53 (213)	56 (220)	70 (266)	42 (162)	49 (180)	71 (554)	48 (375)	53 (400)
Agree	24 (94)	36 (145)	30 (117)	25 (94)	34 (129)	43 (157)	24 (188)	35 (274)	36 (274)
Neither	3 (13)	7 (30)	8 (32)	4 (14)	13 (50)	5 (18)	3 (27)	10 (80)	7 (50)
Disagree	0	4 (15)	4 (17)	1 (5)	10 (40)	2 (9)	1 (5)	7 (55)	3 (26)
Strongly disagree	0 (1)	0	1 (4)	0	1 (4)	0 (1)	0 (1)	1 (4)	1 (5)
Total n	396	403	390	379	385	365	775	788	755
6. Given an appointment for a convenient date/time									
Strongly agree	68 (278)	26 (102)	54 (211)	70 (269)	25 (95)	44 (157)	69 (547)	25 (197)	49 (368)
Agree	26 (106)	37 (144)	25 (99)	23 (88)	47 (177)	38 (136)	25 (194)	42 (321)	31 (235)
Neither	3 (12)	19 (76)	12 (46)	4 (16)	15 (56)	12 (42)	4 (28)	17 (132)	12 (88)
Disagree	2 (7)	15 (58)	6 (25)	2 (7)	11 (41)	5 (16)	2 (14)	13 (99)	5 (41)
Strongly disagree	1 (4)	4 (14)	3 (13)	1 (4)	3 (10)	1 (3)	1 (8)	3 (24)	2 (16)
Total n	407	394	394	384	379	354	791	773	748
7. Seen on time									
Strongly agree	62 (257)	17 (64)	32 (125)	70 (275)	14 (50)	25 (90)	66 (532)	15 (114)	29 (215)
Agree	32 (132)	39 (148)	29 (112)	25 (100)	31 (113)	27 (98)	29 (232)	35 (261)	28 (210)
Neither	3 (11)	16 (62)	14 (53)	2 (9)	24 (88)	15 (55)	2 (20)	20 (150)	14 (108)
Disagree	3 (14)	22 (85)	16 (64)	2 (8)	25 (94)	24 (88)	3 (22)	24 (179)	20 (152)
Strongly disagree	0	7 (25)	9 (37)	1 (2)	7 (25)	8 (29)	0 (2)	7 (50)	9 (66)
Total n	414	384	391	394	370	360	808	754	751
8. Given a choice of hospitals to go to if referred on									
Strongly agree	62 (251)	29 (115)	26 (60)	53 (206)	21 (79)	26 (80)	58 (457)	25 (194)	26 (140)
Agree	28 (111)	38 (151)	18 (41)	28 (110)	36 (134)	36 (111)	28 (221)	37 (285)	28 (152)
Neither	9 (35)	23 (90)	35 (79)	16 (61)	25 (93)	19 (59)	12 (96)	24 (183)	26 (138)
Disagree	1 (5)	8 (30)	14 (33)	1 (4)	13 (50)	15 (46)	1 (9)	10 (80)	15 (79)
Strongly disagree	0 (1)	2 (7)	7 (15)	2 (7)	5 (18)	5 (16)	1 (8)	3 (25)	6 (31)
Total n	403	393	228	388	374	312	791	767	540
9. Given a choice of doctors to consult (if more than one doctor)									
Strongly agree	56 (228)	26 (101)	25 (91)	37 (145)	12 (46)	10 (33)	47 (373)	19 (147)	18 (124)
Agree	32 (131)	36 (140)	20 (73)	36 (140)	30 (111)	20 (70)	34 (271)	33 (251)	20 (143)
Neither	8 (33)	21 (80)	22 (78)	18 (72)	29 (106)	33 (113)	13 (105)	24 (186)	27 (191)
Disagree	2 (10)	14 (53)	21 (74)	8 (31)	23 (86)	27 (93)	5 (41)	18 (139)	24 (167)
Strongly disagree	1 (4)	4 (15)	11 (41)	1 (5)	6 (22)	11 (37)	1 (9)	5 (37)	11 (78)
Total n	406	389	357	393	371	346	799	760	703
10. Reception staff helpful									
Strongly agree	71 (279)	39 (158)	46 (181)	65 (246)	40 (151)	39 (145)	68 (525)	39 (309)	43 (326)
Agree	26 (103)	39 (157)	34 (134)	29 (108)	37 (142)	42 (153)	27 (211)	38 (299)	38 (287)
Neither	2 (6)	12 (47)	13 (51)	5 (18)	11 (42)	15 (54)	3 (24)	11 (89)	14 (105)
Disagree	1 (2)	7 (28)	4 (14)	1 (3)	12 (46)	3 (10)	1 (5)	9 (74)	3 (24)
Strongly disagree	0 (1)	3 (13)	3 (12)	1 (3)	1 (4)	1 (4)	1 (4)	2 (17)	2 (16)
Total n	391	403	392	378	385	366	769	788	758

TABLE 34C Expectation items by GP, hospital and total patient respondents: doctor–patient communication style items

Expectation item	GP patients, % (n)			Hospital patients, % (n)			Total sample, % (n)		
	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met
11. Doctor helpful									
Strongly agree	80 (318)	55 (217)	64 (250)	74 (282)	44 (169)	43 (154)	77 (600)	49 (386)	54 (404)
Agree	19 (76)	36 (142)	26 (103)	25 (97)	44 (168)	41 (147)	22 (173)	40 (310)	33 (250)
Neither	1 (2)	7 (26)	6 (23)	1 (2)	8 (29)	11 (39)	1 (4)	7 (55)	8 (62)
Disagree	0 (1)	3 (11)	4 (14)	0	4 (14)	4 (16)	0 (1)	3 (25)	4 (30)
Strongly disagree	0	1 (2)	1 (2)	0 (1)	1 (2)	1 (4)	0 (1)	1 (4)	1 (6)
Total n	397	398	392	382	382	360	779	780	752
12. Doctor respectful and treats me with dignity									
Strongly agree	77 (306)	63 (248)	67 (263)	65 (249)	41 (155)	38 (136)	71 (555)	52 (403)	53 (399)
Agree	21 (85)	31 (121)	26 (101)	31 (119)	44 (168)	41 (147)	26 (204)	37 (289)	33 (248)
Neither	2 (6)	5 (18)	5 (18)	3 (13)	9 (36)	12 (44)	2 (19)	7 (54)	8 (62)
Disagree	0	2 (8)	3 (11)	0	5 (20)	8 (29)	0	4 (28)	5 (40)
Strongly disagree	0 (1)	0 (1)	0 (1)	0 (1)	1 (3)	1 (3)	0 (2)	1 (4)	1 (4)
Total n	398	396	394	382	382	359	780	778	753
13. Doctor knowledgeable about/understands my health condition/problem									
Strongly agree	77 (312)	50 (198)	58 (231)	74 (279)	41 (159)	38 (139)	76 (591)	46 (357)	49 (370)
Agree	20 (80)	32 (128)	31 (125)	21 (81)	42 (162)	42 (154)	21 (161)	37 (290)	37 (279)
Neither	2 (7)	9 (37)	7 (28)	4 (15)	10 (39)	17 (61)	3 (22)	10 (76)	12 (89)
Disagree	1 (4)	7 (27)	3 (12)	1 (3)	5 (21)	2 (7)	1 (7)	6 (48)	2 (19)
Strongly disagree	0	1 (4)	1 (3)	0	1 (3)	1 (2)	0	1 (7)	1 (5)
Total n	403	394	399	378	384	363	781	778	762
14. Doctor clear and easy to understand									
Strongly agree	71 (284)	49 (195)	65 (257)	71 (269)	43 (162)	45 (164)	71 (553)	46 (357)	55 (421)
Agree	26 (105)	37 (146)	27 (107)	28 (105)	40 (150)	44 (160)	27 (210)	38 (296)	35 (267)
Neither	2 (8)	10 (41)	7 (27)	1 (5)	11 (42)	7 (26)	2 (13)	11 (83)	7 (53)
Disagree	0 (1)	4 (15)	1 (5)	1 (2)	6 (23)	3 (10)	0 (3)	5 (38)	2 (15)
Strongly disagree	0	0 (1)	0 (1)	0	1 (2)	1 (2)	0	0 (3)	0 (3)
Total n	398	398	397	381	379	362	779	777	759
15. Doctor involves me in decisions about my treatment									
Strongly agree	71 (277)	43 (173)	54 (210)	64 (242)	40 (153)	31 (113)	68 (519)	41 (326)	43 (323)
Agree	25 (99)	35 (141)	30 (118)	28 (107)	43 (163)	35 (127)	27 (206)	39 (304)	33 (245)
Neither	2 (8)	12 (49)	11 (44)	4 (15)	10 (37)	26 (94)	3 (23)	11 (86)	18 (138)
Disagree	1 (5)	10 (40)	4 (15)	3 (13)	6 (24)	5 (17)	2 (18)	8 (64)	4 (32)
Strongly disagree	0	1 (3)	1 (5)	0 (1)	1 (4)	2 (8)	0 (1)	1 (7)	2 (13)
Total n	389	406	392	378	381	359	767	787	751

TABLE 34D Expectation items by GP, hospital and total patient respondents: consultation and treatment procedures

Expectation item	GP patients, % (n)		Hospital patients, % (n)			Total sample, % (n)			
<i>Total procedures performed at post visit (physical examination + test/investigations + diagnosis + prescription + referral)</i>									
0	3 (10)		5 (16)			4 (26)			
1	20 (71)		18 (64)			19 (135)			
2	27 (94)		29 (101)			28 (195)			
3	28 (99)		28 (98)			28 (197)			
4	14 (47)		15 (53)			14 (100)			
All 5 performed	8 (27)		4 (15)			6 (42)			
Total n	348		347			695			
	Pre-visit ideally	Pre-visit reality	Post-visit met ^a	Pre-visit ideally	Pre-visit reality	Post-visit met ^a	Pre-visit ideally	Pre-visit reality	Post-visit met ^a
16. Given a physical examination									
Strongly agree	49 (195)	33 (129)	43 (163), 57 (215)	44 (167)	26 (99)	35 (124), 65 (235)	47 (362)	30 (228)	39 (287), 61 (450)
Agree	29 (113)	27 (104)		34 (128)	42 (162)		31 (241)	35 (266)	
Neither	14 (54)	23 (89)		10 (38)	18 (70)		12 (92)	21 (159)	
Disagree	3 (11)	11 (42)		7 (25)	8 (31)		5 (36)	9 (73)	
Strongly disagree	6 (22)	6 (23)		5 (18)	5 (20)		5 (40)	6 (43)	
Total n	(395)	(387)	(378)	(376)	(382)	(359)	(771)	(769)	(737)
17. Given tests/investigations									
Strongly agree	51 (198)	38 (151)	50 (186), 50 (183)	51 (192)	31 (119)	51 (183), 49 (176)	51 (390)	35 (270)	51 (369), 49 (359)
Agree	32 (124)	36 (140)		38 (141)	39 (148)		35 (265)	37 (288)	
Neither	9 (35)	16 (65)		6 (23)	17 (65)		8 (58)	17 (130)	
Disagree	2 (8)	3 (13)		3 (10)	10 (38)		2 (18)	7 (51)	
Strongly disagree	6 (23)	6 (25)		3 (10)	3 (13)		4 (33)	5 (38)	
Total n	(388)	(394)	(369)	(376)	(383)	(359)	(764)	(777)	(728)
18. Given diagnosis or have a previous diagnosis confirmed									
Strongly agree	57 (219)	39 (149)	40 (150), 60 (226)	51 (193)	38 (143)	41 (148), 59 (209)	54 (412)	38 (292)	41 (298), 59 (435)
Agree	30 (115)	36 (141)		38 (146)	41 (156)		34 (261)	39 (297)	
Neither	7 (28)	16 (60)		6 (22)	12 (46)		7 (50)	14 (106)	
Disagree	3 (10)	5 (20)		2 (9)	6 (21)		2 (19)	5 (41)	
Strongly disagree	4 (15)	4 (17)		3 (10)	4 (15)		3 (25)	4 (32)	
Total n	(387)	(387)	(376)	(380)	(381)	(357)	(767)	(768)	(733)
19. Given a new, changed or repeat prescription									
Strongly agree	46 (177)	39 (153)	41 (152), 59 (221)	29 (109)	24 (92)	58 (207), 42 (149)	38 (286)	32 (245)	49 (359), 51 (370)
Agree	27 (103)	31 (122)		36 (134)	37 (140)		31 (237)	34 (262)	
Neither	17 (67)	20 (80)		15 (57)	19 (72)		16 (124)	20 (152)	
Disagree	3 (13)	3 (13)		14 (52)	15 (56)		9 (65)	9 (69)	
Strongly disagree	7 (26)	7 (28)		6 (21)	6 (21)		6 (47)	6 (49)	
Total n	(386)	(396)	(373)	(373)	(381)	(356)	(759)	(777)	(729)
20. Given a referral to another doctor/specialist/therapist									
Strongly agree	43 (166)	31 (121)	62 (230), 38 (141)	31 (117)	17 (63)	67 (240), 33 (118)	37 (283)	24 (184)	64 (470), 36 (259)
Agree	25 (95)	31 (124)		20 (75)	27 (101)		22 (170)	29 (225)	
Neither	19 (73)	25 (100)		26 (98)	34 (128)		22 (171)	30 (228)	
Disagree	9 (33)	8 (30)		17 (65)	16 (62)		13 (98)	12 (92)	
Strongly disagree	5 (20)	5 (20)		5 (20)	6 (23)		5 (40)	6 (43)	
Total n	(387)	(395)	(371)	(375)	(377)	(358)	(762)	(772)	(729)

a Data presented as no [% (n)], yes [% (n)].

TABLE 34E Expectation items by GP, hospital and total patient respondents: doctor–patient approach to information items

Expectation item	GP patients, % (n)			Hospital patients, % (n)			Total sample, % (n)		
	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met
21. Reassurance about my condition									
Strongly agree	65 (254)	39 (153)	40 (157)	63 (239)	29 (111)	34 (120)	64 (493)	34 (264)	37 (277)
Agree	27 (104)	37 (145)	31 (122)	31 (118)	44 (167)	40 (144)	29 (222)	40 (312)	36 (266)
Neither	7 (27)	16 (62)	18 (70)	3 (12)	16 (62)	18 (66)	5 (39)	16 (124)	18 (136)
Disagree	1 (4)	7 (29)	8 (31)	2 (7)	9 (36)	4 (14)	1 (11)	8 (65)	6 (45)
Strongly disagree	1 (3)	1 (4)	2 (9)	1 (3)	2 (6)	4 (14)	1 (6)	1 (10)	3 (23)
Total n	392	393	389	379	382	358	771	775	747
22. Advice about my health/condition									
Strongly agree	65 (250)	49 (196)	38 (144)	64 (243)	48 (184)	36 (129)	64 (493)	49 (380)	37 (273)
Agree	30 (115)	37 (145)	35 (134)	34 (130)	40 (151)	40 (142)	32 (245)	38 (296)	37 (276)
Neither	3 (11)	10 (38)	15 (59)	1 (5)	7 (27)	16 (59)	2 (16)	8 (65)	16 (118)
Disagree	2 (6)	3 (13)	8 (30)	1 (2)	4 (16)	6 (21)	1 (8)	4 (29)	7 (51)
Strongly disagree	1 (4)	1 (5)	4 (14)	0 (1)	1 (3)	2 (7)	1 (5)	1 (8)	3 (21)
Total n	386	397	381	381	381	358	767	778	739
23. What caused my condition/problem									
Strongly agree	61 (236)	37 (147)	36 (139)	57 (219)	42 (160)	17 (62)	59 (455)	40 (307)	27 (201)
Agree	27 (103)	33 (128)	27 (104)	32 (121)	30 (115)	43 (155)	29 (224)	31 (243)	35 (259)
Neither	5 (20)	14 (55)	22 (84)	6 (22)	13 (51)	28 (99)	5 (42)	14 (106)	25 (183)
Disagree	4 (14)	12 (46)	10 (39)	2 (7)	11 (42)	8 (27)	3 (21)	11 (88)	9 (66)
Strongly disagree	4 (14)	4 (17)	4 (17)	3 (12)	3 (12)	4 (14)	3 (26)	4 (29)	4 (31)
Total n	387	393	383	381	380	357	768	773	740
24. How to manage the condition/symptoms/pain									
Strongly agree	65 (250)	42 (167)	41 (158)	58 (220)	43 (164)	20 (70)	61 (470)	42 (331)	31 (228)
Agree	28 (107)	39 (155)	31 (121)	34 (128)	31 (119)	45 (161)	31 (235)	35 (274)	38 (282)
Neither	4 (14)	13 (53)	19 (72)	6 (21)	14 (53)	23 (82)	5 (35)	14 (106)	21 (154)
Disagree	2 (9)	4 (15)	7 (26)	2 (7)	10 (37)	10 (36)	2 (16)	7 (52)	8 (62)
Strongly disagree	1 (5)	2 (7)	3 (10)	1 (5)	2 (8)	1 (5)	1 (10)	2 (15)	2 (15)
Total n	385	397	387	381	381	354	766	778	741
25. The benefits/side effects/complications/risks of treatment									
Strongly agree	63 (243)	43 (173)	32 (119)	57 (216)	43 (165)	26 (91)	60 (459)	43 (338)	29 (210)
Agree	26 (101)	36 (143)	28 (104)	35 (131)	33 (128)	41 (146)	30 (232)	35 (271)	34 (250)
Neither	5 (20)	11 (44)	25 (93)	4 (14)	10 (38)	23 (81)	4 (34)	10 (82)	24 (174)
Disagree	4 (14)	8 (30)	10 (38)	3 (12)	12 (46)	8 (28)	3 (26)	10 (76)	9 (66)
Strongly disagree	2 (6)	2 (9)	5 (19)	1 (4)	2 (6)	2 (7)	1 (10)	2 (15)	4 (26)
Total n	384	399	373	377	383	353	61	782	726
26. Given the opportunity to discuss problems in my life									
Strongly agree	40 (160)	24 (94)	28 (108)	33 (127)	21 (80)	14 (50)	37 (287)	23 (174)	21 (158)
Agree	28 (110)	25 (97)	16 (60)	26 (100)	24 (92)	27 (97)	27 (210)	25 (189)	21 (157)
Neither	17 (67)	24 (92)	30 (113)	25 (97)	25 (96)	28 (100)	21 (164)	25 (188)	29 (213)
Disagree	10 (39)	18 (69)	17 (65)	12 (45)	26 (97)	24 (84)	11 (84)	22 (166)	20 (149)
Strongly disagree	6 (22)	9 (34)	9 (34)	4 (14)	4 (14)	7 (26)	5 (36)	6 (48)	8 (60)
Total n	398	386	380	383	379	357	781	765	737

TABLE 34F Expectation items by GP, hospital and total respondents: treatment outcomes items

Expectation item	GP patients, % (n)			Hospital patients, % (n)			Total sample, % (n)		
	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met	Pre-visit ideally	Pre-visit reality	Post-visit met
27. Improved quality of life									
Strongly agree	60 (237)	36 (139)	36 (137)	64 (246)	44 (164)	28 (101)	62 (483)	40 (303)	32 (238)
Agree	30 (118)	35 (135)	39 (147)	29 (113)	31 (115)	37 (133)	30 (231)	33 (250)	38 (280)
Neither	8 (32)	23 (90)	20 (76)	6 (22)	18 (69)	25 (89)	7 (54)	21 (159)	22 (165)
Disagree	2 (7)	5 (20)	4 (17)	1 (4)	6 (24)	8 (30)	1 (11)	6 (44)	6 (47)
Strongly disagree	1 (2)	1 (5)	1 (2)	0	1 (2)	2 (6)	0 (2)	1 (7)	1 (8)
Total n	396	389	379	385	374	359	781	763	738
28. A reduction in my symptoms/problems									
Strongly agree	64 (255)	33 (128)	36 (135)	70 (267)	30 (113)	29 (104)	67 (522)	32 (241)	32 (239)
Agree	30 (118)	43 (167)	41 (155)	25 (97)	40 (150)	40 (144)	28 (215)	42 (317)	41 (299)
Neither	4 (17)	18 (68)	17 (65)	3 (13)	22 (84)	23 (81)	4 (30)	20 (152)	20 (146)
Disagree	1 (4)	4 (15)	5 (18)	1 (4)	7 (28)	7 (25)	1 (8)	6 (43)	6 (43)
Strongly disagree	1 (2)	2 (8)	1 (4)	1 (3)	1 (2)	2 (6)	1 (5)	1 (10)	1 (10)
Total n	396	386	377	384	377	360	780	763	737
29. Increased chances of improvements to my health/staying healthy									
Strongly agree	59 (238)	36 (139)	33 (127)	61 (233)	31 (119)	25 (89)	60 (471)	34 (258)	29 (216)
Agree	33 (133)	41 (158)	42 (161)	36 (138)	40 (151)	41 (148)	34 (271)	40 (309)	41 (309)
Neither	6 (26)	18 (69)	20 (76)	2 (9)	21 (81)	27 (98)	4 (35)	20 (150)	23 (174)
Disagree	1 (6)	4 (15)	4 (16)	1 (4)	7 (26)	6 (21)	1 (10)	5 (41)	5 (37)
Strongly disagree	0 (1)	1 (4)	1 (4)	0	1 (2)	1 (5)	0 (1)	1 (6)	1 (9)
Total n	404	385	384	384	379	361	788	764	745

Patients' expectations for health care by age and sex

Table 35 shows the item means (and SDs) for the pre-visit ideal and realistic expectations and post-visit experiences (expectations met) by age and sex of respondent and total sample. This shows that ideal expectations scores were generally lower, indicating higher expectations, than realistic expectations scores. These figures also support the validity of the measures as one would expect ideal expectations to be higher than reality.

Overall, mean scores for post-visit experiences (expectations met) were, in most cases, higher than those for pre-visit ideal expectations but lower than those for pre-visit realistic expectations, indicating that met expectations fell below ideal but exceeded realistic expectations. Most of the remaining scores were similar to, or slightly higher (worse) than, realistic but not ideal expectations.

Mean expectations were similar for men and women. The only item with more than 1 mean point difference between men and women was item 7. Women's ideal expectation means were slightly lower (higher expectations) than those for men, although the sex difference was reversed for realistic expectations. Mean realistic and post-visit met expectations were frequently lower among people aged 60+ years than among lower younger age groups, indicating that older people had higher realistic and met expectations. There were fewer differences with ideal expectations.

TABLE 35 Pre- and post-visit reliability (mean, SD) by age, sex of respondent and total sample

Expectation item	≤ 39 years	40–59 years	60+ years	Female	Male	Total sample
Structure of health care						
<i>1. Easy to find where to go when there</i>						
(a) Hope for this ideally	1.33 (0.56)	1.37 (0.58)	1.38 (0.51)	1.37 (0.57)	1.35 (0.52)	1.36 (0.55)
(b) Expect this in reality	1.70 (0.79)	1.84 (0.98)	1.83 (0.90)	1.80 (0.90)	1.78 (0.89)	1.78 (0.89)
(c) It was (post)	1.59 (0.74)	1.65 (0.95)	1.48 (0.71)	1.57 (0.84)	1.57 (0.76)	1.57 (0.80)
<i>2. Easy to get around inside building</i>						
(a) Hope for this ideally	1.43 (0.63)	1.40 (0.58)	1.36 (0.50)	1.40 (0.60)	1.39 (0.54)	1.40 (0.57)
(b) Expect this in reality	1.78 (0.91)	1.99 (1.09)	1.77 (0.94)	1.85 (1.02)	1.84 (0.96)	1.84 (0.98)
(c) It was (post)	1.72 (0.90)	1.71 (0.89)	1.59 (0.17)	1.65 (0.89)	1.69 (0.81)	1.68 (0.85)
<i>3. Clean inside</i>						
(a) Hope for this ideally	1.34 (0.62)	1.32 (0.60)	1.28 (0.49)	1.31 (0.58)	1.31 (0.56)	1.31 (0.57)
(b) Expect this in reality	1.74 (0.90)	1.72 (0.89)	1.58 (0.80)	1.65 (0.86)	1.71 (0.87)	1.67 (0.86)
(c) It was (post)	1.58 (0.73)	1.46 (0.68)	1.42 (0.61)	1.49 (0.68)	1.46 (0.67)	1.49 (0.67)
<i>4. Enough space in waiting room</i>						
(a) Hope for this ideally	1.32 (0.59)	1.45 (0.68)	1.43 (0.65)	1.36 (0.63)	1.47 (0.67)	1.40 (0.64)
(b) Expect this in reality	2.02 (1.05)	2.00 (1.07)	1.86 (0.94)	1.89 (1.00)	2.06 (1.04)	1.95 (1.01)
(c) There was (post)	1.78 (0.97)	1.64 (0.97)	1.62(0.82)	1.68 (0.92)	1.68 (0.93)	1.68 (0.92)
Process of health care						
<i>5. Clear information about where to go</i>						
(a) Hope for this ideally	1.33 (0.58)	1.34 (0.66)	1.33 (0.58)	1.32 (0.59)	1.35 (0.59)	1.34 (0.59)
(b) Expect this in reality	1.74 (0.85)	1.88 (1.01)	1.74 (0.92)	1.78 (0.93)	1.79 (0.93)	1.78 (0.93)
(c) There was (post)	1.83 (0.95)	1.57 (0.76)	1.49 (0.67)	1.62 (0.82)	1.63 (0.78)	1.63 (0.81)
<i>6. Given an appointment for a convenient date/time</i>						
(a) Hope for this ideally	1.37 (0.71)	1.44 (0.77)	1.38 (0.68)	1.36 (0.68)	1.46 (0.79)	1.41 (0.74)
(b) Expect this in reality	2.44 (1.09)	2.32 (1.12)	2.05 (0.96)	2.23 (1.09)	2.33 (1.06)	2.27 (1.07)
(c) I was (post)	1.99 (1.05)	1.77 (1.00)	1.65 (0.88)	1.75 (0.97)	1.85 (1.00)	1.80 (0.99)
<i>7. Seen on time</i>						
(a) Hope for this ideally	1.42 (0.71)	1.43 (0.73)	1.40 (0.61)	1.39 (0.62)	2.74 (1.16)	1.43 (0.70)
(b) Expect this in reality	2.81 (1.22)	2.75 (1.19)	2.61 (1.09)	2.71 (1.18)	1.68 (0.88)	2.72 (1.17)
(c) I was (post)	2.64 (1.32)	2.59 (1.34)	2.39 (1.30)	2.51 (1.35)	2.56 (1.29)	2.53 (1.33)
<i>8. Given a choice of hospitals to go to if referred on^a</i>						
(a) Hope for this ideally	1.57 (0.81)	1.63 (0.83)	1.58 (0.83)	1.54 (0.77)	1.68 (0.88)	1.60 (0.82)
(b) Expect this in reality	2.33 (1.06)	2.29 (1.06)	2.25 (1.06)	2.22 (1.04)	2.40 (1.07)	2.29 (1.06)
(c) I was (post)	2.59 (1.19)	2.39 (1.20)	2.39 (1.16)	2.45 (1.22)	2.46 (1.14)	2.46 (1.19)
<i>9. Given a choice of doctors to consult^b</i>						
(a) Hope for this ideally	1.82 (0.91)	1.82 (0.98)	1.77 (0.92)	1.74 (0.87)	1.90 (1.01)	1.80 (0.93)
(b) Expect this in reality	2.64 (1.09)	2.55 (1.20)	2.52 (1.11)	2.51 (1.14)	2.65 (1.12)	2.56 (1.14)
(c) I was (post)	3.05 (1.24)	2.92 (1.30)	2.74 (1.22)	2.85 (1.32)	2.97 (1.18)	2.90 (1.26)
<i>10. Reception staff helpful</i>						
(a) Hope for this ideally	1.37 (0.67)	1.38 (0.67)	1.38 (0.56)	1.33 (0.61)	1.43 (0.65)	1.38 (0.63)
(b) Expect this in reality	2.10 (1.05)	2.02 (1.13)	1.82 (0.90)	1.99 (1.05)	1.97 (1.03)	1.97 (1.04)
(c) They were (post)	2.01 (0.99)	1.88 (0.93)	1.66 (0.85)	1.84 (0.95)	1.84 (0.91)	1.84 (0.93)

TABLE 35 Pre- and post-visit reliability (mean, SD) by age, sex of respondent and total sample (*continued*)

Expectation item	≤ 39 years	40–59 years	60+ years	Female	Male	Total sample
Doctor–patient communication style						
<i>11. Doctor helpful</i>						
(a) Hope for this ideally	1.23 (0.44)	1.25 (0.53)	1.23 (0.42)	1.20 (0.42)	1.30 (0.51)	1.24 (0.47)
(b) Expect this in reality	1.30 (0.88)	1.61 (0.78)	1.56 (0.69)	1.63 (0.78)	1.70 (0.79)	1.66 (0.79)
(c) Doctor was (post)	1.78 (0.87)	1.68 (0.89)	1.52 (0.79)	1.63 (0.89)	1.68 (0.80)	1.65 (0.85)
<i>12. Doctor respectful and treats me with dignity</i>						
(a) Hope for this ideally	1.35 (0.59)	1.34 (0.58)	1.27 (0.46)	1.29 (0.54)	1.36 (0.56)	1.32 (0.55)
(b) Expect this in reality	1.77 (0.89)	1.59 (0.79)	1.58 (0.73)	1.62 (0.81)	1.68 (0.81)	1.64 (0.81)
(c) Doctor was (post)	1.76 (0.85)	1.67 (0.90)	1.62 (0.89)	1.60 (0.85)	1.78 (0.91)	1.67 (0.88)
<i>13. Doctor knowledgeable about/understands my health condition/problem</i>						
(a) Hope for this ideally	1.33 (0.57)	1.27 (0.58)	1.27 (0.55)	1.24 (0.52)	1.35 (0.62)	1.29 (0.56)
(b) Expect this in reality	1.93 (0.97)	1.77 (0.92)	1.68 (0.84)	1.79 (0.95)	1.80 (0.86)	1.79 (0.92)
(c) Doctor was (post)	1.82 (0.90)	1.71 (0.82)	1.60 (0.90)	1.66 (0.85)	1.76 (0.77)	1.70 (0.82)
<i>14. Doctor clear and easy to understand</i>						
(a) Hope for this ideally	1.34 (0.56)	1.31 (0.53)	1.29 (0.48)	1.27 (0.49)	1.37 (0.56)	1.31 (0.52)
(b) Expect this in reality	1.77 (0.85)	1.77 (0.91)	1.71 (0.80)	1.72 (0.83)	1.80 (0.89)	1.76 (0.86)
(c) Doctor was (post)	1.67 (0.80)	1.53 (0.70)	1.52 (0.73)	1.56 (0.77)	1.59 (0.71)	1.57 (0.74)
<i>15. Doctor involves me in decisions about my treatment</i>						
(a) Hope for this ideally	1.37 (0.63)	1.43 (0.73)	1.41 (0.67)	1.37 (0.67)	1.45 (0.70)	1.40 (0.68)
(b) Expect this in reality	2.00 (1.02)	1.91 (1.03)	1.77 (0.820)	1.89 (1.00)	1.89 (0.96)	1.88 (0.96)
(c) Doctor did (post)	1.95 (0.94)	1.93 (1.01)	1.81 (0.94)	1.82 (0.94)	1.98 (1.00)	1.89 (0.96)
Consultation and treatment procedures						
<i>16. Physical examination</i>						
(a) Hope for this ideally	1.94 (1.10)	2.07 (1.23)	1.71 (0.98)	1.98 (1.14)	1.81 (1.07)	1.90 (1.11)
(b) Expect this in reality	2.41 (1.15)	2.44 (1.21)	1.99 (1.03)	2.33 (1.17)	2.20 (1.13)	2.27 (1.15)
(c) I was given (post) ^c	40 (91), 60 (137)	53 (142), 57 (142)	35 (87), 65 (164)	40 (166), 60 (254)	38 (144), 62 (189)	39 (287), 61 (450)
<i>17. Tests/investigations</i>						
(a) Hope for this ideally	1.83 (0.99)	1.87 (1.13)	1.57 (0.88)	1.79 (1.05)	1.69 (0.95)	1.74 (1.00)
(b) Expect this in reality	2.27 (1.10)	2.19 (1.18)	1.89 (1.00)	2.15 (1.13)	2.05 (1.07)	2.10 (1.10)
(c) I was given (post) ^c	58 (132), 42 (94)	52 (124), 48 (115)	44 (108), 56 (140)	48 (198), 52 (213)	55 (167), 45 (136)	51 (369), 49 (359)
<i>18. Given diagnosis or have a previous diagnosis confirmed</i>						
(a) Hope for this ideally	1.75 (0.96)	1.79 (1.06)	1.48 (0.76)	1.75 (1.02)	1.58 (0.84)	1.68 (0.94)
(b) Expect this in reality	2.18 (1.12)	2.08 (1.11)	1.72 (0.86)	2.10 (1.13)	1.85 (0.92)	2.00 (1.10)
(c) I was given (post) ^c	54 (123), 46 (103)	45 (103), 55 (128)	27 (68), 73 (182)	42 (177), 58 (241)	39 (117), 61 (183)	41 (298), 59 (435)
<i>19. A new, changed or repeat prescription</i>						
(a) Hope for this ideally	2.10 (1.14)	2.32 (1.28)	2.00 (1.13)	2.16 (1.21)	2.13 (1.18)	2.14 (1.19)
(b) Expect this in reality	2.36 (1.19)	2.39 (1.24)	2.01 (1.06)	2.30 (1.19)	2.19 (1.16)	2.25 (1.17)
(c) I was given (post) ^c	51 (115), 49 (111)	57 (135), 43 (103)	42 (105), 58 (146)	52 (216), 48 (201)	46 (139), 54 (160)	49 (359), 51 (370)

continued

TABLE 35 Pre- and post-visit reliability (mean, SD) by age, sex of respondent and total sample (*continued*)

Expectation item	≤ 39 years	40–59 years	60+ years	Female	Male	Total sample
<i>20. A referral to another doctor/specialist/therapist</i>						
(a) Hope for this ideally	2.26 (1.23)	2.38 (1.27)	2.17 (1.19)	2.27 (1.24)	2.27 (1.22)	2.27 (1.23)
(b) Expect this in reality	2.57 (1.15)	2.53 (1.19)	2.32 (1.08)	2.51 (1.18)	2.42 (1.09)	2.46 (1.14)
(c) I was given (post) ^c	64 (145), 36 (82)	63 (152), 37 (89)	67 (165), 33 (80)	65 (272), 35 (144)	64 (191), 36 (108)	64 (470), 36 (259)
Total procedures performed at post visit (695 complete procedure responses), % (<i>n</i>)						
0	5 (10)	4 (10)	3 (6)	5 (19)	2 (70)	4 (26)
1	27 (62)	19 (44)	12 (28)	20 (80)	19 (54)	20 (135)
2	27 (60)	30 (69)	28 (63)	27 (108)	30 (85)	28 (195)
3	23 (53)	30 (69)	31 (70)	26 (103)	31 (89)	28 (197)
4	9 (19)	16 (39)	18 (40)	16 (63)	12 (35)	14 (100)
All 5 performed	9 (19)	1 (3)	8 (19)	6 (25)	6 (16)	6 (42)
Doctor–patient approach to information						
<i>21. Reassurance about my condition</i>						
(a) Hope for this ideally	1.47 (0.71)	1.46 (0.80)	1.44 (0.67)	1.40 (0.68)	1.55 (0.79)	1.46 (0.73)
(b) Expect this in reality	2.12 (1.05)	2.07 (0.90)	1.91 (0.90)	1.95 (0.98)	2.14 (0.97)	2.03 (0.98)
(c) I was given (post)	2.24 (1.10)	2.04 (1.09)	1.82 (0.89)	2.05 (1.08)	1.98 (0.98)	2.02 (1.04)
<i>22. Advice about my health/condition</i>						
(a) Hope for this ideally	1.45 (0.64)	1.41 (0.69)	1.40 (0.64)	1.43 (0.66)	1.41 (0.65)	1.42 (0.65)
(b) Expect this in reality	1.82 (0.91)	1.66 (0.86)	1.62 (0.78)	1.76 (0.90)	1.62 (0.77)	1.70 (0.85)
(c) I was given (post)	2.14 (1.08)	2.02 (1.09)	1.87 (0.90)	2.05 (1.08)	1.95 (0.96)	2.01 (1.03)
<i>23. What caused my condition/problem</i>						
(a) Hope for this ideally	1.69 (1.03)	1.62 (0.98)	1.55 (0.85)	1.69 (1.03)	1.53 (0.85)	1.62 (0.96)
(b) Expect this in reality	2.21 (1.24)	2.09 (1.17)	1.95 (1.03)	2.16 (1.21)	1.97 (1.07)	2.08 (1.15)
(c) I was given (post)	2.38 (1.11)	2.34 (1.06)	2.12 (1.08)	2.29 (1.13)	2.26 (1.04)	2.28 (1.08)
<i>24. How to manage the condition/symptoms/pain</i>						
(a) Hope for this ideally	1.57 (0.80)	1.54 (0.86)	1.44 (0.71)	1.54 (0.83)	1.49 (0.74)	1.51 (0.79)
(b) Expect this in reality	2.01 (1.02)	1.91 (1.06)	1.80 (0.91)	1.93 (1.01)	1.88 (0.99)	1.90 (1.00)
(c) I was given (post)	2.29 (1.08)	2.14 (1.01)	1.97 (0.93)	2.11 (1.04)	2.15 (0.97)	2.13 (1.01)
<i>25. The benefits/side effects or complications/risks of treatment</i>						
(a) Hope for this ideally	1.57 (0.80)	1.52 (0.85)	1.56 (0.87)	1.57 (0.87)	1.53 (0.80)	1.55 (0.84)
(b) Expect this in reality	1.99 (1.03)	1.95 (1.09)	1.90 (1.03)	1.92 (1.03)	1.95 (1.08)	1.92 (1.05)
(c) I was given (post)	2.32 (1.083)	2.29 (1.114)	2.13 (1.05)	2.30 (1.13)	2.16 (1.01)	2.24 (1.08)
<i>26. Given the opportunity to discuss problems in my life</i>						
(a) Hope for this ideally	2.21 (1.17)	2.26 (1.27)	2.12 (1.11)	2.10 (1.17)	2.34 (1.18)	2.20 (1.18)
(b) Expect this in reality	2.76 (1.25)	2.73 (1.25)	2.47 (1.15)	2.60 (1.25)	2.72 (1.19)	2.64 (1.22)
(c) I was given (post)	2.82 (1.24)	2.75 (1.31)	2.63 (1.16)	2.70 (1.29)	2.77 (1.16)	2.72 (1.23)
Treatment outcomes						
<i>27. Improved quality of life</i>						
(a) Hope for this ideally	1.58 (0.76)	1.43 (0.70)	1.45 (0.67)	1.53 (0.74)	1.43 (0.66)	1.49 (0.71)
(b) Expect this in reality	2.13 (1.02)	1.87 (0.93)	1.89 (0.91)	2.05 (1.00)	1.84 (0.89)	1.95 (0.96)
(c) I expect (post)	2.14 (1.01)	2.03 (0.92)	2.03 (0.92)	2.02 (0.95)	2.08 (0.94)	2.06 (0.95)

TABLE 35 Pre- and post-visit reliability (mean, SD) by age, sex of respondent and total sample (*continued*)

Expectation item	≤ 39 years	40–59 years	60+ years	Female	Male	Total sample
<i>28. A reduction in my symptoms/problems</i>						
(a) Hope for this ideally	1.50 (0.78)	1.39 (0.67)	1.34 (0.56)	1.45 (0.70)	1.35 (0.65)	1.41 (0.68)
(b) Expect this in reality	2.15 (1.02)	2.00 (0.91)	2.00 (0.85)	2.05 (0.96)	2.04 (0.89)	2.04 (0.93)
(c) I expect (post)	2.10 (0.93)	2.00 (0.96)	1.99 (0.93)	2.02 (0.95)	2.04 (0.94)	2.03 (0.94)
<i>29. Increased chances of improvements to my health/staying healthy</i>						
(a) Hope for this ideally	1.58 (0.75)	1.45 (0.61)	1.42 (0.60)	1.51 (0.67)	1.43 (0.63)	1.48 (0.66)
(b) Expect this in reality	2.05 (0.99)	1.98 (0.90)	1.95 (0.85)	1.98 (0.92)	2.02 (0.90)	1.99 (0.91)
(c) I expect (post)	2.15 (0.93)	2.11 (0.93)	2.00 (0.87)	2.05 (0.92)	2.12 (0.90)	2.08 (0.91)

a Not included in scaling as did not apply if not referred on.

b Not included in scaling as did not apply if only one doctor.

c Data expressed as yes [% (*n*)], no [% (*n*)].

Means (SDs) not calculated for dichotomous items.

The highest ideal expectations, particularly among the GP sample, included expectations about cleanliness, information about where to go, convenient appointments, being seen on time, helpfulness of reception staff and knowledge of doctor, clear and easy to understand doctor, involvement in treatment decisions and reduction in symptoms/problems. The lowest ideal expectations related to the five clinical procedures (physical examination, tests/investigators, diagnosis, prescription and referral on) and being given the opportunity to discuss problems in life.

The lowest met expectations, particularly among the hospital sample, included being seen on time and the two items requested by the ethics committee: being given a choice of hospitals if referred and a choice of doctors to consult (not included in scaling as not applicable to all patients). Other items that had low met expectations were the helpfulness of reception staff, doctor being respectful and treating with dignity (hospital sample), doctor knowledgeable about condition (hospital), being given reassurance, advice about health/condition, information on cause of condition, advice on how to manage condition, information about benefits/side effects of treatment and the opportunity to discuss problems in life and the three items on outcome expectancies.

Expectation subscale score distributions by sample

Although the questionnaire had 29 items, items 8 and 9 were excluded from scaling as they did not apply to all respondents (these were additional items requested by the ethics committee). A scale was produced from scores to 27 items that had responses 1–5 (accepting post-visit 'yes/no' items, which were scored dichotomously). This produced a scoring range of 27–135 (recorded as 1–135 to account for missing responses) for each subscale [pre-visit ideal and realistic expectations and post-visit experiences (met expectations)]. As is usual practice, the score groupings reported in *Tables 36A and B* (1–41, 42–51, 52–61, 62–71, 72–135) were decided after examining the distribution of the data to ensure that sufficient numbers for analysis were included in each group, and testing for ability to discriminate key variables (e.g. by site). Although many authors do present means of such response scores, and it is generally acceptable now with scored (yet not interval-level) data, we wished to be precise here as the study is largely a psychometric one. Here, the frequencies are retained as they represent the spread of the data, so one can see floor and ceiling effects, which is essential in psychometric presentations (i.e. potential users need this information).

Tables 36A and B show score distributions by subscale (ideal, realistic and post visit) and by sample type respectively. Relatively few respondents fell into the 'lowest expectations/met' category, and more respondents achieved the highest scores for ideal (54%) than for realistic (18%) or met (35%) expectations. Table 36B also shows that GP patients were slightly more likely than hospital patients to have the highest ideal and realistic expectations, and somewhat more likely to have the highest expectations met scores.

Table 36C shows that correlations between the three subscales were all highly significant, and correlations between ideal and met expectations were lower than those between realistic and met expectations, supporting their validity.

TABLE 36A Expectations subscale score distributions: total sample

Score ^a	Pre-visit ideal total score, % (n)	Pre-visit realistic total score, % (n)	Post-visit experiences (expectations met) score, % (n) ^b
1–41 (highest expectations/met)	54 (384)	18 (128)	35 (219)
42–51	30 (213)	19 (136)	35 (222)
52–61	13 (90)	31 (215)	21 (129)
62–71	3 (18)	19 (136)	6 (39)
72–135 (post = 115) (lowest expectations/met)	1 (9)	12 (84)	3 (20)
Total complete items	714	699	629

- a Pre-visit ideal and realistic expectations subscales both consisted of 27 items, each item was scored from 1 to 5; scale range: 1 to 135. Post-visit experiences (expectations met) subscale consisted of 22 items, each item was scored from 1 to 5, plus five items each scored 0 or 1; scale range: 1 to 115.
- b Treatment procedures (five items) were coded post-visit as dichotomous 'yes' performed/'no' not performed (recorded in same direction here as scale scores 'yes' = 0, 'no' = 1).

TABLE 36B Expectations subscale score distributions by sample type

Score ^a	Pre-visit ideal total score, % (n)			Pre-visit realistic total score, % (n)			Post-visit experiences (expectations met) score, % (n) ^b		
	GP	Hospital	Total	GP	Hospital	Total	GP	Hospital	Total
1–41 (highest expectations/met)	58 (207)	49 (177)	54 (384)	23 (81)	16 (56)	18 (128)	46 (137)	25 (82)	35 (219)
42–51	25 (87)	35 (126)	30 (213)	22 (77)	17 (59)	19 (136)	29 (88)	41 (134)	35 (222)
52–61	12 (43)	13 (47)	13 (90)	26 (90)	33 (116)	31 (215)	14 (42)	26 (87)	21 (129)
62–71	3 (12)	2 (6)	3 (18)	17 (60)	21 (76)	19 (136)	7 (21)	5 (18)	6 (39)
72–135 (post = 115) (lowest expectations/met)	1 (5)	1 (4)	1 (9)	11 (37)	13 (47)	12 (84)	4 (12)	2 (8)	3 (20)
Total	354	360	714	345	354	699	300	329	629

- a Pre-visit ideal and realistic expectations subscales both consisted of 27 items, each item was scored from 1 to 5; scale range: 1 to 135. Post-visit experiences (expectations met) subscale consisted of 22 items, each item was scored from 1 to 5, plus five items each scored 0 or 1; scale range: 1 to 115.
- b Treatment procedures (five items) were coded post-visit as dichotomous 'yes' performed/'no' not performed (recorded in same direction here as scale scores 'yes' = 0, 'no' = 1).

TABLE 36C Subscale score intercorrelations: Spearman's rho (total sample $n = 714$)^b

	Ideal total scale score	Realistic total scale score	Post-visit experiences total scale score
Ideal total scale score	–	0.568 ^a	0.190 ^a
Realistic total scale score	0.568 ^a	–	0.337 ^a
Post-visit experiences total scale score	0.190 ^a	0.337 ^a	–

a $p < 0.01$.

b Treatment procedures (five items) were coded post-visit as dichotomous 'yes' performed/'no' not performed (recorded in same direction here as scale scores 'yes' = 0, 'no' = 1).

Domains of expectations

As reported earlier the expectation items were also split into six expectation type domains, which are detailed in *Chapter 5*. All of the domains had good reliability. In the next section, we examine correlations between the items in the subscales and domains.

With the exception of the treatment process domain, correlations between pre-visit ideal expectations and post-visit experiences achieved significance, although the correlations were lower than between pre-visit realistic expectations and post-visit experiences. This would be expected given the pre-visit realistic expectations' reflection of real, rather than ideal, life, and as they were partly influenced by previous health-care experiences. These results are shown in *Tables 37A–F*, in which complete response triplets per domain are shown.

TABLE 37A Interitem correlations within subscale domains (Spearman's rho): structure of health care (items 1–4) ($n = 768$)

Expectations	Ideal	Realistic	Post-visit met
Ideal	–	0.496 ^a	0.310 ^a
Realistic	0.496 ^a	–	0.455 ^a
Post-visit met	0.321 ^a	0.455 ^a	–

a $p < 0.01$.

TABLE 37B Interitem correlations within subscale domains (Spearman's rho): process of health care (items 5–7, 10) ($n = 744$)

Expectations	Ideal	Realistic	Post-visit met
Ideal	–	0.290 ^a	0.164 ^a
Realistic	0.290 ^a	–	0.315 ^a
Post-visit met	0.164 ^a	0.315 ^a	–

a $p < 0.01$.

TABLE 37C Interitem correlations within subscale domains (Spearman's rho): doctor–patient communication style (items 11–15) ($n=686$)

Expectations	Ideal	Realistic	Post-visit met
Ideal	–	0.483 ^a	0.322 ^a
Realistic	0.483 ^a	–	0.383 ^a
Post-visit met	0.322 ^a	0.383 ^a	–

a $p < 0.01$.

TABLE 37D Interitem correlations within subscale domains (Spearman's rho): consultation and treatment procedures (items 16–20; post-visit items 22–26: 0, received; 1, not received) ($n=678$)

Expectations	Ideal	Realistic	Post-visit met
Ideal	–	0.738 ^a	0.048 ^b
Realistic	0.738 ^a	–	0.146 ^a
Post-visit met	0.048 ^b	–0.146 ^a	–

a $p < 0.01$.

b Not statistically significant.

TABLE 37E Interitem correlations within subscale domains (Spearman's rho): doctor–patient full approach to information (items 21–26; post visit items 16–21) ($n=650$)

Expectations	Ideal	Realistic	Post-visit met
Ideal	–	0.616 ^a	0.183 ^a
Realistic	0.616 ^a	–	0.307 ^a
Post-visit met	0.183 ^a	0.307 ^a	–

a $p < 0.01$.

TABLE 37F Interitem correlations within subscale domains (Spearman's rho): treatment outcomes (items 27–29) ($n=689$)

Expectations	Ideal	Realistic	Post-visit met
Ideal	–	0.403 ^a	0.220 ^a
Realistic	0.403 ^a	–	0.283 ^a
Post-visit met	0.220 ^a	0.283 ^a	–

a $p < 0.01$.

Consistent with the means reported in *Chapter 6*, *Table 38* shows that there were differences in domain score distributions between GP and hospital patients, particularly for ideal, realistic and post-visit structure of health care and doctor–patient communication style.

Table 39 shows the score distributions for the total sample by domain for pre-visit ideal and realistic and post-visit met expectations. This shows that, for each domain, ideal expectations were much higher than realistic expectations, and most post-visit experiences fell far short of patients' ideals, although they exceeded their lower realistic expectations for structure of health care, process of health care and doctor–patient communication style.

TABLE 38 Expectation domain score frequency distributions by sample type

Expectation domain	GP ideal, % (n)	Hospital ideal, % (n)	GP realistic, % (n)	Hospital realistic, % (n)	GP post-visit met, % (n)	Hospital post-visit met, % (n)
Structure of health care (items 1–4× 5-point response scale)						
4 (highest expectations)	52 (202)	33 (123)	30 (119)	12 (45)	53 (204)	18 (64)
5	16 (60)	18 (65)	15 (59)	7 (28)	9 (34)	8 (28)
6	11 (41)	18 (68)	13 (52)	9 (35)	8 (30)	12 (43)
7	10 (37)	14 (54)	12 (47)	12 (45)	6 (22)	15 (56)
8	10 (38)	12 (43)	14 (55)	18 (68)	16 (63)	23 (83)
9	1 (3)	2 (8)	5 (19)	12 (46)	3 (12)	8 (29)
10	1 (3)	2 (6)	5 (20)	9 (32)	2 (9)	6 (21)
11–20 (lowest expectations)	0 (1)	1 (4)	6 (22)	20 (76)	3 (11)	10 (38)
Total n	385	371	393	375	385	362
Process of health care (items 5–7 and 10× 5-point response scale)						
4 (highest expectations)	44 (168)	39 (145)	9 (32)	7 (26)	21 (80)	13 (44)
5	18 (69)	21 (76)	6 (23)	4 (14)	11 (42)	8 (27)
6	13 (51)	17 (62)	11 (41)	7 (26)	8 (32)	11 (38)
7	8 (31)	10 (37)	13 (48)	12 (44)	8 (29)	13 (44)
8	10 (40)	9 (32)	16 (59)	14 (51)	18 (67)	19 (68)
9	2 (9)	2 (6)	11 (40)	12 (44)	7 (25)	12 (43)
10	2 (7)	1 (5)	9 (35)	17 (61)	9 (33)	7 (26)
11–20 (lowest expectations)	2 (7)	2 (6)	25 (95)	27 (99)	19 (72)	17 (61)
Total n	382	369	373	365	380	351
Doctor–patient communication style (items 11–15× 5-point response scale)						
5 (highest expectations)	57 (220)	38 (140)	28 (108)	12 (45)	46 (177)	19 (66)
6	12 (45)	17 (63)	9 (35)	9 (35)	8 (32)	4 (13)
7	8 (31)	18 (66)	11 (44)	14 (51)	5 (21)	9 (31)
8	5 (21)	9 (34)	6 (22)	11 (42)	6 (24)	9 (30)
9	5 (19)	7 (25)	8 (32)	13 (48)	3 (13)	6 (21)
10	9 (36)	7 (27)	13 (5)	16 (59)	14 (54)	17 (61)
11–25 (lowest expectations)	3 (11)	4 (15)	25 (95)	25 (94)	17 (65)	37 (130)
Total n	383	370	341	374	386	352
Consultation and treatment procedures [items 16–20× 5-point response scale (post-visit items 22–26)]^a						
5 (highest expectations)	25 (91)	11 (40)	13 (47)	5 (19)	Numbers of the five procedures received:	
6	5 (19)	6 (22)	5 (20)	3 (11)	0 = 3 (10)	0 = 5 (16)
7	8 (29)	5 (20)	7 (28)	6 (21)	1 = 20 (71)	1 = 18 (64)
8	7 (27)	10 (36)	6 (24)	7 (24)	2 = 27 (94)	2 = 29 (101)
9	9 (34)	13 (46)	6 (22)	7 (27)	3 = 28 (99)	3 = 28 (98)
10	9 (32)	17 (63)	10 (38)	14 (53)	4 = 14 (47)	4 = 15 (53)
11	9 (32)	12 (42)	8 (29)	11 (41)	5 = 8 (27)	5 = 4 (15)
12	9 (32)	8 (31)	10 (39)	12 (44)		
13	6 (22)	4 (14)	10 (38)	11 (40)		
14	3 (10)	3 (10)	5 (20)	5 (19)		
15	3 (10)	4 (14)	7 (25)	6 (21)		
16–25 (lowest expectations)	9 (32)	7 (27)	12 (45)	13 (49)		
Total n	370	365	375	369	348	347

continued

TABLE 38 Expectation domain score frequency distributions by sample type (*continued*)

Expectation domain	GP ideal, % (n)	Hospital ideal, % (n)	GP realistic, % (n)	Hospital realistic, % (n)	GP post-visit met, % (n)	Hospital post-visit met, % (n)
<i>Doctor–patient approach to information [items 21–26 (post-visit items 16–21)×5-point response scale]</i>						
6 (highest expectations)	27 (102)	18 (66)	12 (43)	10 (37)	14 (49)	7 (25)
7	9 (33)	8 (28)	5 (19)	6 (22)	4 (15)	1 (5)
8	11 (39)	14 (53)	5 (19)	5 (18)	6 (20)	2 (8)
9	9 (33)	10 (38)	8 (28)	4 (14)	5 (19)	4 (14)
10	7 (27)	11 (41)	7 (24)	8 (31)	6 (20)	6 (20)
11	6 (24)	13 (48)	8 (30)	9 (33)	2 (8)	7 (24)
12	11 (41)	11 (40)	10 (38)	12 (46)	8 (27)	14 (50)
13	6 (24)	5 (17)	9 (32)	9 (35)	8 (30)	11 (39)
14	3 (10)	3 (11)	8 (28)	8 (31)	8 (30)	9 (31)
15	2 (9)	3 (10)	4 (16)	6 (23)	6 (22)	7 (26)
16	1 (4)	1 (4)	4 (15)	6 (22)	5 (19)	6 (20)
17	1 (4)	1 (3)	5 (20)	4 (16)	5 (17)	7 (23)
18	2 (8)	2 (6)	6 (21)	4 (17)	7 (25)	6 (21)
19	1 (4)	0	3 (10)	2 (8)	3 (11)	4 (14)
20–30 (lowest expectations)	2 (9)	2 (6)	6 (23)	7 (29)	12 (44)	9 (31)
Total n	371	371	366	382	356	351
<i>Treatment outcomes (items 27–29×5-point response scale)</i>						
3 (highest expectations)	46 (179)	45 (173)	23 (85)	20 (74)	24 (89)	16 (56)
4	11 (43)	14 (54)	7 (28)	7 (27)	6 (21)	7 (25)
5	13 (49)	22 (85)	9 (35)	13 (47)	10 (36)	9 (34)
6	19 (72)	13 (48)	26 (97)	22 (80)	27 (99)	27 (96)
7	4 (17)	2 (7)	10 (39)	15 (54)	11 (41)	9 (34)
8	3 (13)	2 (8)	8 (30)	9 (34)	8 (29)	8 (28)
9	3 (10)	1 (3)	10 (39)	10 (36)	9 (34)	13 (47)
10	0 (1)	0	2 (9)	1 (5)	2 (8)	5 (18)
11–15 (lowest expectations)	1 (2)	1 (3)	4 (14)	4 (15)	3 (12)	6 (20)
Total n	386	381	376	372	369	358

a Post-visit items on five procedures performed (items 22–26) were scored dichotomously as 'yes' = 0 and 'no' = 1.

TABLE 39 Expectation domain score frequency distributions: total sample

Expectation domain	Pre-visit ideal, % (n)	Pre-visit realistic, % (n)	Post-visit met, % (n)
Structure of health care (items 1–4× 5-point response scale)			
4 (highest expectations)	42 (325)	21 (164)	36 (268)
5	16 (125)	11 (87)	8 (62)
6	14 (109)	11 (87)	10 (73)
7	12 (91)	12 (92)	10 (78)
8	10 (81)	16 (123)	20 (146)
9	1 (11)	8 (65)	5 (41)
10	1 (7)	7 (52)	4 (30)
11–20 (lowest expectations)	1 (7)	12 (98)	7 (49)
Total n	756	768	747
Process of health care (items 5–7 and 10× 5-point response scale)			
4 (highest expectations)	42 (313)	8 (58)	17 (124)
5	19 (145)	5 (37)	9 (69)
6	15 (113)	9 (67)	10 (70)
7	9 (68)	12 (92)	10 (73)
8	10 (72)	15 (110)	18 (135)
9	2 (15)	11 (84)	9 (68)
10	2 (12)	13 (96)	8 (59)
11–20 (lowest expectations)	2 (13)	26 (194)	18 (133)
Total n	751	738	731
Doctor–patient communication style (items 11–15× 5-point response scale)			
5 (highest expectations)	48 (360)	20 (153)	33 (243)
6	14 (108)	9 (70)	6 (45)
7	13 (97)	13 (95)	7 (52)
8	7 (55)	8 (64)	7 (54)
9	6 (44)	11 (80)	5 (34)
10	8 (63)	14 (109)	16 (115)
11–25 (lowest expectations)	3 (26)	24 (185)	26 (195)
Total n	753	756	738
Consultation and treatment procedures [items 16–20× 5-point response scale (post visit items 22–26)]^a			
5 (highest expectations)	18 (131)	9 (66)	Numbers of the five procedures received:
6	6 (41)	4 (31)	0 = 4 (26)
7	7 (49)	7 (49)	1 = 19 (135)
8	9 (63)	6 (48)	2 = 28 (195)
9	11 (80)	7 (49)	3 = 28 (197)
10	13 (95)	12 (91)	4 = 14 (100)
11	10 (74)	9 (70)	5 = 6 (42)
12	9 (63)	11 (83)	
13	5 (36)	11 (78)	
14	3 (20)	5 (39)	
15	3 (24)	6 (46)	
16–25 (lowest expectations)	8 (59)	12 (91)	
Total n	735	741	695

continued

TABLE 39 Expectation domain score frequency distributions: total sample (*continued*)

Expectation domain	Pre-visit ideal, % (n)	Pre-visit realistic, % (n)	Post-visit met, % (n)
<i>Doctor–patient approach to information [items 21–26 (post visit items 16–21) × 5-point response scale]</i>			
6 (highest expectations)	23 (168)	11 (80)	11 (74)
7	8 (61)	6 (41)	3 (20)
8	12 (92)	5 (37)	4 (28)
9	10 (71)	6 (42)	5 (33)
10	9 (68)	7 (55)	6 (40)
11	10 (72)	9 (63)	5 (32)
12	11 (81)	11 (84)	11 (77)
13	6 (41)	9 (67)	10 (69)
14	3 (21)	8 (59)	9 (61)
15	3 (19)	5 (39)	7 (48)
16	1 (8)	5 (37)	6 (39)
17	1 (7)	5 (36)	6 (40)
18	2 (14)	5 (38)	7 (46)
19	1 (4)	2 (18)	4 (25)
20–30 (lowest expectations)	2 (15)	6 (44)	11 (75)
Total n	742	740	707
<i>Treatment outcomes (items 27–29 × 5-point response scale)</i>			
3 (highest expectations)	46 (352)	21 (159)	20 (145)
4	13 (97)	7 (55)	6 (46)
5	17 (134)	11 (82)	10 (70)
6	16 (120)	24 (177)	27 (195)
7	3 (24)	12 (93)	10 (75)
8	3 (21)	9 (64)	8 (57)
9	2 (13)	10 (75)	11 (81)
10	0 (1)	2 (14)	4 (26)
11–15 (lowest expectations)	1 (5)	4 (29)	4 (32)
Total n	767	748	727

a Post-visit items on five procedures performed (items 22–26) were scored dichotomously as 'yes = 0' and 'no = 1'.

Table 40 shows the Spearman's rank-order correlations between subscale domains. All correlations achieved statistical significance at least at the 0.05 level. Correlations were strongest overall between the structure of health care, process of health care, doctor–patient communication style and doctor's approach to giving information. These are all common indicators of the quality of health care, supporting the validity of the measures.

Table 41 shows the Spearman's rank-order correlations between the pre-visit ideal and realistic expectation domains and the post-visit expectations met domains. Most were significant, but the strength of the correlations was modest. The post-visit treatment procedures domain failed to correlate with most domains, partly reflecting its clinical nature, but caution is also needed in interpretation because of its dichotomous coding, although still rank ordered. Overall, this suggests that patients' pre-visit ideal and realistic expectations are, at best, only modestly associated with their post-visit experiences.

TABLE 40 Pre-visit intersubscale domain Spearman's rho validity correlations: total sample

Expectation domain	Structure of health care (items 1–4), ideal/realistic	Process of health care (items 5–7, 10), ideal/realistic	Doctor–patient communication style (items 11–15), ideal/realistic	Consultation and treatment procedures (items 16–20), ideal/realistic	Doctor–patient approach to information (items 21–26; post items 16–21), ideal/realistic	Outcome expectations (items 27–29), ideal/realistic
Structure of health care (items 1–4)						
Ideal	–/0.496 ^a	0.568 ^a /0.237 ^a	0.568 ^a /0.306 ^a	0.165 ^a /0.096 ^b	0.343 ^a /0.249 ^a	0.311 ^a /0.224 ^a
Realistic	0.496 ^a /–	0.287 ^a /0.566 ^a	0.307 ^a /0.454 ^a	0.273 ^a /0.383 ^a	0.275 ^a /0.400 ^a	0.080 ^b /0.361 ^a
Process of health care (items 5–7, 10)						
Ideal	0.568 ^a /0.287 ^a	–/0.290 ^a	0.600 ^a /0.309 ^a	0.224 ^a /0.096 ^b	0.404 ^a /0.247 ^a	0.376 ^a /0.228 ^a
Realistic	0.237 ^a /0.566 ^a	0.290 ^a /–	0.220 ^a /0.523 ^a	0.217 ^a /0.404 ^a	0.247 ^a /0.489 ^a	0.097 ^a /0.407 ^a
Doctor–patient communication style (items 11–15)						
Ideal	0.568 ^a /0.307 ^a	0.600 ^a /0.220 ^a	–/0.483 ^a	0.340 ^a /0.183 ^a	0.506 ^a /0.312 ^a	0.465 ^a /0.272 ^a
Realistic	0.306 ^a /0.454 ^a	0.309 ^a /0.523 ^a	0.483 ^a /–	0.199 ^a /0.414 ^a	0.292 ^a /0.611 ^a	0.208 ^a /0.458 ^a
Consultation and treatment procedures (items 16–20)						
Ideal	0.165 ^a /0.273 ^a	0.224 ^a /0.217 ^a	0.340 ^a /0.199 ^a	–/0.738 ^a	0.590 ^a /0.399 ^a	0.353 ^a /0.151 ^a
Realistic	0.096 ^b /0.383 ^a	0.096 ^b /0.404 ^a	0.183 ^a /0.414 ^a	0.738 ^a /–	0.400 ^a /0.558 ^a	0.207 ^a /0.376 ^a
Doctor–patient approach to information (items 21–26; post items 16–21)						
Ideal	0.343 ^a /0.275 ^a	0.404 ^a /0.247 ^a	0.506 ^a /0.292 ^a	0.590 ^a /0.400 ^a	–/0.616 ^a	0.503 ^a /0.298 ^a
Realistic	0.249 ^a /0.400 ^a	0.247 ^a /0.489 ^a	0.312 ^a /0.611 ^a	0.339 ^a /0.558 ^a	0.616 ^a /–	0.273 ^a /0.591 ^a
Outcome expectations (items 27–29)						
Ideal	0.311 ^a /0.080 ^b	0.376 ^a /0.097 ^a	0.465 ^a /0.208 ^a	0.353 ^a /0.207 ^a	0.503 ^a /0.273 ^a	–/0.403 ^a
Realistic	0.224 ^a /0.361 ^a	0.228 ^a /0.407 ^a	0.272 ^a /0.458 ^a	0.151 ^a /0.378 ^a	0.298 ^a /0.591 ^a	0.403 ^a /–

a $p < 0.01$.b $p < 0.05$.

TABLE 41 Intersubscale Spearman's rho validity correlations between the pre-visit ideal and realistic expectation domains and the post-visit expectations met domains: total sample

Post-visit experiences (met expectations)	Structure of health care (items 1–4), ideal/realistic	Process of health care (items 5–7, 10), ideal/realistic	Doctor–patient communication style (items 11–15), ideal/realistic	Consultation and treatment procedures (items 16–20), ideal/realistic	Doctor–patient approach to information (items 21–26), ideal/realistic	Outcome expectations (items 27–29), ideal/realistic
Structure of health care (items 1–4)	0.321 ^a /0.455 ^a	0.274 ^a /0.291 ^a	0.311 ^a /0.336 ^a	0.147 ^a /0.166 ^a	0.180 ^a /0.238 ^a	0.124 ^a /0.168 ^a
Process of health care (items 5–7, 10)	0.187 ^a /0.242 ^a	0.164 ^a /0.315 ^a	0.181 ^a /0.277 ^a	0.146 ^a /0.190 ^a	0.149 ^a /0.258 ^a	0.207 ^a /0.215 ^a
Doctor–patient communication style (items 11–15)	0.300 ^a /0.277 ^a	0.208 ^a /0.205 ^a	0.322 ^a /0.383 ^a	0.049 ^b /0.134 ^a	0.170 ^a /0.304 ^a	0.163 ^a /0.239 ^a
Consultation and treatment procedures (items 16–20; post items 22–26) (yes = 0, no = 1)	0.001/0.039 ^b	0.037/0.056 ^b	0.005/0.001 ^b	0.048 ^b /–0.146 ^c	0.043 ^b /0.095 ^c	0.066 ^b /0.114 ^a
Doctor–patient approach to information (items 21–26; post items 16–21)	0.114 ^a /0.158 ^a	0.065 ^a /0.181 ^a	0.120 ^a /0.247 ^a	0.149 ^a /0.193 ^a	0.183 ^a /0.307 ^a	0.168 ^a /0.226 ^a
Outcome expectations (items 27–29)	0.103 ^a /0.158 ^a	0.057 ^b /0.142 ^a	0.131 ^a /0.254 ^a	0.073 ^b /0.150 ^a	0.114 ^a /0.245 ^a	0.220 ^a /0.283 ^a

a $p < 0.01$.

b Not significant.

c $p < 0.05$.

Global expectations, influences and health service use by site

Following the expectations items in the pre-visit questionnaire, respondents were asked a series of questions about their global expectations and perceived influences on their expectations. There were no significant differences between samples in the global ratings of the importance of their ideal expectations and their deserved expectations and their perceptions of influences on their expectations. About three-quarters of the total sample responded that their ideal hopes were 'very important' to them overall, and over half felt that they deserved these to happen in reality 'a lot'.

Table 42 shows the mean (SD) scores by age and sex of respondents for the pre-visit items about global expectations (importance and entitlement expectancies) and perceptions of influences on expectations. The means for each age group and men and women were similar for assessments of the overall importance of the (ideal) expectations items (tapping expectations values overall), assessments of whether they felt they deserved their (ideal) expectations to be met, and perceived influences on expectations. The most commonly perceived influences on expectations (lowest means) were previous consultations/experiences of health services, health-care staff/professionals and talking with family/relatives (*Chapter 8* presents these expectancies and influences by mode of administration and site).

TABLE 42 Pre-visit questionnaire items on overall expectations, influences on expectations and health service use by age and sex of respondent and total sample ($n=685-765$)

Questionnaire item	Age ≤39 years, mean (SD)	Age 40–59 years, mean (SD)	Age 60+ years, mean (SD)	Female, mean (SD)	Male, mean (SD)	Total sample, mean (SD)
30. Considering all the things that you hope for ideally, overall how important are they to you? ('very important' 1, 'fairly important' 2, 'neither' 3, 'fairly unimportant' 4, 'very unimportant' 5)	1.33 (0.48)	1.23 (0.45)	1.23 (0.53)	1.27 (0.51)	1.24 (0.46)	1.26 (0.49)
31. Overall, how much do you feel that you deserve these to happen in reality? ('a lot' 1, 'a fair amount' 2, 'a little' 3, 'not at all' 4)	1.53 (0.62)	1.39 (0.53)	1.41 (0.55)	1.46 (0.58)	1.42 (0.56)	1.44 (0.57)
32. Overall, to what extent are your expectations about what will happen during this visit influenced by: ('a lot' 1, 'a moderate amount' 2, 'a little/not at all' 3)						
Previous consultations/experiences of health services?	1.47 (0.62)	1.36 (0.57)	1.37 (0.57)	1.40 (0.58)	1.39 (0.59)	1.40 (0.58)
Health-care staff/professionals?	1.84 (0.78)	1.70 (0.77)	1.75 (0.72)	1.83 (0.78)	1.67 (0.72)	1.76 (0.76)
Talking with family/relatives?	1.94 (0.72)	1.93 (0.72)	2.04 (0.72)	2.03 (0.74)	1.87 (0.68)	1.97 (0.72)
Experiences of other people?	2.12 (0.75)	2.17 (0.71)	2.32 (0.66)	2.22 (0.73)	2.17 (0.69)	2.20 (0.71)
Talking with friends/neighbours?	2.14 (0.74)	2.15 (0.75)	2.35 (0.69)	2.21 (0.74)	2.20 (0.73)	2.21 (0.73)
TV, radio, magazines, newspapers?	2.33 (0.76)	2.21 (0.74)	2.39 (0.71)	2.36 (0.74)	2.23 (0.74)	2.31 (0.74)
Other literature?	2.30 (0.76)	2.23 (0.69)	2.45 (0.67)	2.36 (0.74)	2.28 (0.68)	2.32 (0.72)

Reasons for consultation, health and self-management

Respondents were asked about the reasons for their consultation. The most common reason for the consultation was to obtain a diagnosis, especially among hospital patients (54% of responding GP patients vs 72% of responding hospital patients), and hospital patients were more likely than GP patients to have been given a diagnosis before. Few patients in either sample wanted to make the final decision about their treatment (7% of GP patients vs 6% of hospital patients) and preferred to share the decision with the doctors or leave the decision to the doctor. There were few differences in mental or physical health status or healthy behaviour between samples, although the hospital patients rated their quality of life as worse than the GP patients (as might be expected). More hospital than GP patients agreed 'a lot' that they could manage their condition themselves. There were no other differences in perceived self-efficacy and control between samples.

Summary

This chapter presented descriptive data on expectations. It presented the most common types of met and unmet expectations expressed by patients, and variations by health-care setting and characteristics of respondents. In summary, ideal expectations scores were generally lower than realistic expectations scores. This indicates higher ideal expectations and supports the validity of the measures as ideals are anticipated to be higher than real life. Post-visit expectations met scores were lower than pre-visit ideal expectations scores but similar to, or slightly worse than, pre-visit realistic expectations scores, again as expected. Thus, correlations between ideal and

met expectations were lower than those between realistic and met expectations, supporting their validity, although patients' pre-visit ideal and realistic expectations were only modestly associated with their post-visit experiences, at best.

The highest ideal expectations, particularly among the GP sample, included expectations about cleanliness, information about where to go, convenient appointments, being seen on time, helpfulness of reception staff and knowledge of the doctor, a clear and easy to understand doctor, involvement in treatment decisions and reduction in symptoms/problems. The lowest ideal expectations were related to the five clinical procedures (physical examination, tests/investigations, diagnosis, prescription and referral on) and being given the opportunity to discuss problems in life.

The lowest met expectations, particularly among the hospital sample, included being seen on time and the two items requested by the ethics committee: being given a choice of hospitals if referred and a choice of doctors to consult (not included in scaling as not applicable to all patients). Other items that had low met expectations were the helpfulness of the reception staff, the doctor being respectful and treating with dignity (hospital sample), the doctor knowledgeable about the condition (hospital), being given reassurance, advice about health/condition, information on the cause of the condition, advice on how to manage the condition, information about the benefits/side effects of treatment and an opportunity to discuss problems in life, and the three items on outcome expectancies.

Overall, GP patients reported higher pre-visit expectations and post-visit met expectations, particularly for items relating to structure of health care and doctor-patient communication style. Spearman's rank-order correlations between subscale domains were strongest overall between the structure of health care, the process of health care, doctor-patient communication style and doctor's approach to giving information. These are all common indicators of the quality of health care, supporting the validity of the measures.

About three-quarters of the total sample stated that their ideal hopes were 'very important' to them overall, and over half felt that they deserved these to happen in reality 'a lot'. The most common influences on expectations were seen to be their previous consultations/experiences of health services and health-care staff/professionals. There were few associations between expectations and other characteristics.

Chapter 8

Survey results: overall satisfaction with visit

Research question

- How does pre-visit expectation type affect post-visit met expectations and patient satisfaction?

Interactions between mode of questionnaire administration and site and various characteristics potentially related to expectations

Our first analysis considered whether or not the mode of questionnaire administration and site had any relationship to a number of variables that might impact on expectations. In *Chapter 7* we reported that experience of previous consultations and the health service was the factor perceived to be the most influential on current expectations – for both GP and hospital patients. Extending that analysis to consider mode of administration (self-administered questionnaire or interview) revealed similar results: in each mode-by-site combination, past health service experience was rated as the most influential factor on current expectations, above other potential influences (talking with family/relatives or friends/neighbours, experiences of other people, various media and health-care staff/professionals). Overall, the subsamples were broadly similar in their mean responses.

Also, hospital patients were significantly more likely than GP patients to state that their consultation was for a follow-up appointment (regardless of mode of questionnaire administration). There was further a tendency for those attending a hospital appointment to have had the condition about which they were consulting for a longer period (regardless of mode) (e.g. one-third of GP patients were consulting about a condition they had had for ≤ 4 weeks compared with $< 10\%$ of hospital patients). The hospital patients, regardless of mode, also rated their health compared with others of their age as less good than GP patients (average ratings between ‘fair’ and ‘poor’ as opposed to between ‘good’ and ‘fair’). Hospital patients also acknowledged having a ‘long-standing illness, disability or infirmity’ to a greater degree than GP patients (although the difference was not great), and had more often been given a diagnosis for their condition (82% of 267 self-administered questionnaire hospital patients and 58% of 31 interviewed hospital patients vs 63% of 200 self-administered questionnaire GP patients and 49% of 33 interviewed GP patients). Data were also collected on length of time after first noticing symptoms that a diagnosis was sought and the number of visits to hospital over the past 12 months, but these data showed no clear trends across the four mode-by-site samples and are not discussed further here (data available from authors).

Table 43 shows details of certain health-related factors that reveal differences between the mode-by-site samples. It shows that the hospital self-administration sample was significantly less likely to have ever smoked cigarettes and that both hospital samples were more likely to report sedentary activities in the past 4 weeks (perhaps unsurprisingly). There were also significant differences between groups in housing tenure, household size and employment and marital status, although trends were not consistent between modes. The potential influences of these factors on expressed expectations thus need to be controlled for in the multivariable analyses. However, there were no, or very small, differences between groups in relation to the various

subjective measures collected [e.g. items measuring optimism, decision-making preferences, the Short Form questionnaire-12 items (SF-12) mental well-being scale – all data available from authors], suggesting that any analyses on these issues may be conducted over the four combined samples.

Post-visit overall satisfaction, expectations and perceptions of consultation

Measuring patient satisfaction is important for monitoring the quality of health care and also because satisfaction might influence patient outcomes.⁶³ Although there are many surveys of patient satisfaction, few investigators have attempted to define this concept, although it is generally recognised as a cognitively based attitude. For example, people may express their evaluations of a service by comparing their personal standards or expectations with their perceptions of the service received.⁶³ Beyond such basic notions, the lack of underpinning theory to guide measurement was noted by Hall and Dornan,²⁹² who experienced difficulties comparing the diverse range of studies in their meta-analysis. It is implicitly agreed that the concept is multidimensional and relative, although the most commonly investigated dimensions of satisfaction are humaneness, information-giving, quality and competence of care.²⁹²

Crow *et al.*⁶³ also systematically searched the literature on satisfaction with health care and noted problems establishing a tangible definition of satisfaction. They concluded, however, that 20% of 139 studies reviewed considered patients' expectations as a potential predictor of satisfaction, with varied results: satisfaction was associated with prior satisfaction; health status and health outcomes influenced satisfaction (patients with worse mental and physical health were least satisfied, except in some chronically ill patient groups); older patients expressed higher satisfaction than younger patients; the effects of sex, ethnicity and socioeconomic status were inconsistent; the most important influence on satisfaction was the patient–provider relationship, including information-giving; and choice of provider led to increased satisfaction. Although most patients in the majority of studies report some degree of satisfaction with their care, it has been questioned whether variations in patient satisfaction, when detected, reflect variations in the organisation of health care, clinicians or patients themselves.²⁹³

TABLE 43 Pre-visit questionnaire items on various health-related and socio-demographic measures by mode of questionnaire administration (GP vs hospital by interview vs self-administration)

Questionnaire item	GP interview, mean (SD)	GP self-administration, mean (SD)	Hospital interview, mean (SD)	Hospital self-administration, mean (SD)	Total sample, mean (SD)
50. Overall, how would you rate your quality of life? ('so good, could not be better' 1, 'very good' 2, 'good' 3, 'alright' 4, 'bad' 5, 'very bad' 6, 'so bad, could not be worse' 7)	2.69 (0.79)	2.79 (1.00)	3.37 (1.15)	3.20 (1.02)	2.99(1.03)
51. Overall, how much does your health adversely affect your quality of life? ('a lot' 1, 'moderately' 2, 'a little' 3, 'not at all' 4)	2.40 (1.06)	2.44 (1.02)	1.85 (0.98)	1.99 (0.82)	2.21(0.97)
	% (n)	% (n)	% (n)	% (n)	% (n)
53. Smoking					
Never smoked	38 (27)	53 (182)	52 (28)	63 (211) ^a	56 (448)
Ex-smoker	41 (29)	33 (115)	31 (17)	25 (84)	31 (245)
Current smoker	21 (15)	14 (48)	17 (9)	11 (38)	14 (110)

TABLE 43 Pre-visit questionnaire items on various health-related and socio-demographic measures by mode of questionnaire administration (GP vs hospital by interview vs self-administration) (*continued*)

Questionnaire item	GP interview, mean (SD)	GP self-administration, mean (SD)	Hospital interview, mean (SD)	Hospital self-administration, mean (SD)	Total sample, mean (SD)
54. WHO activity classification (561 responded): main activities during the past 4 weeks					
Hard training/competitive sport more than weekly	1 (1)	10 (29)	6 (3)	12 (17) ^b	9 (50)
Jogging/recreational sports/heavy gardening at least 4 hours a week	13 (9)	12 (36)	6 (3)	8 (11)	11 (59)
Walking, cycling, other light activities at least 4 hours a week	54 (38)	48 (142)	48 (26)	38 (55)	47 (261)
Reading, watching television, other sedentary activities	31 (22)	30 (87)	41 (22)	42 (60)	34 (191)
59. Housing tenure					
Homeowner/mortgage	61 (43)	54 (180)	56 (30)	58 (194) ^a	56 (447)
Rents from local authority or voluntary body	11 (8)	18 (61)	17 (9)	28 (93)	22 (171)
Rents privately	15 (11)	18 (62)	17 (9)	8 (26)	14 (108)
Other arrangement	13 (9)	10 (33)	11 (6)	6 (20)	9 (68)
60. Age left school					
< 14 years	3 (2)	4 (15)	2 (1)	18 (61) ^a	10 (79)
14 to < 16 years	17 (12)	21 (73)	30 (16)	27 (89)	24 (190)
16 to < 18 years	41 (29)	28 (95)	54 (29)	29 (98)	31 (251)
18+ years	39 (28)	46 (159)	15 (8)	26 (85)	35 (280)
61. Marital status					
Married/cohabiting with partner	61 (43)	57 (195)	63 (32)	65 (215) ^a	61 (485)
Divorced/separated	14 (10)	11 (36)	8 (4)	11 (35)	11 (85)
Widowed	10 (7)	7 (25)	6 (3)	14 (48)	10 (83)
Single	15 (11)	25 (86)	24 (12)	11 (35)	18 (144)
62. Household size					
Lives alone	25 (18)	19 (64)	8 (4)	20 (68) ^a	19 (154)
Lives with others	75 (53)	81 (270)	92 (47)	80 (264)	81 (641)
63. Employment status					
Employed/self-employed	38 (27)	37 (128)	53 (27)	31 (103) ^a	36 (285)
Full-time/part-time	16 (12)	17 (58)	12 (6)	10 (34)	14 (110)
Unable to work because of illness/condition	1 (1)	7 (24)	4 (2)	9 (29)	7 (56)
Unemployed	1 (1)	5 (18)	4 (2)	9 (31)	7 (52)
Homemaker	11 (8)	5 (18)	18 (9)	6 (19)	7 (54)
Retired	28 (21)	24 (82)	8 (4)	33 (111)	27 (218)
Other	5 (4)	4 (14)	2 (1)	2 (6)	3 (22)
No. of respondents	71–74	324–345	51–54	299–335	649–806

a $p < 0.01$.b $p < 0.05$.

Means (SDs) not calculated for dichotomous items.

Caution is needed in interpreting statistical significance when there are four numbers in a cell.

Given the importance – with acknowledged limitations – of the concept of ‘satisfaction’, we considered its relationship with expectations, anticipating that ‘met expectations’ at least would show some relationship to broader satisfaction.

Table 44 shows the distributions, by mode of administration for the subsamples, for the post-visit satisfaction items. Results were similar by mode of administration in each sample, except for items 33 and 34 (consultation worth it and satisfied with visit), for which the hospital self-administration sample had slightly higher mean scores than the other groups (indicating that they were less likely to rate the visit as ‘worthwhile’ and less likely to be ‘very satisfied’ with it), although differences were small.

Table 45 merges the data across mode of administration and compares only the sites. Post visit, GP patients rated the consultation more favourably than hospital patients in terms of having their overall expectations met in relation to their hopes and ideals of what would happen, rating the consultation as ‘worth it’, being ‘very satisfied’ with the visit and being more likely to take any prescribed medication.

Table 46 shows respondents’ overall assessments of, and satisfaction with, the consultation, by age and sex. Mean scores were similar across groups, and the percentages shown for the dichotomous item (item 32) on things not done, or that disappointed, were similar for both men and women. Respondents aged 60+ years had higher mean scores for the item on overall mean expectations (i.e. their expectations were more likely to be met than younger people’s), but their rated ability to influence the consultation was lower; those aged 60+ years were more likely than those aged ≤39 years to rate the consultation as worth it, and to be more likely to be satisfied with the clinic visit overall.

TABLE 44 Post-visit satisfaction, expectations met and perceptions of consultation by mode of questionnaire administration and site

Questionnaire item	GP interview, mean (SD)	GP self-administration, mean (SD)	Hospital interview, mean (SD)	Hospital self-administration, mean (SD)	Total sample, mean (SD)
30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen? ('not at all' 1, 'a little' 2, 'a fair amount' 3, 'a lot' 4, 'completely' 5)	3.93 (1.01)	3.69 (1.16)	3.52 (1.09)	3.19 (0.85)	3.50 (1.06)
31. To what extent were you able to influence the consultation in order to get the outcome you wanted? ('a lot' 1, 'a moderate amount' 2, 'a little' 3, 'not at all' 4)	2.33 (1.03)	2.25 (1.03)	2.87 (1.15)	2.49 (0.87)	2.41 (0.99)
32. Were there any things that needed to be done at this consultation that were not done, or things that disappointed you? ^a					
No	87 (64)	87 (278)	87 (47)	88 (275)	87 (664)
Yes	13 (10)	13 (42)	13 (7)	12 (38)	13 (97)
33. To sum up, do you think that the consultation (with the journey, wait, any treatment and everything) was worth it or not? ('worth it' 1, 'too early to say' 2, 'not worth it' 3)	1.09 (0.34)	1.29 (0.61)	1.28 (0.66)	2.16 (0.94)	1.36 (0.64)
34. Overall, how satisfied are you with your visit this time? ('very satisfied' 1, 'satisfied' 2, 'neither' 3, 'dissatisfied' 4, 'very dissatisfied' 5)	1.53 (0.72)	1.69 (0.87)	1.63 (0.92)	2.16 (0.94)	1.88 (0.92)
36. If the doctor gave you any prescribed medication on this visit how likely are you to take the medication prescribed? ('very likely' 1, 'likely' 2, 'not very likely' 3, 'uncertain/don't know' 4)	1.38 (0.83)	1.23 (0.60)	1.35 (0.81)	1.83 (0.86)	1.53 (0.81)
No. of respondents	71–74	324–345	54	299–335	678–795

a Data expressed as % (n).

TABLE 45 Post-visit satisfaction, expectations met and perceptions of consultation by sample site

Questionnaire item	GP patients, % (n)	Hospital patients, % (n)	Total sample, % (n)
30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen?			
Not at all	5 (19)	3 (13) ^a	4 (32)
A little	10 (41)	11 (39)	11 (80)
A fair amount	22 (87)	54 (197)	37 (284)
A lot	33 (131)	22 (80)	28 (211)
Completely	30 (120)	10 (36)	20 (156)
Total n	398	365	763
Mean (SD) score	3.73 (1.19)	3.24 (0.90)	3.50 (1.06)
31. To what extent were you able to influence the consultation in order to get the outcome you wanted?			
A lot	27 (96)	12 (45)	20 (141)
A moderate amount	35 (121)	38 (134)	36 (255)
A little	22 (78)	33 (116)	27 (194)
Not at all	16 (55)	17 (62)	17 (117)
Total n	350	357	707
Mean (SD) score	2.26 (1.03)	2.55 (0.92)	2.41 (0.99)
32. Were there any things that needed to be done at this consultation that were not done, or things that disappointed you?			
No	87 (342)	88 (322)	87 (664)
Yes	13 (52)	12 (45)	13 (97)
Total n	394	367	761
33. To sum up, do you think that the consultation (with the journey, wait, any treatment and everything) was worth it or not?			
Worth it	80 (317)	63 (232) ^a	72 (549)
Too early to say	15 (61)	27 (98)	21 (159)
Not worth it	3 (12)	9 (34)	6 (46)
Other response	1 (5)	1 (2)	1 (7)
Total n	395	366	761
Mean (SD) score	1.25 (0.57)	1.47 (0.69)	1.36 (0.64)
34. Overall, how satisfied are you with your visit this time?			
Very satisfied	51 (185)	30 (108) ^a	40 (293)
Satisfied	37 (136)	43 (155)	40 (291)
Neither	7 (26)	20 (73)	14 (99)
Dissatisfied	4 (13)	6 (22)	5 (35)
Very dissatisfied	1 (4)	2 (7)	1 (11)
Total n	364	365	729
Mean (SD) score	1.67 (0.84)	2.08 (0.95)	1.88 (0.92)
36. If the doctor gave you any prescribed medication on this visit how likely are you to take the medication prescribed?			
Very likely	82 (228)	41 (111) ^a	61 (339)
Likely	12 (34)	47 (128)	30 (162)
Not very likely	3 (7)	4 (10)	3 (17)
Uncertain/don't know	3 (8)	9 (23)	6 (31)
Total n	277	272	549
Mean (SD)	1.80 (0.86)	1.26 (0.65)	1.53 (0.81)

^a $p < 0.01$ for matched sample cases (distributions similar matched and full response cases).

Means (SDs) not calculated for dichotomous items.

Caution is needed in interpreting statistical significance when there are four numbers in a cell.

TABLE 46 Post-visit satisfaction, expectations met and perceptions of consultation by age and sex of respondents and total sample

Questionnaire item	≤39 years, mean (SD)	40–59 years, mean (SD)	60+ years, mean (SD)	Female, mean (SD)	Male, mean (SD)	Total sample, mean (SD)
30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen? ('not at all' 1, 'a little' 2, 'a fair amount' 3, 'a lot' 4, 'completely' 5)	3.38 (1.08)	3.48 (1.03)	3.60 (1.05)	3.51 (1.10)	3.48 (0.99)	3.50 (1.06)
31. To what extent were you able to influence the consultation in order to get the outcome you wanted? ('a lot' 1, 'a moderate amount' 2, 'a little' 3, 'not at all' 4)	2.40 (0.95)	2.39 (1.00)	2.44 (1.00)	2.41 (1.01)	2.41 (0.95)	2.41 (0.99)
32. Were there any things that needed to be done at this consultation that were not done, or things that disappointed you? ^a						
No	85 (193)	87 (213)	90 (242)	86 (375)	88 (275)	87 (664)
Yes	15 (35)	13 (33)	10 (28)	14 (60)	12 (36)	13 (97)
33. To sum up, do you think that the consultation (with the journey, wait, any treatment and everything) was worth it or not? ('worth it' 1, 'too early to say' 2, 'not worth it' 3)	1.43 (0.68)	1.34 (0.61)	1.31 (0.62)	1.34 (0.62)	1.37 (0.66)	1.36 (0.64)
34. Overall, how satisfied are you with your visit this time? ('very satisfied' 1, 'satisfied' 2, 'neither' 3, 'dissatisfied' 4, 'very dissatisfied' 5)	2.07 (0.98)	1.87 (0.96)	1.71 (0.80)	1.85 (0.92)	1.91 (0.93)	1.88 (0.92)
36. If the doctor gave you any prescribed medication on this visit how likely are you to take the medication prescribed? ('very likely' 1, 'likely' 2, 'not very likely' 3, 'uncertain/don't know' 4)	1.61 (0.88)	1.68 (0.89)	1.35 (0.63)	1.48 (0.82)	1.61 (0.80)	1.53 (0.81)

a Data expressed as % (*n*).

Means (SDs) not calculated for dichotomous items.

n = 700–763; *n* = 549 if given prescription (item 36), otherwise item 36 did not apply.

Multivariable predictors of pre-visit ideal and realistic expectations and post-visit experiences and of overall expectations and satisfaction with visit

To examine independent predictors of expectation type and satisfaction with the visit, multiple regression analyses were carried out. The dependent variables in the different models were (1) the total subscale scores for pre-visit ideal and realistic expectations and post-visit experiences (met expectations) and (2) ratings of post-visit global satisfaction and expectations met by the visit.

Theoretically relevant independent variables were entered hierarchically, along with sociodemographic/economic, perceived control over life and mood (optimism) variables to control for their effects. Those variables that were significant in any expectation full model were re-entered along with the control variables (only those showing significance are shown). All variables entered achieved correlations of ± 0.600 , and criteria for minimising multicollinearity were met.

Pre-visit ideal and realistic expectations and post-visit experiences (met expectations)

Initial models entered the following independent variables, which were not significant in any model: feeling of entitlement to ideal expectations (overall deserve item), NHS use, feels can influence consultation to achieve wanted outcome, given diagnosis earlier, preferred involvement in treatment decisions (Degner scale), feels can manage condition oneself, perceived problem-solving ability, self-rated health status compared with others of the same age, global quality of life and ethnicity. These were removed and new reduced models were run.

Variables achieving significance were re-entered with the control variables. The statistics for these reduced models are given underneath significant variables in the full model. The control variables (age, sex, household size, socioeconomic status, study site) were entered into each model; their statistics are shown for the reduced models only if significant.

Table 47 shows that variables that were significant in the full and reduced models for the ideal expectations subscale were ideal expectation values (greater importance of these overall was associated with higher ideal expectations), the effects of health on quality of life (greater effects were associated with lower ideal expectations) and a more active lifestyle, which was associated with lower ideal expectations. Age, sex, marital status and indicators of socioeconomic status were not independently associated with ideal expectations. The reduced model explained 10% (adjusted $R^2 = 0.104$) of the variance in ideal expectation scores.

Ideal expectation values (overall) were not significantly associated with realistic subscale expectations. In both full and reduced models, expectations said to be influenced by talking with family/relatives and by health-care staff/professionals were also significantly associated with higher realistic expectations. The effect of health on quality of life was significant in both full and reduced models (greater health effects were associated with lower realistic expectations). Being a GP rather than a hospital study patient was significantly associated with having higher realistic expectations. Living alone, being unmarried and older age were associated with lower realistic expectations. The reduced model explained 15% of the variance in realistic expectation scores (adjusted $R^2 = 0.145$).

Realistic, but not ideal subscale, scores were independently predictive of the post-visit met expectations subscale. Additionally, the independent variables that were associated with post-visit experiences (met expectations subscale), in both the full and reduced models, were expectations said to be influenced by previous consultations/experiences (associated with higher met expectations) and whether the consultation was a first or follow-up for the condition (first consultations had higher met expectations). GP patients had higher met expectations than hospital patients. Being more anxious/depressed and older age were associated with lower met expectations. The reduced model explained 11% of the variance in post-visit scores (adjusted $R^2 = 0.114$).

Overall expectations and satisfaction with visit

To examine independent predictors of the two dependent variables – global ratings of post-visit satisfaction and met expectations – theoretically relevant independent variables were entered hierarchically, along with sociodemographic/economic, perceived control over life and mood variables to control for their effects.

TABLE 47 Multiple regression of independent predictors of ideal and realistic expectations and post-visit met expectations scores (each model adjusted for age, sex, household size, socioeconomic status and study site)

Questionnaire item	Pre-visit ideal expectations subscale ^e : unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval	Pre-visit realistic expectations subscale ^e : unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval	Post-visit experiences/met expectations subscale ^e : unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval
Realistic expectations subscale ^e	–	–	0.306/0.365 (6.365), ^a 0.211 to 0.400 Reduced model: 0.316/0.378 (9.954), ^a 1.678 to 4.833
30. Overall, how important are expectations hoped for ideally (values)? ('very important' 1 to 'very unimportant' 5)	2.278/0.104 (2.021), ^b 0.063 to 4.493 Reduced model: 5.143/0.195 (3.651), ^a 2.372 to 7.914	2.629/0.86 (1.680), ^c –0.446 to 5.704	1.785/0.070 (1.259), ^c –1.004 to 4.574
32. Expectations influenced ('a lot' 1 to 'not at all' 3) by:			
Previous consultations/experiences	1.261/0.069 (1.401), ^c –0.508 to 3.031	0.098/0.004 (0.078), ^c –2.359 to 2.555	2.267/0.107 (2.001), ^b 0.039 to 4.495 Reduced model: 2.890/0.136 (3.435), ^a 1.237 to 4.508
Talking with family/relatives	0.905/0.061 (1.029), ^c –0.824 to 2.634	2.618/0.127 (2.143), ^b 0.216 to 5.019 Reduced model: 3.604/0.182 (3.294), ^a 1.452 to 5.756	1.267/0.074 (1.145), ^c –0.910 to 3.45
Health-care staff/professionals	1.301/0.093 (1.666), ^c –0.234 to 2.835	2.260/0.115 (2.085), ^b 0.129 to 4.390 Reduced model: 2.975/0.159 (2.824), ^d 0.903 to 5.048	–0.093/–0.006 (–0.094), ^c –2.025 to 1.839
36. First consultation ('yes/no')	–0.105/–0.008 (–0.119), ^c –1.843 to 1.633	1.490/0.080 (1.213), ^c –0.924 to 3.903	3.272/0.209 (2.941), ^a 1.084 to 5.461 Reduced model: 3.776/0.242 (5.592), ^a 2.902 to 5.347
43. Control over important things in life ('a lot' 1 to 'none' 4)	0.370/0.025 (0.433), ^c –1.310 to 2.050	0.470/0.023 (0.396), ^c –1.863 to 2.802	0.517/0.030 (0.480), ^c –1.598 to 2.632
44. Takes a positive attitude towards self ('strongly agree' 1 to 'strongly disagree' 5)	0.583/0.047 (0.846), ^c –0.772 to 1.939	1.541/0.089 (1.610), ^c –0.340 to 3.423	–0.186/–0.013 (–0.214), ^c 0.830 to –1.892
51. Overall, health affects quality of life ('a lot' 1 to 'not at all' 4)	–1.712/–0.156 (–2.978), ^d –2.842 to –0.582 Reduced model: –1.628/–0.145 (–2.614), ^a –2.853 to –0.402	–1.680/–0.110 (–2.105), ^b –3.250 to –0.111 Reduced model: –1.890/–0.127 (–2.305), ^b –3.503 to –0.276	–0.839/–0.066 (–1.159), ^c –2.262 to 0.584
52a–d. SF-36 = four depression anxiety items summed [6-point response scale: 1 'all of the time' 1 to 'none of the time' 6 (calm, energy, downhearted, happy) (total score 4–24)]	0.034/0.009 (0.151), ^c –0.402 to 0.469	0.205/0.038 (0.667), ^c –0.400 to 0.810	0.565/0.124 (2.027), ^b 0.017 to 1.114 Reduced model: 0.636/0.140 (3.441), ^a 0.315 to 1.015
Active lifestyle (level of exercise)	–1.912/–0.161 (–2.791), ^a –3.258 to –0.565 Reduced model: –1.880/–0.158 (–2.075), ^d –3.248 to –0.513	–1.802/–0.109 (–1.896), ^c –3.671 to –0.067	–0.027/–0.002 (–0.031), ^c –1.722 to 1.668

TABLE 47 Multiple regression of independent predictors of ideal and realistic expectations and post-visit met expectations scores (each model adjusted for age, sex, household size, socioeconomic status and study site) (continued)

Questionnaire item	Pre-visit ideal expectations subscale ^e : unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval	Pre-visit realistic expectations subscale ^e : unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval	Post-visit experiences/met expectations subscale ^e : unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval
Employed full-time, employed part-time, not working	0.413/0.036 (0.640), ^c -0.857 to 1.684	1.197/0.074 (1.334), ^c -0.567 to 2.961	0.463/0.034 (0.569), ^c -1.136 to 2.062
Housing tenure (owner/mortgage vs rents) (1/0)	-0.512/-0.024 (-0.456), ^c -2.721 to 1.697	0.526/0.018 (0.337), ^c -2.540 to 3.593	0.311/0.012 (0.220), ^c -2.470 to 3.092
Lives alone vs with others	-1.290/-0.049 (-0.805), ^c -4.437 to 1.858	-2.886/-0.078 (-1.298), ^c -7.257 to 1.484	-1.114/0.036 (-0.553), ^c -5.077 to 2.849
		Reduced model: -5.863/-0.154 (-2.373), ^b -10.725 to -1.001	
Age left school: <14 to 18+ years	-0.791/-0.073 (-1.333), ^c -1.957 to 0.376	0.275/0.018 (0.334), ^c 0.738 to -1.334	-0.660/-0.053 (-0.884), ^c -2.128 to 0.809
Married/unmarried	-0.578/-0.065 (-1.032), ^c -1.678 to 0.523	-1.087/-0.087 (-1.399), ^c -2.615 to 0.441	-0.566/-0.054 (-0.804), ^c -1.952 to 0.819
Age (continuous)	0.920/0.071 (1.088), ^c -0.743 to 2.582	1.748/0.096 (1.489), ^c -0.560 to 4.056	2.412/0.159 (2.267), ^b 0.319 to 4.505
		Reduced model: -0.154/-0.178 (-2.438), ^b -0.279 to -0.030	Reduced model: 2.275/0.150 (2.767), ^a 0.335 to 2.672
Female/male (1/0)	0.439/0.020 (0.412), ^c -1.654 to 2.532	0.995/0.033 (0.673), ^c 0.501 to -1.911	1.909/0.076 (1.425), ^c -0.727 to 4.544
GP vs hospital patient (1/2)	0.171/0.008 (0.192), ^c -1.579 to 1.922	2.976/0.102 (2.450), ^d 0.591 to 5.361	2.240/0.089 (2.059), ^b 0.103 to 4.377
		Reduced model: 3.721/0.126 (3.047), ^d 1.323 to -6.120	Reduced model: 3.016/0.120 (2.725), ^d 0.842 to 5.190
Constant	42.007 ^a Reduced model: 40.774 ^a	43.280 ^a Reduced model: 58.474 ^a	30.588 ^a Reduced model: 27.013 ^a
<i>R</i> ²	0.163 Reduced model: 0.142	0.170 Reduced model: 0.182	0.176 Reduced model: 0.131
Adjusted <i>R</i> ²	0.085 Reduced model: 0.104	0.093 Reduced model: 0.145	0.086 Reduced model: 0.114
ANOVA <i>F</i> -statistic	2.099 ^a Reduced model: 3.780 ^a	2.212 ^a Reduced model: 5.000 ^a	1.961 ^a Reduced model: 7.932 ^a

ANOVA, analysis of variance.

a $p < 0.001$.b $p < 0.05$.

c Not statistically significant at the 5% level.

d $p < 0.01$.

e Higher subscale scores = lower expectations or perceived met expectations.

n Entered: ideal: 714; realistic: 699; post visit: 600.

The entered variables that did not achieve significance at the 0.05 level in the initial full models for either overall satisfaction or expectations met were total ideal expectations score, total realistic expectations score, self-efficacy and control, optimism, long-standing illness, disability or infirmity and other sociodemographic and economic variables. All variables entered achieved correlations of ± 0.600 , and criteria for minimising multicollinearity were met. The small number of variables that were significant in the full model were re-entered into a reduced model, along with control variables (only control variables showing significance shown). *Table 48* shows the results for both sets of dependent variables (overall satisfaction and met expectations).

Those variables independently associated with higher overall satisfaction were higher post-visit met expectations [post-visit experiences (met expectations) scale], no/little anxiety/depression, older age and being a GP rather than a hospital patient. The model explained 30% of the variation in satisfaction (adjusted $R^2 = 0.304$).

The variables independently associated with greater met expectations overall were higher post-visit met expectations [post-visit experiences (met expectations) scale], fewer effects of health on quality of life and being a GP rather than a hospital patient. The model explained 38% of the variation in satisfaction (adjusted $R^2 = 0.378$).

Table 49 shows the full regression models of independent predictors of single-item self-ratings of overall satisfaction and expectations met. The post-visit experiences (met expectations) subscales that were significantly and independently associated with post-visit overall satisfaction were

TABLE 48 Multiple regression of independent predictors of overall satisfaction and perceived met expectations overall post visit (adjusted for age, sex, housing tenure and study site)

Questionnaire item	34. Overall, how satisfied are you with your visit this time? ('very satisfied' 1 to 'very dissatisfied' 5): unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval	30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen? ('not at all' 1 to 'completely' 5): unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval
Post-visit experiences (met expectations) score ^d	0.39/0.510 (12.337), ^a 0.033 to 0.045	-0.471/-0.591 (-15.309), ^a -0.054 to -0.041
52a-d. SF-36 = four depression anxiety items summed [6-point response scale: 1 'all of the time' 1 to 'none of the time' 6 (calm, energy, downhearted, happy) (total score 4-24)]	-0.058/-0.171 (-4.138), ^a -0.085 to 0.030	0.022/0.062 (1.613), ^b -0.005 to 0.050
51. Overall, health affects quality of life ('a lot' 1 to 'not at all' 4)	-0.040/-0.040 (-0.997), ^b -0.120 to 0.039	0.134/0.127 (3.374), ^a 0.056 to 0.212
Age (continuous)	-0.006/-0.101 (-2.129), ^c -0.011 to 0.001	0.003/0.042 (0.953), ^b -0.003 to 0.008
Female/male (1/0)	0.090/0.047 (1.184), ^b -0.059 to 0.239	-0.056/-0.027 (-0.745), ^b -0.203 to 0.091
Housing tenure (owner/mortgage vs rents) (1/0)	-0.076/-0.036 (-0.972), ^b -0.229 to 0.077	-0.059/-0.029 (-0.769), ^b -0.208 to 0.091
GP vs hospital patient (1/2)	0.264/0.137 (3.461), ^a 0.114 to 0.413	-0.155/-0.077 (-2.067), ^c -0.302 to -0.008
Constant	1.106 ^a	5139 ^a
R^2	0.324	0.395
Adjusted R^2	0.304	0.378
ANOVA <i>F</i> -statistic	16.749 ^a	23.465 ^a

ANOVA, analysis of variance.

a $p < 0.001$.

b Not statistically significant at the 5% level.

c $p < 0.05$.

Higher subscale scores = lower met expectations (post-visit experience score).

n Entered: 700.

TABLE 49 Multiple regression of independent predictors (including subscales) of overall satisfaction and overall met expectations scores (adjusted for age, sex, housing tenure and study site)

Questionnaire item	34. Overall, how satisfied are you with your visit this time? ('very satisfied' 1 to 'very dissatisfied' 5): unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval	30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen? ('not at all' 1 to 'completely' 5): unstandardised coefficient b/standardised coefficient (two-tailed <i>t</i> -value), 95% confidence interval
Post-visit expectations subscale: 1. Structure of health care	-0.038/-0.102 (-2.637), ^a -0.067 to -0.010	-0.008/-0.019 (-0.470), ^b -0.042 to 0.026
Post-visit expectations subscale: 2. Process of health care	0.016/0.053 (1.409), ^b -0.006 to 0.039	-0.025/-0.071 (-1.811), ^b -0.052 to 0.002
Post-visit expectations subscale: 3. Doctor-patient communication style	0.055/0.209 (4.628), ^c 0.032 to 0.079	-0.103/-0.339 (-7.529), ^c -0.129 to -0.076
Post-visit expectations subscale: 4. No. of five procedures performed (1 given/0 not given, summed)	-0.024/-0.032 (-1.057), ^b -0.069 to 0.021	0.014/0.016 (0.514), ^b -0.040 to 0.068
Post-visit expectations subscale: 5. Doctor-patient approach to information	0.025/0.136 (3.640), ^c 0.012 to 0.039	-0.027/-0.126 (-3.260), ^a -0.043 to -0.011
Post-visit expectations subscale: 6. Treatment outcomes	0.014/0.036 (1.040), ^b -0.012 to 0.039	-0.073/-0.167 (-4.757), ^c -0.103 to -0.043
30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen? ('not at all' 1 to 'completely' 5)	-0.325/-0.373 (-9.916), ^c -0.389 to -0.260	-
52a-d. SF-36 = four depression anxiety items summed [6-point response scale: 1 'all of the time' 1 to 'none of the time' 6 (calm, energy, downhearted, happy) (total score 4-24)]	-0.035/-0.102 (-3.418), ^a -0.054 to -0.015	0.008/0.020 (0.642), ^b -0.016 to 0.031
51. Overall, health affects quality of life ('a lot' 1 to 'not at all' 4)	-0.005/-0.005 (-0.167), ^b -0.063 to 0.053	0.118/0.107 (3.395), ^a 0.050 to 0.187
Age (continuous)	-0.005/-0.098 (-2.996), ^a -0.008 to -0.002	0.001/0.008 0.244, ^b -0.003 to 0.004
Sex (female/male 1/0)	0.039/0.021 (0.696), ^b -0.071 to 0.150	0.030/0.014 (0.449), ^b -0.102 to 0.162
Housing tenure (owner/mortgage vs rents) (1/0)	-0.013/-0.014 (-0.445), ^b -0.071 to 0.045	-0.046/-0.043 (-1.307), ^b -0.115 to 0.023
GP vs hospital patient (1/2)	0.208/0.112 (3.384), ^a 0.087 to 0.328	-0.205/-0.097 (-2.825), ^a -0.348 to -0.063
Constant	2.733	5.382
<i>R</i> ²	0.452	0.403
Adjusted <i>R</i> ²	0.441	0.392
ANOVA <i>F</i> -statistic	41.242 ^c	36.885 ^c

ANOVA, analysis of variance.

a $p < 0.01$.

b Not statistically significant at the 5% level.

c $p < 0.001$.

Higher scores = lower perceived met expectations post-visit subscales; minus signs reflect opposite directions of coding.

Number of cases with complete data entered in the model for item 34 = 603, and for item 30 = 725.

structure of health care, doctor-patient communication style and doctor-patient approach to information. Also significantly and independently associated with post-visit overall satisfaction were global assessment of met expectations overall, no evidence of anxiety/depression, younger age and being a GP rather than a hospital patient.

The table also shows that the post-visit experiences (met expectations) subscales that were significantly and independently associated with global assessment of expectations met were

doctor–patient communication style, doctor–patient approach to information and treatment outcomes. Also significantly and independently associated with post-visit overall satisfaction was being a GP rather than a hospital patient.

Both regression models indicate the importance to patient satisfaction and feelings of met expectations of the doctor's personal style in communicating with patients and their approach to providing information and explanations.

Summary

Chapter 7 showed that correlations between ideal and met expectations were lower than those between realistic and met expectations, supporting their validity, although patients' pre-visit ideal and realistic expectations were only modestly associated with their post-visit experiences, at best. Multiple linear regression analyses for the total sample were presented in this chapter.

Realistic, but not ideal expectation subscale, scores were independently predictive of the post-visit met expectations subscale scores. Sociodemographic and economic characteristics of respondents did not retain significance in the multiple linear regression models of ideal, realistic or post-visit met expectations.

The pre-visit ideal and realistic expectations subscales were not independently associated with the single-item self-ratings of either overall satisfaction or expectations met, although the post-visit experiences (expectations met) subscale was a significant predictor of overall met expectations and satisfaction, as was being a GP rather than a hospital patient. Other predictors were having no/little anxiety/depression and older age (satisfaction), and fewer effects of health on quality of life (met expectations). Most of these relationships appear to support the validity of the instruments and are readily understandable. For example, GP patients tend to have more realistic expectations as they are generally coming into a situation with which they are familiar (hospital appointments being rather less familiar to people) and so their experiences are likely to be better calibrated with reality and hence they are more likely to have their expectations met and be better satisfied with their consultation. Those in a more positive frame of mind (not anxious or depressed) and with a condition that does not seriously impact on quality of life are also, unsurprisingly, more satisfied with their consultation.

Chapter 9

Discussion

The aims of the research

This project has attempted to look at the issue of patient expectations of health care. It has followed a structured process, beginning with a narrative review of the literature. This identified a clear need for an expectations measure: in essence, although expectations are recognised as potentially significant factors for patient satisfaction and thus health policy consideration, the concept at present is ill-defined and incoherent, and subsequently there is no existing validated measure that may be used (e.g. by the NHS). The remainder of the project then sought to produce a clear conceptualisation of an 'expectation' and develop an instrument to enable this to be measured. The research aspect began with a pilot approach in which a semi-structured interview process (based on certain principles and elements of the repertory grid method) was conducted on two samples of patients – GP patients and hospital cardiology patients. This research revealed a number of common themes (expectation types) that – along with results from the review – were used to develop a pilot questionnaire (or rather two: pre- and post-consultation questionnaires). This was field tested on a small number of patients, revised and then trialled on a much larger sample. The results were subsequently checked to ensure that the questionnaires had acceptable psychometric properties. Evidence suggested good reliability (e.g. of items within subscales) and hinted at validity (a difficult concept to categorically establish). Although the instrument appears valuable, we also acknowledge a need for further research and testing – such as using it to address other types of patients. Further research issues are discussed in more detail later in this chapter.

Key findings

Semi-structured interviews

The semi-structured interviews with GP and hospital cardiology patients revealed a number of themes that were grouped under health-care structures, processes and outcomes. Patient references to health-care structures strongly relate to the spaces that they inhabit during their time in either the GP practice or the cardiology outpatient unit. For the GP patients this was the waiting room and the consultation room and for the cardiology patients this was the department as a whole, the waiting area/room and the consultation room. Although patients held certain expectations about this aspect – such as expecting that these spaces would be clean and contain appropriate furniture and equipment – these expectations seemed *relatively unimportant* to them. However, it may well be that this was because these are the types of expectations that are generally *well met*; it might be that if they were not (e.g. a waiting room was noisy, dirty and otherwise deficient) then patient unhappiness would be significant.

Much of what patients talked about in the context of their expectations instead related to *processes*. Doctor–patient interaction was a particularly important process for both GP and cardiology patients, which included aspects such as the doctor's manner or character, the ways in which the doctor and the patient communicated with each other, the style and length of the consultation, any tests, examinations or treatment and the extent to which the patients felt that

they had had a personalised experience, for example with the doctor taking an interest in the patient. Waiting time was another process that both GP and cardiology patients commented on.

In terms of outcomes, these varied between the two health-care settings. GP patient outcomes leaned towards receiving a diagnosis and/or knowing that something could be done for their particular health issue, for example a referral. Reassurance was also important for GP patients. For cardiology patients the outcomes leaned towards a prognosis and that this would be good relative to their state of health. Both patients referred to lifestyle advice as another outcome of seeing a doctor.

These results, along with findings from the literature review, were used to inform the development of the questionnaire for the main study.

Main questionnaire (properties and results)

The questionnaires that were subsequently developed included both pre- and post-visit questionnaires. Pre-visit questionnaires asked patients to rate their 'real' and 'ideal' expectations on 27 items that came from the pilot study and review; post-visit questionnaires asked patients to rate the extent to which their expectations had been met. Within these there were subscales related to certain types of expectations (as revealed in the pilot study). After the questionnaires had been field tested on a small sample of GP patients, they were presented to GP and hospital patients ($n = 833$). Results suggested that the questionnaires met acceptable levels of reliability and validity.

A number of ceiling effects were apparent in the data but these were mainly related to 'ideal expectations', which is what we would expect. That is, ideal expectations may be extreme and may be unrealistic, but they are useful (upper) benchmarks for comparison with real/actual expectations. However, the important issue in this research is the nature of the real expectations, how they compare with ideal expectations and whether or not they are met. Thus, overall, patients' pre-visit expectations of what would happen in reality were lower than their ideals or hopes about what would happen. This indicates higher ideal expectations and supports the validity of the measures, as ideals are anticipated to be higher than real life. Post-visit met expectations were lower than pre-visit ideal but similar to, or slightly worse than, pre-visit realistic expectations, that is, they fell in-between, indicating some unmet expectations (e.g. on being given advice about health/condition, cause of condition, how to manage condition and benefits/side effects of treatments) but also that some expectations were exceeded. (Correlations between ideal and met expectations were lower than those between realistic and met expectations, supporting their validity, although patients' pre-visit ideal and realistic expectations were only modestly associated with their post-visit experiences, at best.)

GP patients had higher pre-visit expectations than hospital patients and they had higher post-visit met expectations. This might be because, first, GP patients were more accustomed to visiting their GP and had a wider experience to draw on in ensuring that their expectations were well calibrated (i.e. likely to be met), whereas, generally, the hospital patients would have had less experience of visiting the hospital and so, in a sense, would have been less familiar with what might happen, and, second, GP patients would generally have had milder conditions (we assume) and thus be more likely to attain a satisfactory outcome in that respect than the hospital patients with their more severe cardiac conditions. Further research is needed to confirm these contentions.

The highest ideal expectations, particularly among the GP sample, included expectations about cleanliness, information about where to go, convenient appointments, being seen on time, helpfulness of reception staff, knowledge of the doctor, having a clear and easy to understand

doctor, being involved in treatment decisions and having a reduction in symptoms/problems. The lowest ideal expectations related to the five clinical procedures (physical examination, tests/investigations, diagnosis, prescription and referral) and being given the opportunity to discuss problems in life. The former may be explained by patient uncertainty with regard to their condition, which is perhaps unavoidable; the latter is an interesting issue and seems related to the desire of patients to have a positive interaction with their doctor – to have a conversation and be reassured – as much as to receive a cold analysis of their problem.

The lowest met expectations, particularly among the hospital sample, included being seen on time and the two items requested by the ethics committee: being given a choice of hospitals if referred and a choice of doctors to consult (not included in scaling as not applicable to all patients). Other items that had low met expectations were the helpfulness of the reception staff, the doctor being respectful and treating (the patient) with dignity (hospital sample), the doctor being knowledgeable about the condition (hospital), being given reassurance, advice about health/condition, information about the cause of the condition, advice on how to manage the condition, information about the benefits/side effects of treatment and an opportunity to discuss problems in life, and the three items on outcome expectancies.

Overall, GP patients reported higher pre-visit expectations and post-visit met expectations, particularly for items relating to the structure of health care and doctor–patient communication style. Spearman's rank-order correlations between subscale domains were strongest overall between the structure of health care, the process of health care, doctor–patient communication style and doctor–patient approach to information. These are all common indicators of the quality of health care, supporting the validity of the measures.

About three-quarters of the total sample stated that their ideal hopes were 'very important' to them overall, and over half felt that they deserved these to happen in reality 'a lot'. The most common influences on expectations were seen to be patients' previous consultations/experiences of health services and health-care staff/professionals. There were few associations between expectations and other characteristics, although age was one such issue: being older was associated with lower expectations.

Further research

This research has developed and trialled a patient expectations questionnaire. Although the resulting instrument appears to have very good reliability and validity according to a number of measures, it is important not to oversell it. The patients involved in this project came from a limited number of GP surgeries and from a hospital cardiac clinic. The instrument therefore needs further trialling with a wider range of GP surgeries and also in many other types of hospital clinic, which may have different expectations related to different ways of operating and different types of patients with different levels of prognosis. Indeed, the research reported here did find some understandable differences between patients from the two different sites that might be attributable to the rather specific situation of cardiac patients, faced as they are with more severe problems generally than those attending GP surgeries (e.g. GP patients were more likely to have their expectations met). The utility of the instrument will thus be enhanced by demonstration of its reliability/validity in more varied settings.

The research also identified some issues related to patient age, with differing levels of expectations – both idealistic and met – between older and younger patients. (Age was one of the few demographic/socioeconomic variables to reveal a consistent impact on expectations.) Having identified these differences, it is important to conduct further research into why these might arise.

Following on from the observation above, it would be useful to follow certain patients over time to see how their expectations develop and change, and to what extent they vary according to medical context (this might aid in the development of a more profound theoretical model of the concept than presently exists). For example, one could trace how the meeting, or not, of expectations on one visit colour subsequent clinical experiences. That is, are expectations generally quite robust or are they rather fragile? The answer to this question will clearly impact on the ease with which changes in doctors' approaches and administrations are able to remedy expectation deficits.

It may also be important pay attention to how *realistic* patients' expectations are. When expectations are in some sense unrealistic (e.g. they assume the existence of a health service of unlimited funds), this may call for very particular health care or indeed broader political strategies. Such strategies might include enhanced communication, or perhaps enhanced staff training in expectation management. From this perspective future research should consult GPs and consultants about what expectations are and are not realistic – a dimension not considered in the current research.

Another issue in terms of administration is the size of the questionnaire. It is possible that the response rate might have been affected by the overly long questionnaire: the pre-visit questionnaire, for example, took (on average) over 20 minutes to complete. However, it is likely that a fully operational expectations questionnaire would be shortened by excluding items that were specifically included in the main study to assess issues such as validity and testing for sample differences (e.g. questions on health status). Furthermore, our analysis of the reliability of the different subscales (see *Chapter 5*) revealed that in a few cases reliability could be improved through item deletion, and hence there is the possibility of shortening the questionnaire further through item reduction.

Research also needs to be conducted on how to enhance recruitment of patients while respecting patient confidentiality (a recurring problem in research of this type) and on how to enhance response rates for post-visit questionnaires among patients in clinic surveys. Our suspicion is that the response rates are liable to be related to the nature of the hospital clinic, perhaps being affected by the length of time that patients have to spend waiting, and patients' likely health outlook thereafter (e.g. it might well be that patients receiving a better diagnosis will be more willing to participate post consultation than those receiving 'bad news' – and the presence and nature of such a bias needs to be established). One way to enhance patient recruitment might be to increase patient buy-in through better involvement; although this project did include input from a representative of patient groups (who provided feedback on the questionnaires and their design), this was the extent of patient collaboration. For example, discussion with patients *a priori* might have revealed the practical problems encountered by those attending the pre-pilot cardiology clinics and their difficulties in being involved in the research *before* we experienced our subsequent difficulties, which led to a change in the mode of data collection (telephone interviews). As such, we concur with the idea that greater patient involvement in the research process is a signal of good research design – and in any further research in this area this is a principle we would seek to uphold. We also feel that it is necessary to be quite flexible in the recruitment strategy, recognising the problems that can be faced when conducting complex research such as this.

Chapter 10

Conclusions

The narrative review

The narrative review of patients' expectations for health care assessed 211 papers from a total of 20,439 titles and 266 abstracts identified. A number of conclusions emerged from this review:

- most research designs were weak with small or selected samples
- a theoretical frame of reference was rarely stated
- in terms of measurement, the origin of questions about expectations was often absent, questions were frequently untested and those questions that were tested for reliability or validity had mixed results
- little attempt was made to examine expectations in detail or present findings in terms of their contribution to existing knowledge.

A fully integrated model of expectations needs to be dynamic, multidimensional and able to identify its determinants, including sociocognitive components. Furthermore, it needs to be able to model potential causal pathways between expectations, attitudes, behaviours and patient-based health outcomes.

The review concluded that the development of a standardised, well-validated instrument, together with information on the consistency and stability of expectations over time by types of measure and mode of questionnaire administration, are the challenges for future expectations research.

The exploratory study

As well as incorporating information from the narrative review, the structured expectations questionnaire for this study was informed by the results of semi-structured interviews conducted with 20 GP patients and 20 cardiology clinic patients in Norwich, UK. Results revealed three main classes of themes:

- health-care structure, which concerned largely the space and physical conditions that patients expected to experience
- consultation processes, which concerned the activities that would take place during the consultation and included the relationship between the patient and their doctor/consultant
- outcomes, which concerned issues such as treatment and prognosis.

The surveys of patients' expectations for health care

Questionnaire qualities

The measure of patients' expectations used in the surveys was developed using information on expectation constructs and relevant items from the narrative review and the results of the exploratory study. Interview and self-administration surveys of patients before and after they

consulted their doctors (GP patients and hospital outpatients) were conducted in Greater London, Norwich and Essex, in the UK, using convenience sampling ($n = 833$). The psychometric properties of the questionnaires were tested and revealed that:

- The expectations measures met acceptability criteria for reliability (internal consistency); items and subscales also correlated at least moderately with variables expected to be associated with them (e.g. satisfaction), supporting their validity.
- The Cronbach's alphas for the 27 items forming the pre-visit ideal and realistic subscales and the post-visit experiences (expectations met) subscale all exceeded the threshold of 0.70 in each mode of administration and sample type.
- The total sample and the self-administration samples met the threshold criteria adequately for item–total correlations within the subscales, whereas a small number of item–total correlations in the smaller pre-visit interview samples failed to reach 0.3. Most item–item correlations reached or exceeded the threshold for acceptability.

Questionnaire results

- Overall, patients' pre-visit expectations of what would happen in reality were lower than their ideals or hopes about what would happen, supporting the validity of the measures.
- Post-visit met expectations were lower than pre-visit ideal expectations but similar to, or slightly worse than, pre-visit realistic expectations, that is, they fell in-between, indicating some unmet expectations but also that some expectations were exceeded.
- GP patients had higher pre-visit expectations than hospital patients and they had higher post-visit met expectations, particularly for items relating to structure of health care and doctor–patient communication style. This is perhaps understandable because GP patients were in more familiar environments and had greater past experiences to help calibrate expectations, and also perhaps had milder conditions generally.
- The highest ideal expectations, particularly among the GP sample, included expectations about cleanliness, information about where to go, convenient appointments, being seen on time, helpfulness of reception staff, knowledge of the doctor, having a clear and easy to understand doctor, being involved in treatment decisions and having a reduction in symptoms/problems.
- The lowest ideal expectations related to the five clinical procedures (physical examination, tests/investigations, diagnosis, prescription and referral) and being given the opportunity to discuss problems in life.
- The lowest met expectations, particularly among the hospital sample, included being seen on time and the two items requested by the ethics committee: being given a choice of hospitals if referred and a choice of doctors to consult (not included in scaling as not applicable to all patients).
- Spearman's rank-order correlations between subscale domains were strongest overall between the structure of health care, the process of health care, doctor–patient communication style and doctor–patients approach to information. These are all common indicators of the quality of health care, supporting the validity of the measures.
- About three-quarters of the total sample stated that their ideal hopes were 'very important' to them overall, and over half felt that they deserved these to happen in reality 'a lot'. The most common influences on expectations were seen to be patients' previous consultations/experiences of health services and health-care staff/professionals.
- There were few associations between expectations and other characteristics, although age was one such issue: being older was associated with lower expectations.

- The pre-visit ideal and realistic expectations subscales were not independently associated with either overall satisfaction or expectations met, although the post-visit experiences (expectations met) subscale was a significant predictor of overall met expectations and satisfaction, as was being a GP rather than a hospital patient. Other predictors were having no/little anxiety/depression and older age (satisfaction), and fewer effects of health on quality of life (met expectations).

Summary

Patient expectations are liable to be important for health care for various reasons, such as treatment compliance, and to be associated with overall satisfaction. However, 'expectations' are poorly conceptualised: our narrative review revealed the paucity of both theory and empirical data on the topic. This research has developed expectations questionnaires based on that narrative review and an exploratory semi-quantitative study. The resulting instrument has good reliability and validity, tested on both GP and cardiac clinic patients. Although the instrument needs further testing (with other samples, comparing different modes of administration), it seems to provide a potentially useful tool for those in the NHS to benchmark the extent to which expectations are being met (across regions, specialisms and samples and over time), and to identify the types of expectations that are and are not being met, thus potentially informing treatment policy and practices. Academically, the research here – and the developed instrument – might be used to help understand the origin of expectations and how expectations are affected by aspects such as clinical context, thus leading to the development of a more profound 'theory of expectations' than presently exists.

Acknowledgements

We would like to thank the patients who participated in the study, their doctors and the clinic staff, especially Dr Richard Pearson for facilitating outpatient recruitment in Essex. We also thank Ethnifocus and their Ethnibus interviewers, Katie O'Donnell, Laura White and Lesley Williamson, for the fieldwork, Heather Leishman of Norfolk and Waveney PCT Research Network for her help liaising with local practices, and Mable Saili of North Central London Research Network for valuable help with facilitating honorary contracts. We also thank Sally Brearley, who represented patient groups, for her valuable feedback on the questionnaires and design, and Vicky Spencer-Bowdage for help with formatting. This project was funded by the NHS R&D Health Technology Assessment programme (project number 07/58/01, Multi-Centre Research Ethics Committee reference 07/Ho7 8/58). The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the Department of Health.

Contribution of authors

AB, GR and AH were the grant holders and managed the pilot and main studies. MW conducted the literature searches in collaboration with AB. AB wrote the conceptual review. SAF collated and wrote the narrative review of the literature. NL conducted the exploratory interviews, and GR and CK analysed and reported on these data. KRM undertook the piloting of the expectations questionnaires. AB undertook the various analyses and reporting. AB, GR and SAF wrote drafts of this report and GR edited the final report.

Publications

1. Kenten C, Bowling A, Lambert N, Howe A, Rowe G. A study of patient expectations in a Norfolk general practice. *Health Expect* 2010;**13**:273–84.
2. Kenten C, Bowling A, Lambert N, Howe A, Rowe G. The measurement of patients' expectations in a Norfolk general practice. *Health Expect* 2012;in press. doi: 10.1111/j.1369-7625.2010.00603.x.

References

1. Stacey M. The health service consumer: a sociological misconception. *Sociol Rev Monogr* 1976;**22**:194–200.
2. Bowling A. *Measuring disease. A review of disease specific quality of life measurement scales*, 2nd edn. Buckingham: Open University Press; 2001.
3. Bowling A. *Measuring health*, 3rd edn. Buckingham: Open University Press; 2005.
4. Bowling A. Measuring outcomes. In Bowling A, Ebrahim S, editors. *Handbook of health research methods: investigation, measurement and analysis*. Maidenhead: Open University Press; 2005.
5. Mondoloch MV, Cole DC, Frank JW. *Does how you do depend upon how you think you'll do? A structured review of the evidence for a relation between patients' recovery expectations and outcomes*. Toronto: Institute for Work and Health; 1999.
6. Rao JK, Weinberger M, Kroenke K. Visit-specific expectations and patient-centred outcomes. *Arch Fam Med* 2000;**9**:1148–55.
7. Linder-Pelz S. Social psychological determinants of patient satisfaction: a test of five hypotheses. *Soc Sci Med* 1982;**16**:583–9.
8. Linder-Pelz S, Struening EL. The multidimensionality of patient satisfaction with a clinic visit. *J Community Health* 1985;**10**:42–54.
9. Fitzpatrick R. Scope and measurement of patient satisfaction. In Fitzpatrick R, Hopkins A, editors. *Measurement of patient satisfaction with their care*. London: Royal College of Physicians; 1993.
10. Bowling A. *Research methods in health. Investigating health and health services*, 2nd edn. Buckingham: Open University Press; 2002.
11. Cartwright A, Anderson, R. *General practice revisited. A second study of patients and their doctors*. London: Tavistock Press; 1981.
12. Davies AR, Ware, JE. *GHAA's consumer satisfaction survey and manual*. Washington, DC: Group Health Association of America; 1991.
13. Bowling A, Redfern J. The process of outpatient referral and care: the experience and views of patients, their general practitioners, and specialists. *Br J Gen Pract* 2000;**50**:116–20.
14. Bowling A, Bond M. A national evaluation of specialists' clinics in primary care settings. *Br J Gen Pract* 2001;**51**:264–9.
15. British Medical Association. *Your contract, your future*. London: General Practitioners' Committee, BMA; 2002.
16. Coulter A. Examining health expectations. Editorial. *Health Expect* 2006;**9**:1–2.
17. Bowling A. An 'inverse satisfaction' law? Why don't older patients criticise health services? *J Epidemiol Community Health* 2002;**56**:482.
18. Ware JE, Hays RD. Methods for measuring patient satisfaction with specific medical encounters. *Med Care* 1988;**26**:393–402.
19. Janzen JA, Silvus J, Jacobs S, Slaughter S, Dalziel W, Drummond N. What is a health expectation? Development of a pragmatic conceptual model from psychological theory. *Health Expect* 2006;**9**:37–48.

20. Linder-Pelz S. Towards a theory of patient satisfaction. *Soc Sci Med* 1982;**16**:577–82.
21. Fitzpatrick R, Hopkins A. Problems in the conceptual framework of patient satisfaction research: an empirical exploration. *Sociol Health Illn* 1983;**5**:297–311.
22. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process* 1991;**50**:179–211.
23. Ajzen I. *Attitudes, personality and behaviour*. Milton Keynes: Open University Press; 1988.
24. Rotter JB. *Social learning and clinical psychology*. New York, NY: Prentice-Hall; 1954.
25. Rotter JB. *The development and application of social learning theory*. New York, NY: Praeger; 1982.
26. Rotter JB. Generalised expectancies for internal versus external control of reinforcement. *Psychol Monogr* 1966;**30**:1–26.
27. Feather NT. Values, valences, expectations and actions. *J Soc Issues* 1992;**48**:109–24.
28. Fishbein M. Attitude and the prediction of behavior. In M. Fishbein, editor. *Readings in attitude theory and measurement*. New York, NY: Wiley; 1967.
29. Bower P, King M, Nazareth I, Lampe F, Sibbald B. Patient preferences in randomised controlled trials: conceptual framework and implications for research. *Soc Sci Med* 2004;**61**:685–95.
30. Bandura A. The explanatory and predictive scope of self-efficacy theory. *J Soc Clin Psychol* 1986;**4**:359–73.
31. Strecher VJ, Rosenstock IM. The health belief model. In Glanz K, Lewis FM, Rimer BK, editors. *Social cognitive theory*. San Francisco, CA: Josey-Bass; 1997.
32. Baranowski T, Perry CL, Parcel GS. How individuals, environments and health behavior interact. In Glanz K, Lewis FM, Rimer BK, editors. *Social cognitive theory*. San Francisco, CA: Josey-Bass; 1997.
33. Johnston M. Representations of disability. In Petrie KJ, Weinman JA, editors. *Perceptions of health and illness*. Amsterdam: Hardwood Academic Publishers; 1997.
34. Johnston M, Morrison V, MacWalter R, Partridge C. Perceived control, coping and recovery from disability following stroke. *Psychol Health* 1999;**14**:181–92.
35. Fishbein M, Ajzen I. *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading: Addison-Wesley; 1975.
36. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev* 1977;**84**:191–215.
37. Rumelhart DE, Norman DA. Representation in memory. In Atkinson RC, Hernstein RJ, Lindzey G, Luce RD, editors. *Stevens' handbook of experimental psychology*. New York, NY: John Wiley; 1988.
38. Swan EI, Trawick F. Satisfaction related to predictive vs. desired expectations. In Hunt HK, Day RL, editors. *Refining concepts and measures of consumer satisfaction and complaining behavior*. Bloomington, IN: Indiana University School of Business; 1980.
39. Miller J. Studying satisfaction, modifying models, eliciting expectations, posing problems, and making meaningful measurements. In Hunt HK, editor. *Conceptualisation and measurement of consumer satisfaction and dissatisfaction*. Cambridge, MA: Marketing Science Institute; 1977.
40. Uhlmann RF, Inui TS, Carter WB. Patient requests and expectations. Definitions and clinical applications. *Med Care* 1984;**22**:681–5.

41. Like R, Zyzanski SJ. Patient satisfaction with the clinical encounter: social psychological determinants. *Soc Sci Med* 1987;**24**:351–7.
42. Thompson AGH, Sunol R. Expectations as determinants of patient satisfaction: concepts, theory and evidence. *Int J Qual Health Care* 1995;**7**:127–41.
43. Buetow SA. What do general practitioners and their patients want from general practice and are they receiving it? A framework. *Soc Sci Med* 1995;**40**:213–21.
44. Williams S, Weinman J, Dale J, Newman S. Patient expectations: what do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction? *Fam Pract* 1995;**12**:193–201.
45. McKinley RK, Stevenson K, Adams S, Manku-Scott TK. Meeting patient expectations of care: the major determinant of satisfaction with out-of-hours primary medical care. *Fam Pract* 2002;**19**:333–8.
46. Faller H, Vogel H, Bosch B. Patient expectations regarding methods and outcomes of their rehabilitation – a controlled study of back pain and cancer patients. *Rehabilitation* 2000;**39**:205–14.
47. Kravitz RL. Patients' expectations for medical care: an expanded formulation based on review of the literature. *Med Care Res Rev* 1996;**53**:3–27.
48. Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE. Prevalence and sources of patients' unmet expectations for care. *Ann Intern Med* 1996;**125**:730–7.
49. Bandura A. *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall; 1986.
50. Bandura A. Perceived self-efficacy in the exercise of personal agency. *Psychologist* 1989;**2**:411–24.
51. Bandura A. *Self-efficacy in changing societies*. New York, NY: Cambridge University Press; 1995.
52. Bandura A. *Self-efficacy: the exercise of control*. New York, NY: WH Freeman; 1997.
53. Maddox JE. Expectancies and the social-cognitive perspective: basic principles, process and variables. In Kirsch I, editor. *How expectancies shape experience*. Washington, DC: American Psychological Association; 1999.
54. Kirsch I. Response expectancy: an introduction. In Kirsch I, editor. *How expectancies shape experience*. Washington, DC: American Psychological Association; 1999.
55. Olson JM, Roese NJ, Zanna MP. Expectancies. In Higgins ET, Kruglanski AW, editors. *Social psychology: handbook of basic principles*. New York, NY: Guilford Press; 1996.
56. Donabedian A. *The definition of quality and approaches to its assessment*. Ann Arbor, MI: Health Administration Press; 1980.
57. Bandura A. Health promotion by social cognitive means. *Health Educ Behav* 2004;**31**:143–64.
58. Crow R, Gage H, Hampson S, Hart J, Kimber A, Thomas H. The role of expectancies in the placebo effect and their use in the delivery of health care: a systematic review. *Health Technol Assess* 1999;**3**(3).
59. Festinger L. A theory of social comparison processes. *Hum Relat* 1954;**7**:117–40.
60. Katzell RA. Personal values, job satisfaction and job behaviour. In Borrow H, editor. *A man in the world of work*. Boston, MA: Houghton Mifflin; 1964.
61. Locke EA. What is job satisfaction? *Organ Behav Hum Perform* 1969;**4**:309–36.

62. Scheier MF, Carver CS. Optimism, coping and health: assessment and implications of generalised outcome expectancies. *Health Psychol* 1985;4:219–47.
63. Crow R, Gage H, Hampson S, Hart J, Kimber A, Storey L, *et al.* The measurement of satisfaction with healthcare: implications for practice from a systematic review of the literature. *Health Technol Assess* 2002;6(32).
64. Roscoe JA, Bushunow P, Morrow GR, Hickok JT, Kuebler PJ, Jacobs A, *et al.* Patient expectation is a strong predictor of severe nausea after chemotherapy: a University of Rochester Community Clinical Oncology Program study of patients with breast carcinoma. *Cancer* 2004;101:2701–8.
65. Holzner B, Kemmler G, Kopp M, Dachs E, Kaserbacher R, Spechtenhauser B, *et al.* Preoperative expectations and postoperative quality of life in liver transplant survivors. *Arch Phys Med Rehabil* 2001;82:73–9.
66. Metcalfe CJ, Klaber Moffett JA. Do patients' expectations of physiotherapy affect treatment outcome? Part 2: survey results. *Int J Ther Rehabil* 2005;12:112–19.
67. Guerra CE, McDonald VJ, Ravenell KL, Asch DA, Shea JA. Effect of race on patient expectations regarding their primary care physicians. *Fam Pract* 2008;25:49–55.
68. Junod Perron N, Secretan F, Vannotti M, Pecoud A, Favrat B. Patient expectations at a multicultural out-patient clinic in Switzerland. *Fam Pract* 2003;20:428–33.
69. Shaw A, Thompson EA, Sharp DJ. Expectations of patients and parents of children with asthma regarding access to complementary therapy information and services via the NHS: a qualitative study. *Health Expect* 2006;9:343–58.
70. Wójcicki TR, White SM, McAuley E. Assessing outcome expectations in older adults: the multidimensional outcome expectations for exercise scale. *J Gerontol B Psychol Sci Soc Sci* 2009;64B:33–40.
71. Zenz M, Strumpf M. Redefining appropriate treatment expectations. *J Pain Symptom Manage* 2007;33:S11–18.
72. Lelliot P, Beevor A, Hogman G, Hyslop J, Lathlean J, Ward M. Carers' and users' expectations of services – carer version (CUES-C): a new instrument to support the assessment of carers of people with a severe mental illness. *J Ment Health* 2003;12:143–52.
73. Redsell S, Jackson C, Stokes T, Hastings A, Baker R. Patient expectations of 'first-contact care' consultations with nurse and general practitioners in primary care. *Qual Prim Care* 2007;15:5–10.
74. Richardson LA. Seeking and obtaining mental health services: what do parents expect? *Arch Psychiatr Nurs* 2001;15:223–31.
75. Roberts D, McNulty A, Caress AL. Current issues in the delivery of complementary therapies in cancer care – policy, perceptions and expectations: an overview. *Eur J Oncol Nurs* 2005;9:115–23.
76. Russell D, Luthra M, Wright J, Golby M. A qualitative investigation of parents' concerns, experiences and expectations in managing otitis media in children: implications for general practitioners. *Prim Health Care Res Dev* 2003;4:85–93.
77. Tarkka MT, Lehti K, Kaunonen M, Astedt-Kurki P, Paunonen-Limonen M. First-time mothers' expectations of public health nurses in Finland. *Prim Health Care Res Dev* 2002;3:96–104.
78. Wardman L. and the Bolton Research Group. Patients' knowledge and expectations of confidentiality in primary health care: a quantitative study. *Br J Gen Pract* 2000;50:901–2.

79. Chunta KS. Expectations, anxiety, depression and physical health status as predictors of recovery in open-heart surgery patients. *J Cardiovasc Nurs* 2009;**24**:454–64.
80. Gamble J, Creedy DK, Teakle B. Women's expectations of maternity services: a community-based survey. *Women Birth* 2007;**20**:115–20.
81. Horrocks S, Coast J. Patient choice: an exploration of primary care dermatology patients' values and expectations of care. *Qual Prim Care* 2007;**15**:185–93.
82. Ip WY, Chien WT, Chan CL. Childbirth expectations of Chinese first-time pregnant women. *J Adv Nurs* 2003;**42**:151–8.
83. Lampley-Dallas VT, Mold JW, Flori DE. African-American caregivers' expectations of physicians: gaining insights into the key issues of caregivers' concerns. *J Natl Black Nurses Assoc* 2005;**16**:18–23.
84. Lindstand P, Brodin J, Lind L. Parental expectations from three different perspectives: what are they based on? *Int J Rehabil Res* 2002;**25**:261–9.
85. Metcalfe CJ, Klaber Moffet JA. Do patients' expectations of physiotherapy affect treatment outcome? Part 1: baseline data. *Int J Ther Rehabil* 2005;**12**:55–62.
86. Moons P, Pinxten S, Dedroog D, Van Deyk K, Gewillig M, Hilderson D, *et al.* Expectations and experiences of adolescents with congenital heart disease on being transferred from pediatric cardiology to an adult congenital heart disease program. *J Adolesc Health* 2009;**44**:316–22.
87. Newton C, Clarke M, Donlan C, Wright JA, Lister C, Cherguit J. Parents' expectations and perceptions concerning the provision of communication aids by the Communication Aids project (CAP). *Child Lang Teach Ther* 2007;**23**:47–65.
88. Resnick B, Wehren L, Orwig D. Reliability and validity of the self-efficacy and outcome expectations for osteoporosis medication adherence scales. *Orthop Nurs* 2003;**22**:139–47.
89. Stein J, Shafqat S, Doherty D, Frates EP, Furie KL. Patient knowledge and expectations for functional recovery after stroke. *Am J Phys Med Rehabil* 2003;**82**:591–6.
90. van Steenkiste B, van der Weijden T, Timmermans D, Vaes J, Stoffers J, Grol R. Patients' ideas, fears and expectations of their coronary risk: barriers for primary prevention. *Patient Educ Couns* 2004;**55**:301–7.
91. Weems CF. The Anxiety Change Expectancy Scale shows high internal validity and correlation with validated measures of anxiety, self-esteem and hopelessness in varied settings. *Evid Based Ment Health* 2006;**9**:66.
92. Winterling J, Sidenvall B, Glimelius B, Nordin K. Expectations for the recovery period after cancer treatment – a qualitative study. *Eur J Cancer Care* 2009;**18**:585–93.
93. Witt Sherman D, Ouellette SC. Patients tell of their images, expectations and experiences with physicians and nurses on an AIDS-designated unit. *J Assoc Nurses AIDS Care* 2001;**12**:84–94.
94. Barker Bausell R, Lao L, Bergman S, Lee WL, Berman BM. Is acupuncture analgesia an expectancy effect? Preliminary evidence based on participants' perceived assignments in two placebo-controlled trials. *Eval Health Prof* 2005;**28**:9–26.
95. Benedetti F, Arduino C, Costa S, Vighetti S, Tarenzi L, Rainero I, *et al.* Loss of expectation-related mechanisms in Alzheimer's disease makes analgesic therapies less effective. *Pain* 2006;**121**:133–44.

96. Benedetti F, Pollo A, Lopiano L, Lanotte M, Vighetti S, Rainero I. Conscious expectation and unconscious conditioning in analgesic, motor, and hormonal placebo/nocebo responses. *J Neurosci* 2003;**23**:4315–23.
97. Cheng JD, Hitt J, Koczwara B, Schulman KA, Burnett CB, Gaskin DJ, *et al*. Impact of quality of life on patient expectations regarding phase 1 clinical trials. *J Clin Oncol* 2000;**18**:421–8.
98. Fulda KG, Slich T, Stoll ST. Patient expectations for placebo treatments commonly used in osteopathic manipulative treatment (OMT) clinical trials: a pilot study. *Osteopathic Med Prim Care* 2007;**1**:3.
99. Goossens MEJB, Vlaeyen JWS, Hidding A, Kole-Snijders A, Evers SMAA. Treatment expectancy affects the outcome of cognitive-behavioural interventions in chronic pain. *Clin J Pain* 2005;**21**:18–26.
100. Kucukarsian S, Schommer JC. Patients' expectations and their satisfaction with pharmacy services. *J Am Pharm Assoc* 2002;**42**:489–96.
101. Larrosa F, Hernandez L, Morello A, Ballester E, Quinto L, Montserrat JM. Laser-assisted uvulopalatoplasty for snoring: does it meet the expectations? *Eur Resp J* 2004;**24**:66–70.
102. Mercado R, Constantoyannis C, Mandat T, Schulzer M, Stoessl J, Honey CR. Expectation and the placebo effect in Parkinson's disease patients with subthalamic nucleus deep brain stimulation. *Movement Disord* 2006;**21**:1457–61.
103. Spinhoven P, terKuile MM. Treatment outcome expectancies and hypnotic susceptibility as moderators of pain reduction in patients with chronic tension-type headache. *Int J Clin Exper Hypnosis* 2000;**48**:290–305.
104. Wei SJ, Hampshire K, Devine PA, Metz JM. Differences in expectations of clinical trials between patients who participate in clinical cancer trials and those who do not. *J Clin Oncol* 2005;**165**:6065.
105. Campbell C. *The role of patient expectations in perceptions of treatment outcome for low back pain*. PhD thesis. Middlesbrough: University of Teesside; 2002.
106. Fryman RJ. *The expectations of men undergoing surgery for benign prostatic obstruction*. PhD thesis. Sheffield: University of Sheffield; 2007.
107. Mitchell HL. *The nature and role of patient expectations in exercise behaviour in osteoarthritis (OA)*. PhD thesis. London: University of London; 2007.
108. Al Issa A. Patients' experiences and expectations from an emergency department: a survey of 4392 patients. *Middle East J Emerg Med* 2007;**7**:57–60.
109. Baumann M, Euller-Ziegler L, Guillemin F. Evaluation of the expectations osteoarthritis patients have concerning healthcare, and their implications for practitioners. *Clin Exp Rheumatol* 2007;**25**:404–9.
110. Chapple A, Sibbald B, Rogers A, Roland M. Citizens' expectations and likely use of a NHS walk-in centre: results of a survey and qualitative methods of research. *Health Expect* 2001;**4**:38–47.
111. Chiolero A, Prior J, Bovet P, Masson J-C, Darioli R. Expectation to improve cardiovascular risk factors control in participants to a health promotion program. *J Gen Intern Med* 2008;**23**:615–18.
112. Christiaens W, Verhaeghe M, Bracke P. Childbirth expectations and experiences in Belgian and Dutch models of maternity care. *J Reprod Infant Psych* 2008;**26**:309–22.

113. Cutts C, Tett SE. Do rural consumers expect a prescription from their GP visit? Investigation of patients' expectations for a prescription and doctors' prescribing decisions in rural Australia. *Aust J Rural Health* 2005;**13**:43–50.
114. Dady KE, Rugg S. An exploration of individuals' expectations of their stay on an elderly care unit. *Br J Occup Ther* 2000;**63**:9–16.
115. Dawn AG, McGwin G, Lee PP. Patient expectations regarding eye care. *Arch Ophthalmol* 2005;**123**:534–41.
116. Dogra N. What do children and young people want from mental health services? *Curr Opin Psychiatry* 2005;**18**:370–3.
117. Figaro MK, Williams-Russo P, Allegrante JP. Expectation and outlook: the impact of patient preference on arthritis care among African Americans. *J Ambul Care Manage* 2005;**28**:41–8.
118. Fosnocht DE, Swanson ER, Bossart P. Patient expectations for pain medication delivery. *Am J Emerg Med* 2001;**19**:399–402.
119. Goldsteen M, Houtepen R, Proot IM, Abu-Saad HH, Spreuwenberg C, Widdershoven G. What is a good death? Terminally ill patients dealing with normative expectations around death and dying. *Patient Educ Couns* 2006;**64**:378–86.
120. Hundley V, Ryan M. Are women's expectations and preferences for intrapartum care affected by the model of care on offer? *Br J Obstet Gynaecol* 2004;**111**:550–60.
121. Ibrahim SA, Siminoff LA, Burant CJ, Kwok CK. Differences in expectations of outcome mediate African American/white patient differences in 'willingness' to consider joint replacement. *Arthritis Rheum* 2002;**46**:2429–35.
122. Kallestrup P, Bro F. Parents' beliefs and expectations when presenting with a febrile child at an out-of-hours general practice clinic. *Br J Gen Pract* 2003;**53**:43–4.
123. Karydis A, Komboli-Kodovazeniti M, Hatzigeorgiou D, Panis V. Expectations and perceptions of Greek patients regarding the quality of dental health care. *Int J Qual Health Care* 2001;**13**:409–16.
124. Koller M, Lorenz W, Wagner K, Keil A, Trott D, Engenhardt-Cabillic R, *et al.* Expectations and quality of life of cancer patients undergoing radiotherapy. *J R Soc Med* 2000;**93**:621–8.
125. Kravitz RL. Measuring patients' expectations and requests. *Ann Intern Med* 2001;**134**:881–8.
126. Lam TP. Chinese fisherman's expectations on medications. *Subst Use Misuse* 2003;**38**:85–96.
127. Larsen T, Nguyen TH, Munk M, Svendsen L, Teisner L. Ultrasound screening in the 2nd trimester. The pregnant woman's background knowledge, expectations, experiences and acceptances. *Ultrasound Obstet Gynecol* 2000;**15**:383–6.
128. Lelliott P, Beevor A, Hogman G, Hyslop J, Lathlean J, Ward M. Carers' and users' expectations of services – user version (CUES-U): a new instrument to measure the experience of users of mental health services. *Br J Psychiatr* 2001;**179**:67–72.
129. Lindrooth RC, Hoerger TJ, Norton EC. Expectations among the elderly about nursing home entry. *Health Serv Res* 2000;**35**:1181–202.
130. Melzer D, McWilliams B, Brayne C, Johnson T, Bond J. Socioeconomic status and the expectations of disability in old age: estimates for England. *J Epidemiol Community Health* 2000;**54**:286–92.
131. Mohr DC, Boudewyn AC, Likosky W, Levine E, Goodkin DE. Injectable medication for the treatment of multiple sclerosis: the influence of self-efficacy expectations and injection anxiety on adherence and ability to self-inject. *Ann Behav Med* 2001;**23**:125–32.

132. Montgomery DA, Krupa K, Wilson C, Cooke TG. Patients' expectations for follow-up in breast cancer – a preliminary, questionnaire based study. *Breast* 2008;**17**:347–52.
133. Morlock RJ, Lafata JE, Nerenz D, Schiller M, Rosenblum M. Expectations, outcomes, and medical costs in patients with low back pain referred to physical therapy. *Dis Manag* 2002;**5**:185–8.
134. Myers SS, Phillips RS, Davis RB, Cherkin DC, Legedza A, Kaptchuk TJ, *et al.* Patients expectations as predictors of outcome in patients with acute low back pain. *J Gen Intern Med* 2007;**23**:148–53.
135. Peremans L, Hermann I, Avonts D, Van Royen P, Denekens J. Contraceptive knowledge and expectations by adolescents: an explanation by focus groups. *Patient Educ Couns* 2000;**40**:133–41.
136. Price M, Anderson P, Henrich CC, Rothbaum BO. Greater expectations: using hierarchical linear modelling to examine expectancy for treatment outcome as a predictor of treatment response. *Behav Ther* 2008;**39**:398–405.
137. Rao JK, Weinberger M, Anderson LA, Kroenke K. Predicting reports of unmet expectations among rheumatology patients. *Arthritis Rheum* 2004;**51**:215–21.
138. Rao JK, Weinberger M, Kroenke K. Visit-specific expectations and patient-centred outcomes. *Arch Fam Med* 2000;**9**:1148–55.
139. Richardson J. What patients expect from complementary therapy: a qualitative study. *Am J Public Health* 2004;**94**:1049–53.
140. Ruiz-Moral R, Pérula de Torres LA, Jaramillo-Martin I. The effect of patients' met expectations on consultation outcomes. A study with family medicine residents. *J Gen Intern Med* 2007;**22**:86–91.
141. Sarkisian CA, Hays RD, Mangione CM. Do older adults expect to age successfully? The association between expectations regarding aging and beliefs regarding healthcare seeking among older adults. *J Am Geriatr Soc* 2002;**50**:1837–43.
142. So DW. Acupuncture outcomes, expectations, patient–provider relationship and the placebo effect: implications for health promotion. *Am J Public Health* 2002;**92**:1662–7.
143. Spahr CD, Flugstad NA, Brousseau DC. The impact of a brief expectation survey on parental satisfaction in the pediatric emergency department. *Acad Emerg Med* 2006;**13**:1280–7.
144. Spear J. A new measure of consumer expectations, perceptions and satisfaction for patients and carers of older people with mental health problems. *Australas Psychiatry* 2003;**11**:330–3.
145. Stone DA, Kerr CE, Jacobson, Conboy LA, Kaptchuk TJ. Patient expectations in placebo-controlled randomized clinical trials. *J Eval Clin Pract* 2005;**11**:77–84.
146. Svensson I, Sjöström B, Haljamäe H. Influence of expectations and actual pain experiences in satisfaction with postoperative pain management. *Eur J Pain* 2001;**5**:125–33.
147. Tähepöld H, van den Brink-Muinen A, Maaroo H-I. Patient expectations from consultation with family physician. *Croat Med J* 2006;**47**:148–54.
148. Tollén A, Fredriksson C, Kamwendo K. Elderly persons' expectations of day-care rehabilitation. *Scand J Occup Ther* 2007;**14**:173–82.
149. Westburg NG, Guindon MH. Hope, attitudes, emotions and expectations in healthcare providers of services to patients infected with HIV. *AIDS Behav* 2004;**8**:1–8.
150. Winterling J, Glimelius B, Nordin K. The importance of expectations on the recovery period after cancer treatment. *Psychooncology* 2008;**17**:190–8.

151. Young J, Tschudi P, Périat P, Hugenschmidt C, Welge-Lüssen A, Bucher HC. Patients' expectations about the benefit of antibiotic treatment: lessons from a randomised controlled trial. *Forsch Komplement Klass Naturheilkd* 2005;**12**:347–9.
152. Zebiene E, Razgauskas E, Basys V, Baubiniene A, Gurevicius R, Padaiga Z, *et al.* Meeting patient's expectations in primary care consultations in Lithuania. *Int J Qual Health Care* 2004;**16**:83–9.
153. Zebracki K, Drotar D. Outcome expectancy and self-efficacy in adolescent asthma self-management. *Child Health Care* 2004;**33**:133–49.
154. Baron-Epel O, Dushenat M, Friedman N. Evaluation of the consumer model: relationship between patients' expectations, perceptions and satisfaction with care. *Int J Qual Health Care* 2001;**13**:317–23.
155. Billittier AJ, Lerner EB, Tucker W, Lee J. The lay public's expectations of prearrival instructions when dialling 9-1-1. *Prehosp Emerg Care* 2000;**4**:234–7.
156. Cooke T, Watt D, Wertzler W, Quan H. Patient expectations of emergency department care: phase II – a cross-sectional survey. *Can J Emerg Med* 2006;**8**:148–57.
157. Couchman GR, Forjuoh SN, Rascoe TG, Reis MD, Koehler B, van Walsum KL. E-mail communications in primary care: what are patients' expectations for specific test results? *Int J Med Inform* 2005;**74**:21–30.
158. Dawn AG, Lee PP. Patient expectations for medical and surgical care: a review of the literature and applications to ophthalmology. *Surv Ophthalmol* 2004;**49**:513–24.
159. Flynn D, Gregory P, Makki H, Gabbay M. Expectations and experiences of eHealth in primary care: a qualitative practice-based investigation. *Intern J Med Inform* 2009;**78**:588–604.
160. Fromentin O, Laure Boy-Lefèvre M. Quality of prosthetic care: patients' level of expectation, attitude and satisfaction. *Eur J Prosthodont Restor Dent* 2001;**9**:123–9.
161. Goldberg A, Pliskin JS, Peterburg Y. Gaps in expectations among clients of secondary medical services in the military system compared with the civilian system as a satisfaction index. *Mil Med* 2003;**168**:274–9.
162. Heymans MW, de Vet HCW, Knol DL, Bongers PM, Koes BW, van Mechlen W. Workers' beliefs and expectations affect return to work over 12 months. *J Occup Rehabil* 2006;**16**:685–95.
163. Hildingsson I, Waldenström U, Rådestad I. Women's expectations on antenatal care as assessed in early pregnancy: number of visits, continuity of caregiver and general content. *Acta Obstet Gynecol Scand* 2002;**81**:118–25.
164. Hooper R, Rona RJ, French C, Jones M, Wessely S. Unmet expectations in primary care and the agreement between doctor and patient: a questionnaire study. *Health Expect* 2005;**8**:26–33.
165. Iannotti RJ, Schneider S, Nansel TR, Haynie DL, Plotnick LP, Clark LM, *et al.* Self-efficacy, outcome expectations and diabetes self-management in adolescents with type 1 diabetes. *J Dev Behav Pediatr* 2006;**27**:98–105.
166. Jerome D, Dehail P, Daviet J-C, Lamothe G, De Sèze M-P, Orgoozo J-M, *et al.* Stroke in the under-75s: expectations, concerns and needs. *Ann Phys Rehabil Med* 2009;**52**:525–37.
167. Kelman L. The broad treatment expectations of migraine patients. *J Headache Pain* 2006;**7**:403–6.

168. Kim SH. Older people's expectations regarding ageing, health-promoting behaviour and health status. *J Adv Nurs* 2009;**65**:84–91.
169. Kolber, CT, Zipp G, Glendinning D, Mitchell JJ. Patient expectations of full-body CT screening. *AJR Am J Roentgenol* 2007;**188**:W297–304.
170. Kucukarslan SN, Nadkarni A. Evaluating medication-related services in a hospital setting using the disconfirmation of expectations model of satisfaction. *Res Soc Admin Pharm* 2008;**4**:12–22.
171. Leung KK, Silvius JL, Pimlott N, Dalziel W, Drummond N. Why health expectations and hopes are different: the development of a conceptual model. *Health Expect* 2009;**12**:347–60.
172. Levy JM. Women's expectations of treatment and care after an antenatal HIV diagnosis in Lilongwe, Malawi. *Reprod Health Matters* 2009;**17**:152–61.
173. Linde K, Witt CM, Streng A, Weidenhammer W, Wagenpfeil S, Brinkhaus B, *et al.* The impact of patient expectations on outcomes in four randomized controlled trials of acupuncture in patients with chronic pain. *Pain* 2007;**128**:264–71.
174. Llewellyn CD, McGurk M, Weinman J. Striking the balance: a qualitative pilot study examining the role of information on the development of expectations in patients treated for head and neck cancer. *Psychol Health Med* 2005;**10**:180–93.
175. Mahomed NN, Liang MH, Cook EF, Daltroy LH, Portin PR, Fossel AH, *et al.* The importance of patient expectations in predicting functional outcomes after total joint arthroplasty. *J Rheumatol* 2002;**29**:1273–9.
176. Mannion AF, Junge A, Elfering A, Dvorak J, Porchet F, Grob D. Great expectations. Really the novel predictor of outcome after spinal surgery? *Spine* 2009;**34**:190–9.
177. Mawajdeh SM, Daabseh KA, Nasir MJ, Al-Qutob RJ. Patient expectation and satisfaction in different hospital in Irbid, Jordan. *Saudi Med J* 2001;**22**:625–9.
178. Meng K, Zdrahal-Urbaneck J, Frank S, Holderied A, Vogel H. Patients' expectations, motivation and multi-dimensional subjective and objective socio-medical success in medical rehabilitation measures. *Int J Rehabil Res* 2006;**29**:65–9.
179. Münstedt K, von Georgi R, Eichel V, Kullmer U, Zygmunt M. Wishes and expectations of pregnant women and their partners concerning delivery. *J Perinat Med* 2000;**28**:482–90.
180. Murray CJL, Kawabata K, Valentine N. People's experience versus people's expectations. *Health Affair* 2001;**20**:21–4.
181. Noble LM, Douglas BC, Newman SP. What do patients expect of psychiatric services? A systematic and critical review of empirical studies. *Soc Sci Med* 2001;**52**:985–98.
182. O'Connor SJ, Trinh HQ, Shewchuk RM. Perceptual gaps in understanding patient expectations for health care service quality. *Health Care Manage Rev* 2000;**25**:7–23.
183. Porter EJ. Older widows' expectations of home care nurses. *Home Health Care Serv Q* 2005;**24**:79–93.
184. Rankinen S, Salanterä S, Heikkinen K, Johansson K, Kaljonen A, Virtanen H, *et al.* Expectations and received knowledge by surgical patients. *Int J Qual Health Care* 2007;**19**:113–19.
185. Roberts D, Hirschman D, Scheltema K. Adult and pediatric CPR: attitudes and expectations of health professionals and laypersons. *Am J Emerg Med* 2000;**18**:465–8.
186. Saleem T, Khalid U, Qidwai W. Geriatric patients' expectations of their physicians: findings from a tertiary care hospital in Pakistan. *BMC Health Serv Res* 2009;**9**:205.

187. Saunders GH, Lewis MS, Forsline A. Expectations, prefitting counselling and hearing aid outcome. *J Am Acad Audiol* 2009;**20**:320–34.
188. Shelke AR, Roscoe JA, Morrow GR, Colman LK, Banerjee TK, Kirshner JJ. Effect of a nausea expectancy manipulation on chemotherapy-induced measure: a University of Rochester Cancer Center Community Clinical Oncology Program Study. *J Pain Symptom Manage* 2008;**35**:381–7.
189. Sigrell H. Expectations of chiropractic patients: the construction of questionnaire. *J Manip Physiol Ther* 2001;**24**:440–4.
190. Sigrell H. Expectations of chiropractic treatment: what are the expectations of new patients consulting a chiropractor, and do chiropractors and patients have similar expectations? *J Manip Physiol Ther* 2002;**25**:300–5.
191. Toma G, Triner W, McNutt L-A. Patient satisfaction as a function of emergency department previsit expectations. *Ann Emerg Med* 2009;**54**:360–7.
192. Velanovich V, Kamolz T, Pointner R, Contini S. Qualitative analysis of the expectations of antireflux surgical outcomes of patients from different nationalities. *Dis Esophagus* 2006;**19**:88–93.
193. Weiss MC, Deave T, Peters TJ, Salisbury C. Perceptions of patient expectation for an antibiotic: a comparison of walk-in centre nurses and GPs. *Fam Pract* 2004;**21**:492–9.
194. White JG, Slabber J, Schreuder A. Patient management: measuring patients' expectations and perceptions of service quality in a dental training hospital. *S Afr Dent J* 2001;**56**:203–8.
195. Wilcox S, Castro CM, King AC. Outcome expectations and physical activity participation in two samples of older women. *J Health Psychol* 2006;**11**:65–77.
196. Wilhelm K, Wedgwood L, Malhi G, Mitchell P, Austin M-P, Kotze B, *et al*. Great expectations: factors influencing patient expectations and doctors recommendations at a mood disorders unit. *J Affect Disord* 2005;**88**:187–92.
197. Yee A, Adjei N, Do J, Ford M, Finkelstein J. Do patient expectations of spinal surgery relate to functional outcome? *Clin Orthop Relat Res* 2008;**466**:1154–61.
198. Bell RA, Kravitz RL, Thom D, Krupat E, Azari R. Unmet expectations for care and the patient–physician relationship. *J Gen Intern Med* 2002;**17**:817–24.
199. Davis MJ, Addis ME. Treatment expectations, experiences and mental health functioning predict attrition status in behavioural medicine groups. *Ir J Psychol* 2002;**23**:1–2, 37–51.
200. Dowswell G, Dowswell T, Lawler J, Green J, Young J. Patients' and caregivers' expectations and experiences of a physiotherapy intervention 1 year following stroke: a qualitative study. *J Eval Clin Pract* 2002;**8**:361–5.
201. Engel C, Hamilton NA, Potter PT, Zautra AJ. Impact of two types of expectancy on recovery from total knee replacement surgery (TKR) in adults with osteoarthritis. *Behav Med* 2004;**30**:113–23.
202. Mangione-Smith R, Elliott MN, Stivers T, McDonald L, Heritage J, McGlynn EA. Racial/ethnic variation in parent expectations for antibiotics: implications for public health campaigns. *Pediatrics* 2004;**113**:e385–94.
203. Montgomery GH, Bovbjerg DH. Presurgery distress and specific response expectancies predict postsurgery outcomes in surgery patients confronting breast cancer. *Health Psychol* 2004;**23**:381–7.

204. Vardaki MA, Philalithis AE, Vlachonikolis I. Factors associated with the attitudes and expectations of patients suffering from β -thalassaemia: a cross-sectional study. *Scand J Caring Sci* 2004;**18**:177–87.
205. Vogel DL, Wester SR, Wei M, Boysen GA. The role of outcome expectations and attitudes on decisions to seek professional help. *J Couns Psychol* 2005;**52**:459–70.
206. Frank R. Homeopath & patient – a dyad of harmony? *Soc Sci Med* 2002;**55**:1285–96.
207. Mangione-Smith R, Stivers T, Elliott M, McDonald L, Heritage J. Online commentary during the physical examination: a communication tool for avoiding inappropriate antibiotic prescribing? *Soc Sci Med* 2003;**56**:313–20.
208. Arthur V, Clifford C. Rheumatology: the expectations and preferences of patients for their follow-up monitoring care: a qualitative study to determine the dimensions of patient satisfaction. *J Clin Nurs* 2004;**13**:234–42.
209. Beattie A, Shaw A, Kaur S, Kessler D. Primary-care patients' expectations and experiences of online cognitive behavioural therapy for depression: a qualitative study. *Health Expect* 2009;**12**:45–59.
210. Beck SL. An ethnographic study of factors influencing cancer pain management in South Africa. *Cancer Nurse* 2000;**23**:91–9.
211. Bellini D, Dos Santos MBF, de Paula Prisco da Cunha V, Marchini L. Patients' expectations and satisfaction of complete denture therapy and correlation with locus of control. *J Oral Rehabil* 2009;**36**:682–6.
212. Bostan S, Acuner T, Yilmaz G. Patient (customer) expectations in hospitals. *Health Policy* 2007;**82**:62–70.
213. Bower Baca C, Cheng EM, Spencer SS, Vassar S, Vickrey BG, for the multicenter Study of Epilepsy Surgery. Racial differences in patient expectations prior to resective epilepsy surgery. *Epilepsy Behav* 2009;**15**:452–5.
214. Bramesfeld A, Klippel U, Seidel G, Schwartz FW, Dierks ML. How do patients expect the mental health service system to act? Testing the WHO responsiveness concept for its appropriateness in mental health care. *Soc Sci Med* 2007;**65**:880–9.
215. Bramesfield A, Wedegärtner F, Elgeti H, Bisson S. How does mental health care perform in respect to service users' expectations? Evaluating inpatient and outpatient care in Germany with the WHO responsiveness concept. *BMC Health Serv Res* 2007;**7**:99.
216. Cash TF. Attitudes, behaviors and expectations of men seeking medical treatment for male pattern hair loss: results of a multinational survey. *Curr Med Res Opin* 2009;**25**:1811–20.
217. Clark L, Redman RW. Mexican immigrant mothers' expectations for children's health services. *Western J Nurs Res* 2007;**29**:670–90.
218. Davidge K, Bell R, Ferguson P, Turcotte R, Wunder J, Davis AM. Patient expectations for surgical outcome in extremity soft tissue sarcoma. *J Surg Oncol* 2009;**100**:375–81.
219. Dawn AG, Freedman SF, Lee PP, Enyedi LB. Parents' expectations regarding their children's eye care: interview results. *Am J Ophthalmol* 2003;**136**:797–804.
220. Delsignore A, Schnyder U. Control expectancies as predictors of psychotherapy outcome: a systematic review. *Br J Clin Psychol* 2007;**46**:467–83.
221. Egbunike JN, Shaw C, Bale S, Elwyn G, Edwards A. Understanding patient experience of out-of-hours general practitioner services in South Wales: a qualitative study. *Emerg Med J* 2008;**25**:649–54.

222. Eisler T, Svensson O, Tengström A, Elmstedt E. Patient expectation and satisfaction in revision total hip arthroplasty. *J Arthroplasty* 2002;**17**:457–62.
223. Escudero-Carretero M, Prieto-Rodríguez MÁ, Fernández- Fernández I, March-Cerdá JC. Expectations held by type 1 and 2 diabetes mellitus patients and their relatives: the importance of facilitating the health-care process. *Health Expect* 2007;**10**:337–49.
224. Gandhi R, Davey R, Mahomed N. Patient expectations predict greater pain relief with joint arthroplasty. *J Arthroplasty* 2009;**24**:716–21.
225. Gibbons MBC, Crits-Christoph P, de la Cruz C, Barber JP, Siqueland L, Gladis M. Pretreatment expectations, interpersonal functioning and symptoms in the prediction of the therapeutic alliance across supportive-expressive psychotherapy and cognitive therapy. *Psychother Res* 2003;**13**:59–76.
226. Goldschmidt D, Schmidt L, Krasnik A, Christensen U, Groenvold M. Expectations to and evaluation of a palliative home-care team as seen by patients and carers. *Support Cancer Care* 2006;**14**:1232–40.
227. Glass CR, Arnkoff DB, Shapiro SJ. Expectations and preferences. *Psychotherapy* 2001;**38**:455–61.
228. González M, Escobar A, Herrera C, Garcia L, Sarasqueta C, Quintana JM, *et al.* Patient expectations in health related quality of life outcomes in total joint replacement. *Value Health* 2008;**11**:A551–2.
229. Greenberg RP, Constatino MJ, Bruce N. Are patient expectations still relevant for psychotherapy process and outcome? *Clin Psychol Rev* 2006;**26**:657–78.
230. Heikkinen K, Leino-Kilpi H, Hiltunen A, Johansson K, Kaljonen A, Rankinen S, *et al.* Ambulatory orthopaedic surgery patients' knowledge expectations and perceptions of received knowledge. *J Adv Nurs* 2007;**60**:270–8.
231. Janssen C, Ommen O, Pfaff H. Combining patient satisfaction, fulfilment of expectations and importance – an integrative approach in quality assurance. *Eur J Public Health* 2005;**15**(Suppl. 1):139–40.
232. Hickok JT, Roscoe JA, Morrow GR. The role of patients' expectations in the development of anticipatory nausea related to chemotherapy for cancer. *J Pain Symptom Manage* 2001;**22**:843–50.
233. Jackson JL, Kroenke K. The effect of unmet expectations among adults presenting with physical symptoms. *Ann Intern Med* 2001;**134**:889–97.
234. Jones F, Harris P, Waller H, Coggins A. Adherence to an exercise prescription scheme: the role of expectations, self-efficacy, stage of change and psychological well-being. *Br J Health Psych* 2005;**10**:359–78.
235. Joyce AS, Ogrodniczuk JS, Piper WE, McCallum M. The alliance as mediator of expectancy effects in short-term individual therapy. *J Consult Clin Psychol* 2003;**7**:672–9.
236. Kadzielski J, Malhotra LR, Zurakowski D, Lee S-GP, Jupiter JB, Ring D. Evaluation of preoperative expectations and patient satisfaction after carpal tunnel release. *J Hand Surg* 2008;**33A**:1783–8.
237. Kalauokalani D, Cherkin DC, Sherman KJ, Koepsell TD, Deyo RA. Lessons from a trial of acupuncture and massage for low back pain. Patient expectations and treatment effects. *Spine* 2001;**26**:1418–24.

238. Kapoor S, Shaw WS, Pransky G, Patterson W. Initial patient and clinician expectations of return to work after acute onset of work-related low back pain. *J Occup Environ Med* 2006;**48**:1173–80.
239. Kumar RN, Kirking DM, Hass SL, Vinokur AD, Taylor SD, Atkinson MJ, McKercher PL. The association of consumer expectations, experiences and satisfaction with newly prescribed medications. *Qual Life Res* 2007;**16**:1127–36.
240. Lee SJ, Loberiza FR, Rizzo JD, Soiffer RJ, Antin JH, Weeks JC. Optimistic expectations and survival after hematopoietic stem cell transplantation. *Biol Blood Marrow Transplant* 2003;**9**:389–96.
241. Lindsay GM, Smith N, Hanlon P, Wheatley DJ. Coronary artery disease patients' perception of their health and expectations of benefit following coronary artery bypass grafting. *J Adv Nurs* 2000;**32**:1412–21.
242. Lurie JD, Berven SH, Gibson-Chambers J, Tosteson T, Tosteson A, Hu SS, *et al.* Patient preferences and expectations for care. Determinants in patients with lumbar intervertebral disc herniation. *Spine* 2008;**33**:2663–8.
243. Lytsy P, Westerling R. Patient expectations on lipid-lowering drugs. *Patient Educ Couns* 2007;**67**:143–50.
244. McCarthy SC, Lyons AC, Weinman J, Talbot R, Purnell D. Do expectations influence recovery from oral surgery? An illness representation approach. *Psychol Health* 2003;**18**:109–26.
245. Mancuso CA, Jout J, Salvati EA, Sculco TP. Fulfillment of patients' expectations for total hip arthroplasty. *J Bone Joint Surg Am* 2009;**91**:2073–8.
246. Mancuso CA, Rincon M, McCulloch CE, Charlson ME. Self-efficacy, depressive symptoms, and patients' expectations predict outcomes in asthma. *Med Care* 2001;**39**:1326–38.
247. Manthorpe J, Clough R, Cornes M, Bright L, Moriarty J, Iliffe S, OPRI (Older People Researching Social Issues). Four years on: the impact of the National Service Framework for Older People on the experiences, expectations and views of older people. *Age Ageing* 2007;**36**:501–7.
248. Meijerink HJ, Brokelman RBG, van Loon CJ, van Kampen A, de Waal Malefijt MC. Surgeon's expectations do not predict the outcome of a total knee arthroplasty. *Arch Orthop Trauma Surg* 2009;**129**:1361–5.
249. Meyer-Reed EJ, Reeve KR, Wadman MC, Mulleman RL, Tran TP. Patient expectation in a freestanding emergency department. *Ann Emerg Med* 2008;**52**:S112–3.
250. Mondloch MV, Cole DC, Frank JW. Does how you do depend on how you think you'll do? A systematic review of the evidence for a relation between patients' recovery expectations and health outcomes. *Can Med Assoc J* 2001;**165**:174–9.
251. O'Malley KJ, Roddey TS, Gartsman GM, Cook KF. Outcome expectancies, functional outcomes and expectancy fulfilment for patients with shoulder problems. *Med Care* 2004;**42**:139–46.
252. Ogden J, Jain A. Patients' experiences and expectations of general practice: a questionnaire study of differences by ethnic group. *Br J Gen Pract* 2005;**55**:351–6.
253. Oliver IN, Taylor AE, Whitford HS. Relationships between patients' pre-treatment expectations of toxicities and post chemotherapy experiences. *Psychooncology* 2005;**14**:25–33.
254. Özsoy SA, Özgür, Durmaz Akyol A. Patient expectation and satisfaction with nursing care in Turkey: a literature review. *Int Nurs Rev* 2007;**54**:249–55.

255. Palfreyman SJ, Drewery-Carter K, Rigby K, Michaels JA, Tod AM. Varicose veins: a qualitative study to explore expectations and reasons for seeking treatment. *J Clin Nurs* 2004;**13**:332–40.
256. Paulson-Karlsson G, Nevenon L, Engström I. Anorexia nervosa: treatment satisfaction. *J Fam Ther* 2006;**28**:293–306.
257. Parsons S, Harding G, Breen A, Foster N, Pincus T, Vogel S, *et al.* The influence of patients' and primary care practitioners' beliefs and expectations about chronic musculoskeletal pain on the process of care. *Clin J Pain* 2007;**23**:91–8.
258. Peck BM, Asch DA, Goold SD, Roter DL, Ubel PA, McIntyre LM, *et al.* Measuring patient expectations. Does the instrument affect satisfaction or expectations? *Med Care* 2001;**39**:100–8.
259. Perimenis P, Roumeguere T, Heidler H, Roos E, Belger M, Schmitt H. Evaluation of patient expectations and treatment satisfaction after 1-year tadalafil therapy for erectile dysfunction: the DETECT study. *J Sex Med* 2009;**6**:257–67.
260. Razmjou H, Finkelstein JA, Yee A, Holtby R, Vidmar M, Ford M. Relationship between preoperative patient characteristics and expectations in candidates for total knee arthroplasty. *Physiother Can* 2009;**61**:38–45.
261. Roscoe JA, Hickok JT, Morrow GR. Patient expectations as predictor of chemotherapy-induced nausea. *Ann Behav Med* 2000;**22**:121–6.
262. Rosenberger PH, Jokl P, Cameron A, Ickovics JR. Shared decision making, preoperative expectations and postoperative reality: differences in physician and patient predictions and ratings of knee surgery outcomes. *Arthroscopy* 2005;**21**:562–9.
263. Schneider U, Kroemer-Olbrisch T, Wedegärtner F, Cimander KF, Wetterling T. Wishes and expectations of alcoholic patients concerning their therapy. *Alcohol Alcohol* 2004;**39**:141–5.
264. Shapiro J, Mosqueda L, Botros D. A caring partnership. Expectations of ageing persons with disabilities for their primary care doctors. *Fam Pract* 2003;**20**:635–41.
265. Symon Z, Daignaut S, Symon R, Dunn RL, Sanda MG, Sandler HM. Measuring patients' expectations regarding health-related quality-of-life outcomes associated with prostate cancer surgery or radiotherapy. *Urology* 2006;**68**:1224–9.
266. Szeinbach SL, Barnes JH, Summers KH, Lenox SM. Development of an instrument to assess expectations of and preference for an insulin injection pen compared with the vial and syringe. *Clin Ther* 2004;**26**:590–7.
267. Venkataramanan V, Gignac MA, Mahomed NN, Davis AM. Expectations of recovery from revision knee replacement. *Arthritis Rheum* 2006;**55**:314–21.
268. Victorson DV, Peterman AH, Kamminer LS. HRQL and patient expectations in a mixed diagnostic autologous stem cell transplant sample. *Psychooncology* 2004;**13**:S1–233.
269. Wiles R, Ashburn A, Payne S, Murphy C. Patients' expectations of recovery following stroke: a qualitative study. *Disabil Rehabil* 2002;**24**:841–50.
270. Wu S-FV, Courtney M, Edwards H, McDowell J, Shortridge-Baggett LM, Chan P-J. Self-efficacy, outcome expectations and self-care behaviour in people with type 2 diabetes in Taiwan. *J Clin Nurs* 2007;**16**:250–7.
271. Delgado A, López-Fernández LA, de Dios Luna J, Gil N, Jiménez M, Puga A. Patient expectations are not always the same. *J Epidemiol Community Health* 2008;**62**:427–34.

272. Parente J, White P, Frackowiak RSJ, Lewith G. Expectancy and belief modulate the neuronal substrates of pain treated by acupuncture. *Neuroimage* 2005;**25**:1161–7.
273. Kelly GA. *The psychology of personal constructs: a theory of personality*. New York, NY: Norton; 1955.
274. Fransella F, Bell R, Bannister D. *A manual for repertory grid technique*, 2nd edn. Chichester: Wiley; 2004.
275. Dijksterhuis GB, Gower JC. The interpretation of generalised procrustes analysis and allied methods. *Food Qual Prefer* 1991;**3**:67–87.
276. Raats M, Shepherd R. An evaluation of the use and perceived appropriateness of milk using the repertory grid method and the ‘item by use’ appropriateness method. *Food Qual Prefer* 1991–2;**3**:89–100.
277. Rowe G, Lambert N, Bowling A, Ebrahim, S, Thomson R. Ascertaining patients’ preferences for treatment for angina using a modified repertory grid method. *Soc Sci Med* 2005;**60**:2585–95.
278. Bowling A, Reeves B, Rowe G. Patient preferences for treatment for angina: an overview of findings from three studies. *J Health Serv Res Policy* 2008;**13**(Suppl. 3):104–8.
279. Poland B. Transcription quality as an aspect of rigour in qualitative research. *Qual Inq* 1995;**1**:290–310.
280. Halcomb EJ, Davidson PM. Is verbatim transcription of interview data always necessary. *Appl Nurs Res* 2006;**19**:38–42.
281. Braun V, Clarke, V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;**3**:77–101.
282. Wellard S, McKenna L. Turning tapes into text: issues surrounding the transcription of interviews. *Contemp Nurse* 2001;**11**:180–6.
283. Degner LF, Sloan JA. Decision making during serious illness: what role do patients really want to play? *J Clin Epidemiol* 1992;**45**:941–50.
284. Bowling A, Bannister D, Sutton S, Evans O, Windsor J. A multidimensional model of the quality of life in older age. *Aging Ment Health* 2002;**6**:355–71.
285. Ware JE, Snow KK, Kosinski M, Gandek B. *SF-36 health survey: manual and interpretation guide*. Boston, MA: The Health Institute, New England Medical Center; 1997.
286. Kaiser H. A second generation Little Jiffy. *Psychometrika* 1970;**35**:401–15.
287. Nunnally J. *Psychometric theory*. New York, NY: McGraw-Hill; 1978.
288. Tabachnick BG, Fidell LS. *Using multivariate statistics*. New York, NY: HarperCollins College Publishers; 1996.
289. Nunnally JC, Bernstein IH. *Psychometric theory*, 2nd edn. New York, NY: McGraw Hill; 1994.
290. Kaiser H. An index of factorial simplicity. *Psychometrika* 1974;**39**:31–6.
291. Bartlett MS. A note on the multiplying factors for various chi square approximations. *J R Stat Soc* 1954;**16**(B):296–8.
292. Hall JA, Dornan MC. What patients like about their medical care and how often they are asked: a meta-analysis of the satisfaction literature. *Soc Sci Med* 1988;**27**:935–9.
293. Salisbury C, Wallace M, Montgomery AA. Patients’ experience and satisfaction in primary care: secondary analysis using multilevel modelling. *Br Med J* 2010;**341**:c4783.

294. Andrykowski MA, Brady MJ, Greiner CB, Altmaier EM, Burish TG, Antin JH, *et al.* 'Returning to normal' following bone marrow transplantation: outcome, expectations and informed consent. *Bone Marrow Transplant* 1995;**15**:573–81.
295. Metcalfe CJ. *An investigation of patients' expectations of outpatient physiotherapy for peripheral musculoskeletal conditions and their effect on treatment outcome.* PhD thesis. Hull: University of Hull; 2004.
296. Good MD, Good BJ, Nassi AJ. Patient requests in primary health care settings: development and validation of a research instrument. *J Behav Med* 1983;**6**:151–68.
297. Sanchez-Menegay C, Stalder H. Do physicians take into account patients' expectations? *J Gen Intern Med* 1994;**9**:404–6.
298. Marple RL, Kroenke K, Lucey CR, Wilder J, Lucas CA. Concerns and expectations in patients presenting with physical complaints. Frequency, physician perceptions and actions, and 2-week outcome. *Arch Intern Med* 1997;**157**:1482–8.
299. Jackson JL, Chamberlin J, Kroenke K. Predictors of patient satisfaction. *Soc Sci Med* 2001;**52**:609–20.
300. Axelrad KJ. *Locus of control and causal attributions as they relate to expectations for coping with a heart attack.* Doctoral dissertation. Los Angeles, CA: California School of Professional Psychology; 1981.
301. Creedy DK, Shochet IM, Horsfall J. Childbirth and the development of acute trauma symptoms: incidence and contributing factors. *Birth* 2000;**27**:104–11.
302. Gupton A, Beaton J, Sloan J, Bramadat I. The development of a scale to measure childbirth expectations. *Can J Nurs Res* 1991;**23**:35–47.
303. Heaman M, Beaton J, Gupton A, Sloan J. A comparison of childbirth expectations in high-risk and low-risk pregnant women. *Clin Nurs Res* 1992;**1**:252–65.
304. Beaton J, Gupton A. Childbirth expectations: a qualitative analysis. *Midwifery* 1990;**6**:133–9.
305. Green JM. Expectations and experiences of pain in labour: findings from a large prospective study. *Birth* 1993;**20**:65–72.
306. Green JM, Coupland VA, Kitzinger JV. Expectations, experiences and psychological outcomes of childbirth: a prospective study of 825 women. *Birth* 1990;**17**:15–24.
307. Slade P, MacPherson SA, Hume A, Maresh M. Expectations, experiences and satisfaction with labour. *Br J Clin Psychol* 1993;**32**:469–83.
308. Staniszewska S, Ahmed L. The concepts of expectation and satisfaction: do they capture the way patients evaluate their care? *J Adv Nurs* 1999;**29**:364–72.
309. Lampley-Dallas VT, Mold JW, Flori DE. Perceived needs of African-American caregivers of elders with dementia. *J Natl Med Assoc* 2001;**93**:47–57.
310. Turnbull A, Turbiville V, Turnbull HR. Evolution of family–professional partnerships. Collective first century. In JP Shonkoff, SJ Meisels, editors. *Early childhood intervention.* Cambridge: Cambridge University Press; 2000.
311. Wachs TD. *Necessary but not sufficient.* Washington, DC: American Psychological Association; 2000.
312. Strickland BR. Internal–external expectancies and health related behaviours. *J Consult Clin Psychol* 1978;**46**:1192–211.

313. Skargren EI, Oberg BE. Predictive factors for a 1-year outcome of low back and neck pain in patients treated in primary care: comparison between the treatment strategies chiropractic and physiotherapy. *Pain* 1998;77:201–7.
314. Dozois DJA, Westra HA. Development of the Anxiety Change Expectancy Scale and validation in college, community and clinical samples. *Behav Res Ther* 2005;43:1655–72.
315. Kirsch I. *How expectancies shape experience*. Washington, DC: American Psychological Association; 1999.
316. Oliver RL. A cognitive model of the antecedents and consequences of satisfaction decisions. *J Mark Res* 1980;17:460–9.
317. Feather NT. Attribution of responsibility and valence of success and failure in relation to initial confidence and task performance. *J Pers Soc Psychol* 1969;13:129–44.
318. Oscar G. The influence of patient expectations on learning experience. *J CANNT* 1996;6:23–5.
319. Poole ME. *Youth: expectations and transitions*. London: Routledge and Kegan Paul; 1983.
320. Maddux JE. Expectancies and the social-cognitive perspective: basic principles, processes and variables. In Kirsch I, editor. *How expectancies shape experience*. Washington, DC: American Psychological Association; 1999.
321. Ditto PH, Hilton JL. Expectancy processes in the health care interaction sequence. *J Soc Issues* 1990;46:97–124.
322. O’Hair D, Allman J, Moore SD. A cognitive-affective model of relational expectations in the provider–patient context. *J Health Psychol* 1996;1:307–22.
323. Scheier MF, Carver CS. Dispositional optimism and physical well-being: the influence of generalised outcome expectancies on health. *J Pers* 1987;55:169–210.
324. Qidwai W, Ali SS, Baqir M, Ayub S. Patient expectations from an emergency medical service. *J Ayub Med Coll Abbotabad* 2005;17:3–6.
325. Carr-Hill RA. The measurement of patient satisfaction. *J Pub Health Med* 1992;14:236–49.
326. Cockburn J, Pit S. Prescribing behaviour in clinical practice: patients’ expectations and doctors’ perceptions of patients’ expectations – a questionnaire study. *BMJ* 1997;315:520–3.
327. Wijma K, Wijma B, Zar M. Psychometric aspects of the W-DEQ: a new questionnaire for the measurement of fear of childbirth. *J Psychosom Obstet Gynecol* 1998;19:84–97.
328. Britten N, Ukoumunne O. The influence of patients’ hopes of receiving a prescription on doctors’ perceptions and the decision to prescribe: a questionnaire survey. *BMJ* 1997;315:1506–10.
329. Himmel W, Lippert-Urbanke E, Kochen MM. Are patients more satisfied when they receive a prescription? The effect of patient expectations in general practice. *Scand J Prim Health Care* 1997;15:118–22.
330. Baker SA, Lyne P. Quality and patients’ expectations of a surgical admission. *Semin Perioper Nurs* 1996;5:257–61.
331. Otte D. Patients’ perspectives and experiences of day case surgery. *J Adv Nurs* 1996;23:1228–37.
332. Borkan J, Quirk M. Expectations and outcomes after hip fracture among the elderly. *Int J Aging Hum Dev* 1992;34:339–50.
333. Sheppard B. Patients’ views of rehabilitation. *Nurs Stand* 1994;9:27–30.

334. Joos SK, Hickam DH, Borders LM. Patients' desires and satisfaction in general medicine clinics. *Public Health Rep* 1993;**108**:751–9.
335. Seale C. Theories and studying the care of dying people. *BMJ* 1998;**317**:1518–20.
336. Frank AW. *The wounded storyteller: body, illness and ethics*. Chicago, IL: University of Chicago Press; 1995.
337. Hundley V, Ryan M, Graham W. Assessing women's preferences for intrapartum care. *Birth* 2001;**28**:254–63.
338. Hohlstein LA, Smith GT, Atlas JG. An application of expectancy theory to eating disorders: development and validation of measures of eating and dieting expectancies. *Psychol Assess* 1998;**10**:49–58.
339. Zeithaml VA, Parasuraman A, Berry LL. *Delivering quality service: balancing customer perceptions and expectations*. New York, NY: Free Press; 1990.
340. Jones RA. Expectations and illness. In DiMatteo MR, Friedman HS, editors. *Interpersonal issues in health care*. New York, NY: Academic Press; 1982.
341. Jones RA. Expectations and delay in seeking medical care. *J Soc Issues* 1990;**48**:81–95.
342. Macfarlane J, Holmes W, Macfarlane R, Britten N. Influence of patients' expectations on antibiotic management of acute lower respiratory tract illness in general practice: questionnaire study. *BMJ* 1997;**315**:1211–14.
343. Hamm RM, Hicks RJ, Bembem DA. Antibiotics and respiratory infections: are patients more satisfied when expectations are met? *J Fam Pract* 1996;**43**:56–62.
344. Scheier MF, Magovern GJ, Abbott RA *et al*. Dispositional optimism and recovery from coronary artery bypass surgery: the beneficial effects on physical and psychological well-being. *J Pers Soc Psychol* 1989;**57**:1024–40.
345. Taylor SE, Lichtman RR, Wood JV. Attributions, beliefs about control and adjustment to breast cancer. *J Pers Soc Psychol* 1984;**46**:489–502.
346. Carver CS, Pozo-Kaderman C, Harris SD, Noriega V, Scheier MF, Robinson DS, *et al*. Optimism versus pessimism predicts the quality of women's adjustment to early stage breast cancer. *Cancer* 1994;**73**:1213–20.
347. Frey D, Rogner O, Schuler M, Korte C, Havemann D. Psychological determinants in the convalescence of accident patients. *Basic Appl Soc Psychol* 1985;**6**:317–28.
348. Jussim L. Social reality and social problems: the role of expectancies. *J Soc Issues* 1990;**46**:9–34.
349. Hausman JA, Taylor WE. Panel data and unobservable individual effects. *Econometrica* 1981;**49**:1377–98.
350. Mohr DC, Goodkin DE, Likosky W, Gatto N, Neilley LK, Griffin C, *et al*. Therapeutic expectations of patients with multiple sclerosis on initiating interferon beta-1b: relationship to adherence to treatment. *Mult Scler* 1996;**2**:222–6.
351. Bandura A. Self-efficacy in human agency. *Am Psychol* 1982;**37**:122–47.
352. Strecher VJ, DeVellis BE, Becker MH, Rosenstock IM. The role of self-efficacy in achieving health behaviour change. *Health Educ Q* 1986;**13**:73–91.
353. Lutz GK, Butzlaff ME. The relation between expectations and outcomes in surgery for sciatica. *J Gen Intern Med* 1999;**14**:740–4.

354. Degroot KI, Boeke S, Passchier J. Preoperative expectations of pain and recovery in relation to postoperative disappointment in patients undergoing lumbar surgery. *Med Care* 1999;**37**:149–56.
355. Borkovec TD, Nau SD. Credibility of analogue therapy rationales. *J Behav Ther Exp Psychiatry* 1972;**3**:257–60.
356. Jackson J, Kroenke K, Chamberlin J. Effects of physician awareness of symptom-related expectations and mental disorders: a controlled trial. *Arch Fam Med* 1999;**8**:135–42.
357. Kroenke K. Patient expectations for care: how hidden is the agenda? *Mayo Clin Proc* 1998;**73**:191–3.
358. Sarkisian CA, Hays RH, Berry S, Mangione CM. Development, reliability and validity of the Expectations Regarding Aging (ERA-38) Survey. *Gerontologist* 2002;**42**:534–42.
359. Kiresuk TJ, Lund SH. Goal attainment scaling. In Attkisson CC, Hargreaves WA, Horowitz MJ, Soresen JE, editors. *Evaluation of human service programs*. New York, NY: Academic Press; 1978.
360. Trout A, Magnusson AR, Hedges JR. Patient satisfaction investigations and the emergency department: what does the literature say? *Acad Emerg Med* 2000;**7**:695–709.
361. van den Brink-Muinen A, Verhaak PF, Bensing JM, Bahrs O, Deveugele M, Gask L, *et al*. Doctor–patient communication in different European health care systems: relevance and performance from the patients’ perspective. *Patient Educ Couns* 2000;**39**:115–27.
362. Salmon P, Quine L. Patient’s intentions in primary care: measurement and preliminary investigation. *Psychol Health* 1989;**3**:103–10.
363. Bandura, A. Personal and collective efficacy in human adaptation and change. In Adair JG, Belanger D, KL Dion (Eds.), *Advances in psychological science: Vol 1*. Personal, social and cultural aspects (51–71). Hove: Psychology Press; 1998.
364. Reikert KA. Health benefits and medication adherence among adolescents with chronic health conditions. Case Western Reserve University, Cleveland, OH: Doctoral dissertation; 2000.
365. Watt D, Wertzler W, Brannan G. Patient expectations of emergency department care: phase I – a focus group study. *Can J Emerg Med* 2005;**7**:12–16.
366. Sarkisian CA, Steers WN, Hays RD, Mangione CM. Development of the 12-item Expectations Regarding Aging Survey. *Gerontologist* 2005;**45**:240–8.
367. Lee HS. A study on factors causing health concerns and the burden of medical expenses to the elderly. *J Korean Gerontol Soc* 2004;**24**:163–79.
368. Deck R, Zimmermann M, Kohlmann T, Raspe H. Rehabilitation-related expectations and motivations in patients with nonspecific backache. The development of a standardised questionnaire [in German]. *Rehabilitation* 1998;**37**:140–6.
369. Blendon RJ, Kim M, Benson JM. The public versus the World Health Organization on health system performance. *Health Aff* 2001;**20**:10–20.
370. Frank A, Eisenthal S, Lazare A. Are there social class differences in patients’ treatment conceptions? *Arch Gen Psychiatry* 1978;**35**:61–9.
371. Parasuraman A, Zeithaml V, Berry LL. SERVQUAL: a multiple item scale for measuring consumer perception of service quality. *J Retailing* 1988;**64**:12–40.
372. Cox R, Alexander G. Expectations about hearing aids and their relationship to fitting outcome. *J Am Acad Audiol* 2000;**11**:368–82.

373. Day H, Jutai J, Campbell K. Development of a scale to measure the psychological impact of assistive devices: lessons learned and the road ahead. *Disabil Rehabil* 2002;**24**:31–7.
374. Neff K, King AC. Exercise program adherence in older adults: the importance of achieving one's expected benefits. *Med Exerc Nutr Health* 1995;**4**:355–62.
375. AJ. Toward a theory-based analysis of behavioural maintenance. *Health Psychol* 2000;**19**(Suppl. 1):64–9.
376. King AC, Taylor CB, Haskell WL, DeBusk RF (1989). Influence of regular aerobic exercise on psychological health: A randomized, controlled trial of healthy middle-aged adults. *Health Psychol* 1989;**8**:305–324.
377. Kleinman A. *The illness narratives*. New York, NY: Basic Books; 1988.
378. Kirsch I. Response expectancy as a determinant of experience and behaviour. *Am Psychol* 1985;**40**:1189–202.
379. Kirsch I. *How expectancies shape experience*. Washington, DC: American Psychological Association; 1990.
380. Vogel DL, Wester SR. To seek help or not to seek help: the risks of self-disclosure. *J Couns Psychol* 2003;**50**:351–61.
381. Ajzen I, Fishbein M. *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ: Prentice Hall; 1980.
382. Mangione-Smith R, McGlynn EA, Elliott MN, Krogstad P, Brook RH. The relationship between perceived parental expectations and pediatric antimicrobial prescribing behavior. *Pediatrics* 1999;**103**:711–18.
383. Rust RT, Zahorik AJ, Keiningham TL. *Service marketing*. New York, NY: HarperCollins College Publishers; 1996.
384. World Health Organization (WHO). *World health report 2000: health systems: improving performance*. Geneva: WHO; 2000.
385. Bramesfield A, Wismar M, Mosebach K. Managing mental health service provision in the decentralized and multi-layered health and social care system of Germany. *J Ment Health Policy Econ* 2004;**7**:3–14.
386. Rust RT, Oliver RL. *Service quality: new direction in theory and practice*. Thousand Oaks, CA: Sage; 1994.
387. Elkin I, Shea MT, Watkins JT, Imber SD, Sotsky SM, Collins JF *et al*. National Institute of Mental Health Treatment of Depression Collaborative Research Program: General effectiveness of treatments. *Arch Gen Psychiat* 1989;**46**:971–82.
388. Leino-Kilpi H, Johansson K, Heikkinen K, Kalijone A, Virtanan S, Salanterä S. Patient education and health-related quality of life. Surgical hospital patients as a case in point. *J Nurs Care Qual* 2005;**20**:307–16.
389. Polivy J, Herman CP. If at first you don't succeed: false hopes of self-change. *Am Psychol* 2002;**57**:677–89.
390. Leventhal H, Meyer D, Nerenz D. The common-sense representation of illness danger. In Rachman S (Ed.), *Contributions to Medical Psychology*. Vol. 2. New York, NY: Pergamon Press; 1980.
391. Weinman J, Petrie KJ, Moss-Morris R, Horne R. The Illness Perception Questionnaire: A new method for assessing the cognitive representations of illness. *Psychology and Health* 1996;**11**:431–45.

392. McCarthy SC. *The role of expectations in surgical recovery: a critical review of the literature*. PhD thesis. Birmingham: Birmingham University; 2000.
393. Cassileth BR, Lusk EJ, Bodenheimer BJ, Farber JM, Jochimsen P, Morrin-Taylor B. Chemotherapeutic toxicity – the relationship between patients' pre-treatment expectations and post-treatment results. *Am J Clin Oncol* 1985;8:419–25.
394. Dunbar-Jacob J. *Perceived Therapeutic Efficacy Scale (PTES)*. Pittsburg, PA: Division of Nursing, University of Pittsburg; 2000.

Appendix 1

Copy of the project application form and research protocol

RESEARCH METHODOLOGY PROGRAMME

APPLICATION FORM

CONTENTS

- I. Summary of the proposal
- II. Details of proposed research
- III. Finance/Analysis of costs
- IV. *Curriculum vitae* of applicants
- V. Institutional *curriculum vitae*
- VI. Declarations

After completion this form should be returned to:

Nathalie Maillard
Assistant Programme Manager
NCCRM
Public Health Building (Room 107)
University of Birmingham
Edgbaston
Birmingham
B15 2TT

July 2007

I. SUMMARY OF PROPOSAL

BOX 1: TITLE OF PROJECT

The measurement of patients' expectations for health care

BOX 2: APPLICANTS (NOTE: Section IV should also be completed for ALL applicants)

A: LEAD APPLICANT

Surname(s): Bowling

Forename(s): Ann

Title: Professor of Health Services Research

Post(s) held - if not permanent, please indicate tenure Professor of Health Services Research

Official Address: Department of Primary Care and Population Sciences,
University College London, Hampstead Campus, Rowland Hill Street, London, NW3
2PF

B: OTHER APPLICANTS

List separately each individual involved in the research project, giving their name, title, and responsibility:

Name: Gene Rowe

Job title: **Head of Consumer Science**

Responsibility: Research (consumer sciences)

Official Address: Institute of Food Research (BBSRC), Norwich Research Park, Colney,
Norwich, Norfolk, NR4 7UA

Name: Amanda Howe

Job title: Professor of Primary Care

Responsibility: (1) Professor of Primary Care; (2) Course Director for Undergraduate Medical MB/BS Programme; (3) Consultant in Primary Care to Norwich PCT.

Official Address: School of Medicine, Health Policy and Practice, University of East Anglia, Norwich, NR4 7TJ

Supporters:

Clinical, research network, clinical governance and patient representatives who have re-confirmed by email that they still support this proposal [*note: I did not re-contact The Patients' Association in view of their conflict of interest*]:

1. Dr R.M. Pearson FRCP

Consultant Physician and Director of Clinical Governance

Harold Wood Hospital

Romford Essex RM3 OBE

2. Dr Steve Iliffe MRCGP

Reader in Primary Care, Department of Primary Care and Population Sciences, UCL

& Principle in General Practice,

executive member of Primary Care Research Network - Greater London

Lonsdale Medical Centre, 24 Lonsdale Road London NW6 6RR

3. Lynis Lewis

Director of Research Operations

North Central London Research Consortium

3rd Floor, West Wing

Camden PCT, St Pancras Hospital

4 St Pancras Way, London, NW1 0PE

www.noclor.nhs.uk

4. Ms. Heather Leishman

SPHERE Research Coordinator (PCT and UEA General Practice Research Network for Norwich and Waveney), Research and Development, Quality Development Team, and Mr David Stonehouse, Director of Finance Norfolk PCT

St. Andrews House Northside

St Andrews Business Park

Thorpe St Andrew Norwich, NR7 0HT

5. Members of The Patients Forum (approached by Diana Basterfield, project manager: www.thepatientsforum.org.uk):-

i) Ms Sally Brearley

Chair, Health Link (www.health-link.org.uk)

and

Patient and Public Involvement Project Worker

London Specialised Commissioning Group

(www.londonspecialisedcommissioning.nhs.uk)

& Visiting Senior Research Fellow in Patient and Public Involvement

Nursing Research Unit

King's College London (www.kcl.ac.uk/schools/nursing/nru)

Cornwall House

Waterloo Road London SE1

ii) Ms Kirstin McCarthy

Joint Chief Executive

Developing Patient Partnerships (formerly Doctor Patient Partnership)

Tavistock House

Tavistock Square London WC1H 9JP

6. Ms Oksana Hoile

Head of Research and Development/Manager Essex Primary Care Research Network
and Ms Carolyn Burden, Research Governance Manager,
Essex Primary Care R&D Office
N.E. Essex PCT. Kennedy House, Kennedy Way,
Clacton-on-Sea, Essex, CO15 4AB.

BOX 3: POTENTIAL REVIEWERS

Please suggest three people who we might approach to review this proposal. Please include their area of expertise and full contact details, including email:

Name: Emily Grundy

Job title: Professor of Demography

Official Address: Centre for Population Sciences, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1

Name: Jackie Masterson

Job title: Professor of Psychology

Official Address: Department of Psychology, Institute of Education,
20 Bedford Way, London WC1H 0AL

Name: Shah Ebrahim

Job title: Professor of Epidemiology and Public Health

Official Address: London School of Hygiene and Tropical Medicine, Keppel Street,
London WC1

BOX 4: SUMMARY OF RESEARCH

ABSTRACT OF RESEARCH. No more than 200 words covering the following topics: aims of project; research subject group; sample size, type and location; methods of working.

There is widespread recognition of the importance of evaluating services from consumer perspectives. What people expect from their health care, compared with their experiences, may influence their satisfaction with it. There is also some evidence that patients who receive the health care they expect may recover better than patients who do not.

However, there are many definitions of what patients expect from health services, for example, relating to different types of expectations (e.g. desires, predictions) and of health care structures (e.g. buildings, equipment, staff), processes (e.g. waiting lists, the way staff and patients interact) and health outcomes (e.g. the effects of the health service on patients' health, including patients' assessments of their health), and different visit types/episodes. There is also no well tested, multidimensional, questionnaire to measure these different expectations.

We aim to examine existing models and definitions of patient expectations in the literature and to explore expectations with patients. We will then develop an expectations questionnaire, which is informed by theory and grounded in lay perspectives. We will test it for its psychometric properties, using gold standard techniques. Using survey methods we will examine the different types of expectations, and test hypothesised associations with pertinent variables.

BOX 5: TIMESCALE

Proposed starting date: 01-11-07

Proposed duration: 2 Years 0 Months

BOX 6: ETHICS

(NOTE: Ethical approval is not necessary at the application stage, however, projects cannot begin until the necessary approvals are in place.)

Is Ethics Committee approval needed? **Yes, for fieldwork stage**

If yes, do you foresee any problems with obtaining ethical approval? **No**

BOX 7: COST

Total Research Grant Requested from this programme £ . is 80% claimable of the total cost of £ .

BOX 8: ADVERTISING

Where did you see the advert for this project? **NCCRM website and BMJ**

II. DETAILS OF PROPOSED RESEARCH

Detailed outline of proposed research (see attached notes for guidance).

Background to the study.doc

Background to the study, including policy relevance and related research

Consumer expectations

There is widespread recognition in health policy of the importance of evaluating health services from a wide range of perspectives, including those of consumers (see 'Further Particulars', p. 2). This was given emphasis in the late 1980s and 1990s with the emphasis on accountability, and the continuing emphasis on consumerism since the 1970s (Stacey 1976). Consumer evaluations of their health care are now an established component of quality assessment, mainly via patient satisfaction and patient based health outcome studies (e.g. health status and health related quality of life) (Bowling 2001, 2005a, 2005d). It is generally acknowledged that planners need to understand the expectations underlying patients' views in order to interpret their feedback. Understanding how expectations are formed is, in theory, crucial for furthering knowledge on a range of health topics from health and illness behaviour to patient assessed outcomes. Indeed, the general practice contract in the UK mentions the measurement of patients' experiences as an area for measuring quality of care (British Medical Association 2002). There is little information on whether expectations can be modified, although it has been argued that high expectations should be encouraged and be used as a catalyst for improving health care (Coulter 2006). Moreover, scant attention has been paid to the generally high patient satisfaction levels among older people, despite their increased likelihood of experiencing delays in specialist referral and treatment. This may reflect lower expectations of health care in older age (Bowling 2002a).

The literature on patient expectations in health care appears to be characterised by diversity, lack of integration and a theoretical paucity of approach to both conceptualisation and measurement. This fragmentation and lack of integration of research partly reflects the multidimensionality of the concept, a characteristic shared with the concept of patient satisfaction (Ware and Hays 1988). The largest body of literature on expectations appears to relate to patient satisfaction, reflecting its alleged theoretical underpinning of this concept. It is often argued that an excess of perceived delivery (e.g. of health care) over what is *hoped for, anticipated or expected* leads to increased satisfaction, and the converse that unmet expectations leads to increased dissatisfaction (Kravitz 1996; Crow *et al.* 2002; McKinley *et al.* 2002; Dawn and Lee 2004). This has been conceptualised as *expectancy dis/confirmation* (Thompson and Sunol 1995; Rao *et al.* 2000). A systematic review of the literature solely in primary care settings on patient pre-consultation expectations confirmed that unmet/met expectations with health care can affect patient satisfaction (Rao *et al.* 2000), although associations are often weak, and expectations explained a relatively small proportion of the variance in satisfaction (Linder-Pelz 1982a; Linder-Pelz and Struening 1985).

However, this *expectancy dis/confirmation* model is popular, and also important given the possible influence of these 'beliefs' on health care outcomes. Several studies have indicated that treatment expectations (as 'beliefs') influence treatment outcomes (e.g. experience of severe nausea after chemotherapy – Roscoe *et al.* 2004). A systematic review of the placebo effect also concluded that expectancies are a mechanism by which placebos have their effects (Crow *et al.* 1998). However, Rao *et al.*'s (2000) systematic review in primary care settings reported that associations between expectations and health-related quality of life outcomes were inconsistent. This is likely to be due to weaknesses and variations in research design, as well as to the type of expectations measured. There is much scope for further research in this area, especially given

evidence of poor concordance between patients' expectations and their doctors' perceptions of these expectations (Rao *et al.* 2000).

Although the concepts and measurement of patient satisfaction and health related quality of life outcomes have been linked to the concept of patient expectations, there has been little attempt to support these links with conceptual development or a theoretical model. Rarely have these concepts even been adequately defined (Fitzpatrick 1993; Bowling 2001, 2002b, 2005a, 2005d). For example, patient satisfaction has often been measured superficially with generalised satisfaction questions, with little attempt at theoretical justification, and which largely tap concepts of adequacy, acceptability and appropriateness. These general questions also elicit higher than expected proportions of satisfied responses than do open-ended, questions (Cartwright and Anderson 1981). The greater validity of specific, over general, patient satisfaction questions has long been reported (i.e. asking about specific details of patient care, rather than general satisfaction questions – *accessibility and availability of services and providers; choice and continuity; communication (including information); financial arrangements; interpersonal aspects of care; outcomes of care (i.e. satisfaction with one's health status, ability and outcome); technical quality of care, time spent with providers*; Davies and Ware 1991). There is also evidence of their greater provision of information of value to health policy (Bowling and Redfern 2000; Bowling and Bond 2001).

In contrast to most health economics models of utility, which are generally focused on outcomes (e.g. health states and effects of treatment), *psychological models of expectancy include both outcome and process expectancies* (Crow *et al.* 1999). In a review of studies of the placebo effect, Crow *et al.* (1999) concluded that expectancies are an important mechanism for the placebo effect across a range of clinical conditions and outcomes, although the studies they reviewed included several weaknesses. They defined expectancies as treatment-related outcome expectations (beliefs that treatment will have positive or negative effects on health status) and *patient-related self-efficacy expectations* (beliefs that one can carry out actions necessary for disease management or coping with the treatment). They focused on *three clinical areas* (preparation for medical procedures, management of illness and medical treatment), in which five sub-groups of expectancy were identified within their two main definitions: *Treatment-related expectancy*: process expectancy (in relation to preparation for medical procedures), positive outcome expectancy (in relation to medical treatment), negative outcome expectancy (ditto); *Patient-related self-efficacy expectations*: interaction self-efficacy (in relation to management of illness) and management self-efficacy (in relation to preparation for medical procedures and management of illness). As they indicated, research is still needed to assess the validity of their model in a variety of settings, or whether it requires revising, and more information is needed on the influence of experience, knowledge and beliefs on expectations (including the influences and experiences of others).

An integrated multi-dimensional approach to conceptualising and measuring expectations theoretically involves building a model of expectations from the dimensions identified in the patient satisfaction and expectations literature, supplemented by a patient-based model of outcomes, such as health-related quality of life, defined as 'the extent to which our hopes and ambitions are matched by experience' (Calman 1984). This suggests that the main aim of health care is to narrow the *gap* between a patient's hopes and expectations and what happens in practice in relation to (a) processes and (b) outcomes (i.e. emphasising the value of individual expectations and experiences rather than relying solely on traditional measures, which capture mainly functioning) (Ruta *et al.* 1994). This is consistent with Staniszevska's (1999) in-depth research on expected outcomes, and which emphasised cardiac in-patients' *experiences* and 'hopes' of both processes and outcomes ('*knowing what was wrong with me*', '*complete recovery from my condition*', '*increasing my chance of living*', '*knowing what would happen to my illness in*

future, *'expecting my condition to be more manageable*, *preventing the condition from happening in future*'). However, a counter-argument to building solely on the existing satisfaction, expectations, and health outcome literature is that the most commonly used models and measures reflect the dominance of providers' or 'experts' interests and perspectives over patients (Calnan 1988; Bowling 2001; Bowling *et al.* 2003). Hence calls for lay involvement in the planning of research on health (Chalmers 1995).

Psychological theory holds that expectations are complex beliefs, or values, resulting from cognitive processes (Linder-Pelz 1982b). The term 'expectancy' is used in psychology as a general concept, in contrast to the health literature which refers to 'expectations' in the real world (Janzen *et al.* 2006). Attitude theories are mainly based on *expectancy-value theory*, whereby attitudes (disposition to respond favourably or unfavourably towards an object) are related to beliefs (expectancies) that the object possesses certain attributes, and evaluations of those attributes (Ajzen 1988). Expectancy theory is regarded as particularly important in theories of *behaviour*. Role theory, for example, posits that human behaviour is guided by expectations, although there has been little analysis of their construction. *Expectancy values* – such as the value people place on processes and outcomes – have been used to explain relationships between attitudes and behaviour (Fishbein 1967), although empirical evidence is limited (Bower *et al.* 2004). Outcome expectancy and perceived competence to perform particular behaviours (*self-efficacy*) are held to be important predictors of behaviour (Bandura 1986). However, there is little evidence on how abstract theories might be used in empirical research in real life patient settings (Linder-Pelz 1982a; Janzen *et al.* 2006). Many studies of expectations in the health field are ambiguous in their use of terminology, or have focused on different *types* of expectations. Taxonomies include *expectancy probability* (judgements about the likelihood of an event occurring, e.g. based on past experience, self-confidence, perceived difficulty of the goal), *value expectations* (hopes or desires concerning an event, expressed as wants or needs) (Kravitz *et al.* 1996), *process expectations* (e.g. medical attention, health information, pleasant surroundings), and *outcome expectations* (e.g. ability to return to work/previous way of life, physical fitness) (Faller *et al.* 2000). Expectancies of processes of care will differ from treatment outcome expectancies, as the latter are less certain, involve weighing up risks and benefits, and involve the person's attitude towards risk taking. A recent non-systematic review of the literature on health expectations by Janzen *et al.* (2006) concluded that Thomson and Sunol's (1995) model of expectations was the most frequently cited conceptual framework, and attempted to translate the psychological concept of expectancy into a relevant conceptual model that could be used to underpin research on health expectations. Thomson and Sunol (1995) identified four types of expectation in relation to satisfaction: ideal (*desires, preferred outcomes*); predicted (*expected outcomes*); normative (what should happen), and unformed (*unarticulated*). This framework build on other less integrated models (e.g. Like and Zyzanski 1987; Buetow 1995; Williams *et al.* 1995; McKinley *et al.* 2002). However, Janzen *et al.* (2006) questioned whether these expectations bore any relationship to each other.

Janzen *et al.* (2006) developed their own, quite different, social-cognitive model, based on their review of the literature, although they found relatively little good quality research. Their model overlapped with that developed by Olsen *et al.* (1996), which focused more on the consequences, rather than the antecedents, of expectation formation. In contrast, Janzen *et al.* (2006)'s framework is a dynamic model, and consisted of a *precipitating, cognitive processing stage* (an individual's sense of subjective probability of something occurring, causality [understanding of causality between actions or events] and temporality (concepts of duration and order)); a sense of *self-efficacy* (a person's perceived capability of carrying out specific behaviours to achieve a desired outcome), and which influences outcome expectations; perceived expected subjective utility (impression of the personal value accruing as a result of achieving the behaviour); *goal development* (ideas directed towards future outcomes, and influenced by past experiences); *expectancy formation* (estimates of behaviours and their consequences) was hypothesised to

follow these processes. However, as the authors admitted, their model lacks empirical evidence to support it.

Given the evidence that expectations of care are associated with recent experience of health care, it is also likely to be important to distinguish ‘*informed expectations*’ (whereby people have received sufficient, timely information to reach an informed judgement) from *subjective expectations*. This indicates the importance of longitudinal analysis of the process of expectation development (Janzen *et al.* 2006). Consistent with this, Kravitz’s (1996) *dynamic* model of patient expectations is relevant (and identified as an important tool in the ‘Further particulars’). With this, the first stage involves the *identification of determinants of consumer expectations* (external: friends, relatives, media, policy; *previous experiences of health care*; patients’ socio-demographic characteristics, health status, health-related quality of life). Patients’ expectations can then be described according to *definitional orientations* (e.g. probabilities, values), *type of health care visit/episode or generic*; and *content (do they relate to structure, process or outcome?)* (Donabedian 1980). *The model takes account of the importance of experiences and subsequent revision of expectations and evaluations.*

In summary, a fully integrated model of expectations needs to be dynamic, both generic and site-specific, multidimensional (e.g. in relation to type of expectations), and identify determinants, including socio-cognitive. It also needs to model potential causal pathways (between expectations and related attitudes and behaviours (patient satisfaction), health behaviours (e.g. adherence to therapy) and patient-based health outcomes (health status and health-related quality of life). A major gap in this area is that no standardised, well validated, instrument exists for measuring patients’ expectations in any of these domains. This is needed, together with provision of information on the consistency and stability of expectations over time by type of measure, and mode of questionnaire administration (Dawn and Lee 2004). A large, mixed method research agenda is required to address these issues.

Purpose of the research, including aims, objectives, hypotheses

The model of patient expectations which will underpin the planned research is not pre-judged here, but is anticipated to build on existing reviews and models (including the Kravitz (1996) model), following the literature review. The theoretical model will then be integrated with lay views derived from interviews. Thus it will overcome a weakness of existing models which are mainly expert led, or based on social-cognitive theory with little or no empirical justification. It also aims to be multidimensional, rather than narrow in focus. This follows Bowling’s (2005) successful development of a multidimensional model of quality of life, which integrated theory with lay perspectives on quality of life. This led to the development of a unique, theoretically informed measurement tool, grounded in lay perspectives.

Aims

The aims of the study are:

- To undertake a systematic review of the literature on patient expectations, and critically examine existing models and measures of patient expectations,
- To examine overlap between theoretical models and lay perspectives, and to identify the strongest models,
- To conduct semi-structured interviews with adult patients about their expectations, using repertory grid techniques, in order to assess the content validity of the models, and to inform the development of a patient expectations questionnaire,
- To develop, and test psychometrically, a standardised questionnaire reflecting an integrated theoretical and lay model of pre-consultation expectations, informed by the literature review and the lay interviews. This will be for use, initially, with adult patients in ambulatory

settings: a generic primary care setting and in a selected specialist setting – cardiology. The latter is a major cause of morbidity, disability and mortality, and an area in which the PI has a track record of research); a post-consultation tool will also be designed to tap revised expectations and evaluations. The developed instrument will be used to investigate the objectives in the ‘Further Particulars’ (p6) (see below).

The pre- and post-visit modes of the instrument will incorporate expectations judged to be supported by the literature and the lay interviews i) in general modules to facilitate cross-setting comparisons (*general expectations module*), and ii) modules specific to different types of health care setting and type of visit/episode (*specific setting expectations module*). It is anticipated that the response formats will be Likert Scales to measure strength of positive and strength of negative expectations. A self-completion mode and an interviewer mode will be developed and tested (the latter will be of value for use with people with learning difficulties or cognitive impairments).

Objectives (example of how the analysis will address each in brackets):

The objectives will address the following methodological and research questions in the ‘Further Particulars’ (p. 6):

1. How does the definitional orientation applied affect the expectations elicited (probability and value)? (Analyses of types of expectancies, including expectancy probability [judgements about likelihood of events occurring], value expectations [hopes and desires].)
2. How do general expectations affect specific expectations? (Analyses will include testing for associations between these variables; in addition any effect of question order on associations will be examined. One principle of questionnaire design is that general questions should be placed before specific ones in order to minimise any bias from order effects (Bowling 2002b). This will be addressed by randomising patients to different question ordering – general followed by specific questions vs specific followed by general questions – and analysing the impact on distributions of response (interview only respondents, so the interviewer, not the respondent, has control over the question order.)
3. How does the category/type of expectations being measured affect the relationship between expectations and satisfaction? (Analyses of treatment related structure/process/outcome expectations, and type (e.g. including ideal, predictions), by relevant indicators of satisfaction and outcome at post-assessment.)
4. How can expectations for different health care settings be compared? (Analysis of the results from the general expectations questionnaire module in primary care and selected specialist setting.)
5. Does visit type affect expectations? (Analysis of whether any expectations are associated with visit type, comparing responses to the general expectations questionnaire module.)
6. How does the timing of data collection affect the expectations elicited? (Assessment of whether any expectations change between pre- and post-testing, controlling for other change.)
7. How does the instrument type affect the expectations elicited? (Analysis of any differences in the range of expectations, and item completion, between mode of administration [self-completion and interviewer administered form].)
8. Are expectations influenced, and if so in what direction, by, respondents’ characteristics – socio-demographic (age, gender, marital status) and socio-economic (social class, level of education); health status, health-related quality of life and symptoms; personality traits, self-efficacy; experiences of health care; and information from/discussion with/experiences of: friends, relatives and clinicians? (Analysis of associations between these variables.)
9. How well do the expectations elicited from patients relate to structure, process and outcome? (Analysis of the frequency distributions of the type and content of expectations measured; correlations; factor analyses of questionnaire.)

10. Do expectations, and the extent to which they are met, influence patients' short-term outcomes? (Assessment at post-test of whether pre-test expectations were met, and impact on changes [pre- and post-test change scores, and effect sizes] on short-term generic health status and health related quality of life. *Note:* a longer period of follow-up will be needed to fully address this question in a future study.)
11. Are patients' health behaviours, illness behaviours, adherence to therapy and expectations associated? (Analysis of reported healthy lifestyles, delay in seeking medical treatment, adherence to therapy [at post-testing] by expectation type.)
12. What are the most common types of met and unmet expectations (gap model) expressed by patients, and do these vary by setting (type of health care accessed), visit type/episode and condition? (Comparisons of pre-test expectations with follow-up assessment of the extent to which these were met by setting, visit/episode type.)
13. What are the psychometric properties of the developed expectations questionnaire? (Tests will include acceptability, item redundancy, item endorsement, reliability, validity; scaling, and factor structure.)

Hypotheses:

There will be positive associations between general and specific expectations. In addition, there will be question order effects.

There will be a positive association between structure/process/outcome expectations and patient satisfaction.

It will be possible to make valid comparisons of generic expectations in different settings using the general expectations module.

Expectations are likely to undergo revision by patients between pre- and post-visits.

Slight social desirability bias is likely to operate in the presence of an interviewer with the consequence that interviews will obtain slightly more positive ratings on selected variables than self-administration modes (e.g. patient satisfaction, self-rated health and health-related quality of life).

People aged 65+, those in lower socio-economic groups, and those with low self-efficacy will independently have lower expectations of health care than others (structure, process and outcome).

The expectations questionnaire will have satisfactory levels of reliability and validity, with a confirmed factor structure.

Methods: details of methods of data collection

A mixed method approach to the empirical research is planned, following a systematic literature search. Semi-structured interview methods (using repertory grid techniques) will be used to explore and identify patients' expectations and models, in order to contribute to the body of knowledge on expectations and existing models, and to inform the development of a theoretically informed structured expectations questionnaire, also grounded in lay views.

The applicants will then develop a questionnaire to measure expectations which will build on strong theoretical models (e.g. Kravitz 1996; Crow *et al.* 1999; Dawn and Lee 2004) combined with lay models. This will follow the PI's method of integrating theoretical and lay models of quality of life (Bowling 2005). It will then be rigorously tested, using survey methods, for its psychometric properties, and used to examine the objectives listed earlier.

This mixed methods approach gives value for money. Each phase can be reported and published separately, followed by an integrated report and publication.

i) Systematic literature review

A systematic review of the literature on the concept and measurement of patient expectations, by type, will be conducted. This will include literature on predictors of expectations, and expectations as determinants of both satisfaction and outcome. The aim of the updated review will be used critically to refine a model of expectations, which, together with the lay views, will underpin the development of the expectations questionnaire. This will build on existing reviews (e.g. Crow *et al.* 1999; Rao *et al.* 2000) and thus the search will be limited to the years January 2000 and December 2006. The searches will be conducted by AB and repeated for reproducibility by GR. UCL medical school library (Hampstead Campus) will be consulted on search strategies, given their established expertise on systemic reviews.

Search strategy

A multiple search strategy will be adopted. For electronic searches, a search strategy will be developed using MeSH terms and keywords, augmented by inclusion of keywords used in studies as they are identified. No design filters will be used. Key terms are likely to include, for example, 'patient' and 'expectations' or 'belief' or 'expectancy' or 'expectancy theory'; and these terms plus i) 'satisfaction' and ii) outcome. The electronic gateways/databases to be searched, using comparable strategies, will include: Applied Social Sciences Index and Abstracts (ASSIA); British Nursing Index; CINAHL (nursing and allied health); EMBASE (biomedical); PsycINFO (American Psychological Association); PubMed (National Library of Medicine – by default PubMed searches MEDLINE); Social Sciences Abstracts; Sociofile; SOSIG (Social Science Information Gateway); ISI Web of Knowledge (i.e. Arts and Humanities Citation Index, Science Citation Index and Social Sciences Citation Index, as well as ISI Proceedings).

In addition, the HTA database will be searched. In case electronic searches are insufficiently sensitive, key journals will be hand-searched (e.g. *Patient Expectations*, *Psychology and Health*, *Journal of Health Psychology*, *Social Science and Medicine*). General search engines on the internet will be searched (e.g. Google); the research team will consult other research groups in the field. Grey literature and dissertations will be excluded for manageability, and due to the time constraints of the study. The references cited in all accepted studies will be reviewed for additional citations within the stated search period. References will be downloaded into bibliographic software packages.

Study selection

The process of developing the search criteria will be used to construct inclusion and exclusion criteria which will be used to determine the relevance of the evidence retrieved to the study aims. However, the search will not be restricted to particular definitions or conceptualisations of expectations, or type of site/setting. Broad inclusion criteria will be used will allow a variety of studies to be reviewed, including theoretical papers, observational and interventional studies, randomised control trials, systematic reviews and meta-analyses. Due to time and budget constraints, only papers published in English will be included.

Assessing relevance and inclusion

The results of each search will be documented and downloaded into a database that will allow duplicate citations to be highlighted. The titles and abstracts identified in the search will be perused by AB to determine whether the articles contain theory or original research results on patients' expectations and is relevant to the research aims. An independent reviewer (GR) will screen studies for relevance independently, and disagreements will be resolved by consensus. If relevance criteria are met, the full text article will be obtained. Again, the full text of studies

that appear potentially relevant will be assessed for inclusion by one reviewer and checked by a second.

Data extraction

A list of key questions will be generated, and a proforma will be developed to enable recording of data to address these from the included papers. The data extraction forms will be developed using Microsoft Access. These will be piloted independently on a small selection of studies and adjusted as necessary. Data will be extracted from studies by one reviewer and checked by a second.

Data extraction for empirical studies will include, for example:

- study design;
- country and date of study;
- site of study and visit type;
- sample characteristics, including condition;
- theoretical framework;
- type of expectation/s assessed/identified;
- predictors and outcomes assessed;
- measurement tools with evidence of reliability and validity.

Quality assessment

Quality assessment forms will be designed, using Microsoft Access. Quality assessment will be carried out by one reviewer and checked by a second. As the basis for our critical appraisal of the studies, we will use checklists for assessing the methodological quality of qualitative and quantitative studies. The assessment of methodological quality in social research is complex because of the wide range of qualitative and quantitative research methods used. For this study, criteria of quality for each method will include a clear description of the aims, under-pinning theory, and concepts, and the appropriateness of the method. For qualitative research, criteria of quality and rigor will also include a clear description of the justification of the setting, recruitment of participants, numbers of participants and non-respondents. In the case of quantitative research, criteria of quality and rigor will include the validity of instruments used for assessing expectations, as well as standard criteria of research validity (e.g. sampling strategy, sample size, coverage, type and response, appropriateness of design and method in relation to the aims, systematic error, generalisability). These are standard and tested criteria for the assessment of quantitative and qualitative research (including Mays and Pope 1996; Bowling 2000; Campbell *et al.* 2003).

Criteria of quality will be assessed for each paper independently by AB and GR, and disagreements will be resolved by consensus. In view of the heterogeneous nature of the studies likely to be included, it is unlikely that formal techniques of data synthesis, such as meta-analysis, can be applied. Where meta-analysis is not possible or appropriate, we will undertake a narrative synthesis, using a framework analysis, to compile diverse evidence (Ritchie and Spencer 1994). We will include a critical review of concepts, methods and strength of the findings. We will assess whether the internal validity and strength of evidence of identified studies can be graded as high, moderate or low.

The results will be used for descriptive purposes to provide an evaluation of the overall quality of the included studies. Based on the findings of the quality assessment, recommendations will also be made for the conduct of future studies, as well as domains and items for inclusion in the measurement of patient expectations. The yield of different search strategies will also be compared.

ii) Semi-structured interviews using repertory grid analysis

Most existing models and measures of expectations reflect the dominance of providers' or 'experts' interests and perspectives over patients. Hence semi-structured interviews will be conducted with adult patients to explore lay views in order to ensure that the resulting expectations questionnaire (*see Survey later*) is both theoretically informed and grounded in lay views, and hence has content validity. It is proposed to use repertory grid analysis (RGA) within the interviews to improve our understanding of expectations, to assess the content validity of existing models of expectations, and to facilitate the development of a questionnaire to measure patient expectations. This use of this method adds value and uniqueness to the proposed study. The technique is widely used (e.g. in consumer science), although it has been neglected in health services research (Frewer *et al.* 2001). Two of the applicants (AB, GR) have used it successfully to develop a questionnaire for measuring patients' treatment preferences (Lambert *et al.* 2004; Rowe *et al.* 2005). Thus, this research is *innovative* in assessing further the use of this natural 'mixed method' tool in health care settings.

RGA is a semi-structured, psychological tool, which is useful in providing information about people's individual 'personal constructs' (i.e. attitudes, their inter-relationships, and the reasoning underlying them) (Kelly 1955). Its most common manifestation involves what are called 'triadic comparisons', in which people are asked to look at three cards, on which are written concepts of interest, and then requested to say how two are alike and different from a third. In its original use, for therapy purposes, the items may be people such as 'father', 'brother', 'best friend', and the act of comparing and contrasting reveals important personal psychological dimensions (e.g. here, 'two are sympathetic and the other is unsympathetic'). According to personal Construct Theory (Kelly, 1955), the kinds of dimensions that emerge reflect how people *naturally structure beliefs*. But also importantly, as we have discovered from our past work, the nature of dimensions revealed are *readily convertible into quantitative questionnaire items*. In this particular study we aim to develop an innovation of the technique.

Participating adult patients will be shown cards on which are written the words 'ideal consultation', 'expected (predicted) consultation', 'worst possible consultation'. In-depth probing will be used to elicit patients' own ideals to fit these scenarios and also to explore their expectations in relation to their needs, desires and ideals, knowledge, experiences. We will probe how they formed their expectations, and what influenced them (e.g. family, friends, previous experiences). Each type of expectation raised (e.g. ideal, predicted, worst) will be probed in relation to the structure, process and outcome of the consultation and health care. Patients will also be asked to indicate whether they believe their pending consultation and the outcome will be most alike their ideal situation, expected (predicted) consultation, or their worst possible situation (these probes will be repeated at *post-consultation* interview to assess whether their expectations were confirmed). The in-depth interviews will focus on the entire episode (and history, for pre-existing conditions).

Broad questions will be used, with in-depth probing techniques. The researcher will use cognitive interviewing techniques to explore the mental process by which respondents reach their answers/choices, to probe the reasons given, and to get beyond superficial answers. We anticipate that this process will help patients structure their expectations into bi-polar dimensions that have natural meaning to them. For example, one bi-polar dimension that might emerge is 'be treated like an adult' (e.g. in the ideal situation) versus 'be treated like a child' (in the 'expected' and 'worst possible' situations). After going through this process and eliciting as many personally meaningful dimensions as possible, the interviewer will present the patient with an individualised grid, showing the individualised, ideal situations across the top (elicited ideal, expected, worst possible) and the individualised, elicited *personal* dimensions down the side. The patient will then be asked to *rate* the (individualised) situations on a 1–5 scale to reflect the extent to which each

situation associates with each dimension (i.e. from 'not at all' to 'totally'), giving a sense of the importance of each expectation to the patient.

This is an individualised method, and patients rate their own elicited constructs – not those of others, although overlap (e.g. of common, shared values) is anticipated. This will generate ecologically valid and readily usable items for use in the development of our quantitative survey questionnaire of expectations. RGA also yields data that is suitable for analysis at aggregated group level or at the level of the individual. Data from individuals is aggregated using the statistical method of Generalised Procrustes Analysis (GPA) (Gower 1975; Dijksterhuis and Gower 1991). This indicates the commonality of constructs elicited from patients (with respect to 'ideal', 'expected', and 'worst possible' consultations), and will indicate the extent to which certain expectations, and types, are common amongst patients. This method will therefore be used to inform the choice of constructs for inclusion as items in the expectations questionnaire. Unlike other multivariate techniques, then, it can generate plots of personally generated data at the level of the individual, and does not require respondents to use a common set of variables to make their ratings. The value of this method, as with in-depth interviews, is that the constructs are derived from the respondent, not the researcher.

Finally, a structured questionnaire about the condition, health status, symptoms, overall health-related quality of life, age, sex, marital status, ethnic group, socio-economic-status, and level of education will be given to respondents to self-complete and hand back to the researcher at the end of the interview. This will provide contextual information in the presentation of the data.

The consent form will ask participating patients for their consent to being questioned/ interviewed *before, and also after* their consultation in order to assess their post-visit experiences, whether their expectations were met, and their evaluations of the episode. This will then inform the design of both the before- and after expectations questionnaires for the main survey.

In addition to the concepts elicited and listed in the grid during the interview, the interviews (*pre- and post visit*) will be audio-recorded and transcribed, with patients' consent. Their thematic coding and analysis (concepts and categories emerging from the data) will add insight to the meaning and interpretation of the concepts in the grid, which is valuable for illustration and validation purposes. Each script will first be read by two independent members of the team (GR, AB), and a thematic coding frame developed. Coding, using two independent coders, will take place immediately after each interview to enable the technique of constant comparison of data to be used (Donovan and Saunders 2005), and any necessary recoding of themes. The use of two independent coders will ensure methodological rigor. Discrepancies and disagreements between coders will be discussed and resolved, if necessary by a third person.

The researchers will seek honorary contracts with the participating trusts at in order to ensure patient confidentiality.

Sample for the semi-structured interviews (RGA)

Patients will be interviewed before their consultations in order to separate their expectations from their experiences of that health care episode, and followed-up afterwards. The proposed sample is 20 primary care and 20 cardiology clinic out-patients. If necessary, more patients will be recruited until no more expectations and reasons are identified, and themes are being repeated, to reach theoretical saturation. Language interpreters will be sought for anyone who is approached and consents, indicating a need for one. Adult patients will be recruited from primary and secondary care settings (cardiology) in Norfolk. Professor Amanda Howe has agreed to facilitate invitations to clinicians to participate via the SHPERE PCT and UEA General Practice Research Network for Norwich and Waveney.

In collaboration with practices, we will make careful records of numbers of (anonymised) eligible patients and compare them with the numbers who respond, and the number who are then successfully interviewed.

The RGA aims to be indicative rather than provide representative results or cover all social and ethnic variability. However, it is essential to capture social and cultural diversity in the first stage of the research in order to ensure that the items contained within the finally developed Expectations Questionnaire are socially and culturally inclusive. It is possible that patients' expectations are lower among those in ethnic minority groups, in lower socio-economic groups and among elderly people.

The coordinator of the PCT research network for Norwich and Waveney has agreed, with Professor Amanda Howe of UEA, to help us identify potential participating general practices in wards in Norwich and Yarmouth with these more diverse populations. Thus, with their help, we intend to include GPs' patients from diverse social and cultural backgrounds in the first phase of the study. We also aim to include a diverse population in the acute trust cardiology clinic sample (Norfolk and Norwich Hospital) and will work with out-patient booking staff to also include cardiology clinic patient referrals from more diverse wards (using post codes).

Process for RGA interview phase 1 in primary care: Patients will be interviewed pre-consultation and followed-up afterwards. During the target fieldwork dates, as consecutive patients book their appointment for a consultation with the GP by telephone or in person, the receptionists/administrative staff will inform them the study is taking place, give/post them the study letter, information sheet, consent forms and 1st class reply-paid envelopes (satisfying the 24 hour consent criteria), and maintain a confidential list of serial numbers by patients' names and addresses in order to provide the researchers with numbers of patients attending for calculation of response. If patients are willing to be interviewed, they will be asked to return the consent form, with their contact details direct to the researcher, to enable the researcher to make an appointment for the repertory grid interview an hour ahead of their consultation, and a post-consultation interview. This procedure is necessary for appointments to be made which allow sufficient for these semi-structured interviews. Throughout the patient recruitment process, attempts will be made by the researcher to balance the sample interviewed for socio-demographic characteristics (e.g. age, sex, ethnicity, socio-economic group).

Process for RGA phase 1 in hospital out-patient clinics: Patients will be interviewed pre-consultation and followed-up afterwards. The sampling procedure will be identical to that in primary care except that consecutively referred out-patients, with appointments during the fieldwork dates, will be mailed the study letter, information sheet, consent form and 1st class reply paid envelope for its return, with their contact details direct to the researcher, by out-patients booking staff. Throughout the patient recruitment process, attempts will be made by the researcher to balance the sample interviewed for socio-demographic characteristics (e.g. age, sex, ethnicity, socio-economic group).

iii) Questionnaire survey of expectations, sample type and location

The applicants will next meet to agree the items for inclusion in the questionnaires. The questionnaires will include a generic *pre-visit/episode* expectations module, and a *specific expectations* module relating to their type of setting/visit. A comparable *post-visit* expectations questionnaire will be designed for patients to complete after the consultation.

The questionnaire items will be derived from the literature, and thus be theoretically based, but also integrated with lay concepts and views from the interviews and RGA exercise. It is anticipated that the response choice formats will be Likert scales as these are popular, and easy

for lay people to understand. The questionnaire will be examined by the advisory group; bodies representing patients will be asked for their comments on appearance and content (face and content validity), wording, acceptability and apparent ease of completion.

Initial field testing

Finalised, interview and self-administration versions of the general and specific setting, pre- and post-expectations questionnaires will undergo initial field-testing with 100 adult patients. We plan to conduct face-to-face interviews with 50 patients and administer self-administered questionnaires to a further 50. Thus, 25 primary care and 25 cardiology clinic patients will receive the initial pre- and post-visit Expectations Questionnaires in self-administration format, and 25 primary care and 25 cardiology clinic patients will be administered the questionnaires in face-to-face interviews. These numbers are sufficient for the initial field-testing. For the field testing only, we will sample patients consecutively until the target numbers of interviews are reached. See later under 'Main survey' or sampling procedure.

The researchers will seek honorary contracts with the participating trusts in order to ensure patient confidentiality.

These questionnaires will be analysed for initial item-completion, acceptability, reliability and validity. Poorly performing items will be eliminated. Again, the questionnaire will be examined by the advisory group and bodies representing patients will be asked for their comments. The final instrument will then be used for the main expectations survey to be conducted next. This will establish its full psychometric properties on a wider sample, enable analyses of factor structure (which require a large sample), and test the research hypotheses stated earlier.

Main survey

The main survey will be:

- i.) self-completion, postal mode, with an estimated 500 adult patients (250 primary care and 250 cardiology clinic patients) (geographically spread); and
- ii.) an alternative face-to-face interview mode with 100 adult patients in local London sites for manageability (50 in general practice and 50 cardiology out-patients).

The interview sample size is not matched to the postal sample size of 500 as, given the time intensity of interviews, this would be time consuming and highly expensive.

We will aim, through the multi-site nature of the main survey, and sampling of participating practices after analysis of their ward profiles, to reflect social (age, sex, socio-economic status) and ethnic diversity in the findings. Interview survey participants who do not speak English will be offered an interpreter to assist with the completion of the questionnaire. In addition, where a self-administration sample member replies that they need help to complete the questionnaire, we will offer them a face-to-face interview, with an interpreter where required.

The initial mailings and any reminders will be despatched by practice and out-patient booking staff to protect patient confidentiality. Respondents will be sent a post-visit questionnaire to complete after their consultations. Up to three reminders will be sent by practice or out-patient booking staff for the post-visit questionnaires. NHS staff will be facilitated in the despatch of reminders by our provision of a form containing a list of serial numbers. They will be asked to enter the patient's name and address next to each serial number consecutively. We will inform them of patients who do not respond in advance of their consultations to enable timely reminders to be despatched using first class mail.

The researchers will seek honorary contracts with the participating trusts at each phase in order to ensure patient confidentiality.

Process for self-administration sample in primary care (pre-testing and main survey)

During the target fieldwork dates, as consecutive patients book their appointment for a consultation with the GP by telephone or in person, the receptionists/administrative staff will inform them the study is taking place, give/post them the study letter, information sheet and consent forms (*satisfying 24 hour consent*), and maintain a confidential list of serial numbers by patients' names and addresses in order to provide the researchers with numbers of patients attending for calculation of response, and to enable postal reminders to any consenting, participating patients who forget to leave their completed questionnaires behind when they leave the practice.

The written information that the patients receive will pre-inform them that on certain dates, while they are waiting to see the doctor, they will be approached by a researcher and invited to complete a questionnaire about their expectations before (while they are waiting) and also immediately after the consultation, and to hand them back to the researcher in sealed envelopes before leaving (for enhanced confidentiality). If they consent, they will be asked to complete the consent form and bring it when they attend the practice, and to attend 30 minutes ahead of their appointment time in order to complete the 'before questionnaire', and to allow time after the consultation to complete the briefer 'after questionnaire'. This will ensure sufficient time for questionnaire completion.

Process for self-administration in out-patients' clinics (pre-testing and main survey)

The procedure will be identical except that consecutively referred out-patients, with appointments during the fieldwork dates, will be mailed the study letter, information sheet and consent form by the out-patients booking staff for cardiology.

Process for interview sample in primary care (pre-testing and main survey)

During the target fieldwork dates, as consecutive patients book their appointment for a consultation with the GP by telephone or in person, the receptionists/administrative staff will inform them the study is taking place, give/post them the study letter, information sheet, consent form and 1st class reply-paid envelope (*satisfying 24 hour consent*), and maintain a confidential list of serial numbers by patients' names and addresses in order to provide the researchers with numbers of patients attending for calculation of response.

If patients are willing to be interviewed, they will be asked to return the consent form, with their contact details, direct to the researcher, to enable the researcher to make an appointment for the interview 30 minutes ahead of their consultation and afterwards. This procedure is necessary for appointments to be made which allow sufficient time for the interviews.

Process for interview sample in hospital out-patient clinics (pre-testing and main survey):

The procedure will be identical except that consecutively referred out-patients, with appointments during the fieldwork dates, will be mailed the study letter, information sheet, consent form and 1st class reply paid envelope for its return (*satisfying 24 hour consent*), with their contact details direct to the researcher, by out-patients booking staff.

In all cases we will ensure that the patient information clearly states that the information they provide is confidential to the research team, their treatment will not be affected in any way, that we are independent of their doctor, that individuals, practices and clinics cannot be identified in the study report, and that the study is not an evaluation or audit of their individual practice or clinic.

Sample size for main survey

Self-administration, postal mode The main self-administration, postal survey will be conducted in three contrasting geographical settings where the applicants have existing collaborative relationships with trusts and/or clinicians (Norwich, North London and Essex). The multi-site nature of the study will avoid large clustering effects at the outset, and the sample size calculation can be based on the hypothetical size of the variation in expectations between groups of patients. If, for example, it is estimated that the variation in expectations between groups, satisfaction ratings, and by health outcomes, is likely to be as much as 15%, 400 patients is estimated as sufficient for obtaining 80–90% power of detecting statistically significant differences between groups at the 0.05 level (e.g. in expressed preferences by socio-demographic, health and psychological characteristics). It is also estimated to be sufficient for the proposed factor analyses (see later under Psychometric testing). It is proposed to sample 500 overall to allow for non-response. *However, modelling will be used, based on the preliminary data analysis and field tested questionnaires, to calculate the final sample sizes by area and setting required.*

Face-to-face interview mode The size of the interview sample is constrained by the budget, but 100 achieved interviews is sufficient for the correlation analyses for comparisons of alternate modes as large samples are not necessary for such correlation analyses (see italics in third paragraph below). The factor analyses, which require a larger sample size, will be confined to the larger, self-administration sample. It is proposed to sample 125 overall to allow for non-response.

Plans for data analysis: framework of analytic methods to be used

Psychometric testing AB and GR both have recognised methodological expertise in psychometric testing, and collaborated closely in the development and testing of the questionnaire to measure patients' preferences (see earlier). Gold standard psychometric techniques will be adhered to.

The face and content validity of the questionnaire will be assessed by the advisory group by making comparisons with the systematic review and existing models, the elicited lay models of expectations, consultations with patients' representatives, and the initial field testing. SPSS¹³ will be used to examine the psychometric properties of the expectations questionnaire. For example, analyses will include tests for item-redundancy and elimination, based on missing data (usual criterion is 5%), endorsement frequencies (maximum endorsement frequency, > 80%, maximum aggregate adjacent endorsement frequency < 10%), item–total correlations (> 0.75), exploratory factor analysis (loading < 0.8 on all factors; cross loading > /0.8 on more than one factor, with a difference between loadings < 0.4). Scaling tests will also be conducted (items are classified as scaling failures if they correlate significantly more highly with another scale than their own scale). Items which perform poorly will be eliminated.

Internal consistency reliability will be tested with Item–item and item–total correlations using Cronbach's alpha. *The distribution of responses to the alternative forms of the questionnaire (self-administration and interviewer administration) will be compared to assess whether they produce comparable responses.* A small sample of participants ($n = 30$) will be asked to re-complete the questionnaire two weeks after baseline in order to test its reproducibility (test–retest reliability).

Convergent validity will be tested by analysing correlations between expectations and key survey measures (e.g. patient satisfaction, Davis and Ware 1991). Discriminant validity can be assessed by examining correlations between expectations and measures (to be deliberately included) that they would not be expected to correlate with. Criterion validity (i.e. its concurrent validity component – does the instrument measure what it purports to?) is more complex to assess in the absence of a gold standard for expectations. Its other component, predictive validity (i.e. can the measure predict future changes in key variables in expected directions?), can be assessed by examining whether baseline expectations are independently associated with post-visit evaluations of satisfaction. Feedback will be sought on the questionnaire's face and content validity, wording and acceptability from consumer bodies representing patients and from members of the study's advisory group (which will include lay and patient representatives in addition to the research team).

***Testing of study hypotheses** The objectives (see earlier – sections in parenthesis) provided examples of the types of distributions and analyses to be undertaken. The data will first be analysed using descriptive univariate statistics, including frequency distributions, Spearman's rank correlations, Chi-square tests and Wilcoxon matched pairs signed ranks tests to examine any associations between theoretically relevant variables and expectations (minimum significance at 5% level). Change scores for pre- and post-test variables will be calculated (with effect sizes). Analyses will examine whether question order influenced responses (to be addressed by randomising patients to different question ordering and analysing impact on distributions of responses). The independence of any associations will be further examined using multivariable analysis (e.g. multiple regression is appropriate, as the resulting expectations scale is likely to have a scaled format).*

Management of the study

Quarterly Advisory Group meetings will be held between all the applicants, the research staff, lay and patient representatives to agree design issues, ensure the smooth progress of the study, adherence to good research practices (including ethical, clinical governance and data protection) and adherence to timetable. Names will not be stored with the data, and all hard copy files and questionnaires will be stored in locked cabinets in a locked room. AB, with GR, will set up the study and manage the fieldwork. AB will take responsibility for overall management and the successful completion of the whole project. The study has been registered at UCL with the Data Protection office and UCL has agreed to be the research sponsor.

Role of applicants

AB will take responsibility for the successful completion of the overall study, setting it up, and day to day management of the survey arm. She will also conduct the systematic review. She will liaise closely with co-applicants and advisory group over the questionnaire design, lead the mounting of the survey, actively co-analyse and write up the survey from UCL, and liaise and collaborate with the Norwich team re: the progress, coding, analysis, and writing up of the RGA arm. AB has extensive experience of setting up research studies with trusts and in primary care settings, extensive knowledge of survey methodology, questionnaire design and psychometric testing, and always completes projects on deadline (Bowling 2002b, 2005b, 2005c). AB is also known for the development of measures which combine both theoretical and lay models (Bowling 2005; Bowling *et al.* 2003). She has collaborated successfully with GR using repertory grid techniques to elicit lay views for structured questionnaire development (Lambert *et al.* 2004; Rowe *et al.* 2005). Actual time input: 10% over 24 months.

GR will validate the systematic review, manage the fieldwork in Norwich, and collaborate with AB and the research team at each stage. GR and AB will jointly obtain ethics and R&D consents. GR and AB have collaborated successfully previously using repertory grid techniques (RGA) to

elicit lay views for structured questionnaire development and testing (Lambert *et al.* 2004; Rowe *et al.* 2005). GR is a well known expert on the use of RGA, on eliciting the public's perceptions of risks, and consumer views on food technology and health. He is experienced at research management, and completes projects to deadline. Actual time input: 10% over 24 months.

AH, particularly via her co-directorship of SPHERE (the PCT and UEA General Practice Research Network for Norwich and Waveney), will play a major role in facilitating practice and trust 'recruitment', and identification of practices in diverse areas. Her role in the study as co-applicant will also be to identify practices in diverse areas, advise on the progress of the study, and to participate in the interpretation of results, writing up, papers for publication and dissemination. Time input: 1.3% over 24 months.

The earlier established GP research network in Norwich (SUNET) facilitated the applicants' (AB, GR) access to participating general practices, in their study of patients' preferences.

Justification of costs

Roles of grant funded staff

Department of Primary Care, University College London:

Research assistant (to be appointed) to conduct, with AB, management of the survey, interviewing and directly managing the self-administration questionnaire component of the study, data preparation and cleaning, analyse and write up data in collaboration with AB and the research team; 12 months in year 2.

Statistician to i) model optimum sample sizes to address research aims and objectives ii) advise on/check psychometric and multivariate analyses re: survey data. [*note: AB and GR are both trained in statistics and can supervise the psychometric and multivariate analyses*]; two days in year 2.

Clerical assistance: for printing, liaison with study sites, transcribing, assistance with despatching and checking in questionnaires, coding, data entry; 12 months, 20% in year 2.

Freelance interviewer for four months during the initial questionnaire testing phase and the main survey fieldwork phase, who will assist the RA with the additional interviews. The cost of a skilled, freelance interviewer, with NI costs, at £18 per hour, over four months = £10,368.

Freelance coder (for the additional interview open and closed questionnaire coding), plus assistance with the additional data processing. The additional cost, with NI costs, at £18 per hour = £2,592.

Prof. Ann Bowling's FEC for the systematic review and report, setting up and managing the study, data analysis and writing up, dissemination (see earlier) (10% over 24 months).

Prof. Amanda Howe's FEC for practice and trust recruitment, dissemination of the study locally, identification of practices in diverse areas, and involvement in the research process, analysis and writing up (see earlier) (1.3% over 24 months).

BBSRC, Norwich

Research assistant (Norwich): Assist with the setting up of the interviews, travelling to conduct the interviews, transcribing the data, and aiding in the write-up of the results: 6 months in year 1.

Statistical consultancy (Norwich): Ian Wakeling (Senior Statistician, BBSRC, Institute of Food Research, Norwich) will undertake descriptive statistical analyses of the repertory grid data using

generalised procrustes analysis (GPA), to produce individualised and aggregated analyses, plots of personally generated data at the level of the individual, plot maps of consensus agreement to link stimuli and summarise respondents' ratings. Requested consultancy rate = five days in year 1 at £350 per day: £1,750.

Gene Rowe's FEC for management of phase 1, co-analysis and writing up, and involvement in the study throughout (see earlier) (10% over 24 months).

Travel and research costs UCL site

Travel Travel for in-depth and survey interviews (interview mode of questionnaire): 2nd class public transport.

Travel to acute trust and primary care clinics for setting-up and sampling, 2nd class public transport.

Eight advisory group meetings for 6 people second class rail.

Research costs Library costs for updated searching of literature: leading to estimated 50 inter-library loan requests @ £3.50 per request.

Stationary, paper, envelopes, photocopying, postage.

Printer cartridges, diskettes, networking, software.

Printing costs for: questionnaires and interview schedules, address labels, coding sheets, data processing, study reports.

Costs for reimbursing hospital trusts and practices (@ £11–15 per hour administrative time – advised by research networks in the study areas) for training about the study, sample identification, compiling a confidential sample list of names and addresses with serial numbers (to enable reminders to be sent to non-responders where necessary), printing address labels for the provided patient pack envelopes and mailing, room hire costs which are necessary in order to ensure we interview the patients before and after their appointment to see the doctor – especially in general practice: phase 1: Norfolk primary care and hospital clinics in year 1; subsequent pre-test and main study (Norfolk, Essex, London) acute trusts and primary care.

Reimbursement for two patient representatives in lieu of time attending advisory group meetings.

Interpreters for survey; estimated 30 hours in year 2

Refreshments/subsistence for advisory group meetings; estimated 6 attendees per meeting 8 meetings.

Contribution to total cost of conference attendance/travel for dissemination.

FEC for Prof Amanda Howe's time (1.3%) for practice identification and recruitment, facilitation of practice and clinic participation, dissemination of the study locally to facilitate this, involvement in the advisory group meetings and writing up and dissemination of results.

Travel and research costs: Norwich site

All year 1:

Travel Travel for interviews 2nd class public transport estimated.

Contribution to total cost of conference attendance/travel for dissemination of phase 1

Research costs Stationery, envelopes, postage, paper, printing, photocopying for contacting sites and recruiting sample for interviews; baseline interviews schedules, show cards, transcripts, follow-up questionnaires, categorisation of themes, qualitative and statistical analyses; printer cartridges; computer diskettes; networking and software; audio-cassette tapes for recording interviews; inter-library loan requests, report writing.

Study schedule: timetable of work

Months 1–6: Finalise consent, approvals and study sites; liaise with participating study sites. Search/systematic review of literature; finalise expectancy models and instruments. RGA interviews, analyses, draft report. Months 6–14: development of expectations questionnaire (final copy to MREC); initial field testing and refinement of questionnaire; Months 15–20: sampling, main postal survey, interviews, follow-ups; Months 21–24: analyses, writing up, dissemination.

[note: we are providing access, at no additional cost to the project, to computer, printing and other equipment]

Start date: 1 November 2007. End date: 31 October 2009. Duration: 24 months.

Statement of the likely outputs from the study and dissemination (content and form)

1. Expectations questionnaire, tested rigorously for reliability and validity, derived from theory and lay views. This will be made publicly available, without charge, on a study website.
2. Report giving evidence of contribution to body of knowledge on consumer expectations re; the study aims and objectives.
3. Publication in relevant academic and professional journals on:
 - i. contribution to existing body of knowledge (theoretical and lay models),
 - ii. the tested expectations questionnaire,
 - iii. relevance to health policy and clinical practice (quality assurance, patient behaviour, adherence to therapy and health outcomes),
 - iv. methodological papers.

An HTA report (and details on the HTA and Methodology Programme website) would be aimed for. Results would be made available on our website and presented at relevant conferences. We will also disseminate the results to patients' groups including the Patients Forum, and the NHS Clinical Governance Support Team, Patient Experiences Group, who aim to 'engage patients and carers to bring about changes in practice that improve the patient experience'.

Consumer representation

Consumers will be included in the study advisory group which will meet quarterly. Patient organisations at national and local level will be consulted with a view to nominating two consumer representatives to be included, as well as for their views on the questionnaire and development. Representatives of patients have agreed to collaborate with this study (see earlier) and we will consult them throughout. The applicants have a good track record of involving consumers and their representatives in research design (e.g. the advisory group for AB's ESRC funded survey of quality of life in older age included Age Concern England (ACE), and two older people nominated by ACE; the final study questionnaire was field tested with focus groups of older people before use. This collaboration led to an ACE policy document based on findings from the study). The PI's current collaborative research links with representatives of lay people,

public bodies and service providers also include ACE, the Commission for Rural Communities and several health authorities. AB is directly involved with the national evaluation of Partnerships for Older People Programme (Department of Health) which is a collaborative research partnership between academics, health and social service providers and the voluntary sector.

Lay summary

Policy makers are aware of the importance of evaluating health services from the point of view of patients. What people expect from their health care, compared with their experiences of it in practice, may influence their satisfaction with their care. There is also some evidence that patients who receive the health care they expect are likely to recover better than patients who do not. However, there are many different types of expectations, including ideal desires and predicted expectations, and they relate to several different types of health care structures (e.g. buildings, equipment, staff), processes (e.g. waiting lists, the way staff and patients interact) and health outcomes (e.g. the effects of the health service on patients' health, including patients' assessments of their health), and there is no well tested questionnaire to measure these expectations. We propose to examine existing models and definitions of patient expectations in the literature, and to ask patients for their definitions. We will then develop an expectations questionnaire, and test it for its validity, and use it to examine expectations in detail.

References

- Ajzen I. (1988). *Attitudes, personality and behaviour*. Open University Press: Milton Keynes.
- Bandura A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice Hall.
- Bower P, King M, Nazareth I, Lampe F, Sibbald B. (2004). Patient preferences in randomised controlled trials: conceptual framework and implications for research. *Social Science and Medicine*, **61**:685–95.
- Bowling A. (2000). *Research methods in health*. Maidenhead: Open University Press.
- Bowling A. (2001). *Measuring disease. A review of disease specific quality of life measurement scales*. 2nd edition. Buckingham: Open University Press (395 pages).
- Bowling A. (2002a). An 'inverse satisfaction' law? Why don't older patients criticise health services? *Journal of Epidemiology and Community Health*, **56**:482.
- Bowling A. (2002b). *Research methods in health. Investigating health and health services*. 2nd edition. Buckingham: Open University Press (486 pages).
- Bowling A. (2005a). *Measuring Health*. 3rd edition. Buckingham: Open University Press (208 pages).
- Bowling A. (2005b). Techniques of questionnaire design. In: Bowling, A. and Ebrahim, S. (eds). *Handbook of health research methods: investigation, measurement and analysis*. Maidenhead: Open University Press.
- Bowling A. (2005c). Surveys. In: Bowling, A. and Ebrahim, S. (eds). (2005). *Handbook of health research methods: investigation, measurement and analysis*. Maidenhead: Open University Press.

- Bowling A. (2005d). Measuring outcomes. In: Bowling, A. and Ebrahim, S. (eds). *Handbook of health research methods: investigation, measurement and analysis*. Maidenhead: Open University Press.
- Bowling A, Bond M. (2001). A national evaluation of specialists' clinics in primary care settings. *British Journal of General Practice*, **51**:264–269.
- Bowling A, Gabriel Z, Dykes J. *et al.* (2003). Let's ask them: a national survey of definitions of quality of life and its enhancement among people aged 65 and over. *International Journal of Aging and Human Development*, **56**:269–306.
- Bowling A and Redfern, J. (2000). The process of outpatient referral and care: the experience and views of patients, their general practitioners, and specialists. *British Journal of General Practice*, **50**:116–120.
- British Medical Association (2002). *Your contract, your future*. General Practitioners' Committee, BMA, London.
- Buetow SA. (1995). What do general practitioners and their patients want from general practice and are they receiving it? A framework. *Social Science and Medicine*, **40**:213–21
- Calman KC. (1984). Quality of life in cancer patients – a hypothesis. *Journal of Medical Ethics*, **10**:124–7.
- Calnan M. (1988). Towards a conceptual framework of lay evaluation of health care. *Social Science and Medicine*, **27**:927–33.
- Campbell R, Pound P, Pope C, Britten N. *et al.* (2003). Evaluating meta-ethnology: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Social Science and Medicine*, **56**:671–84.
- Cartwright A, Anderson, R. (1981). *General practice revisited. A second study of patients and their doctors*. London: Tavistock Press.
- Chalmers I. (1995). What do I want from health research and researchers when I am a patient? *British Medical Journal*, **310**:1315–18.
- Coulter A. (2006). Examining health expectations. Editorial. *Health Expectations*, **9**:1–2.
- Crow R, Gage H, Hampson S. *et al.* (1999). The role of expectancies in the placebo effect and their use in the delivery of health care: a systematic review. *Health Technology Assessment*, **3**(3).
- Crow R, Gage H, Hampson S. *et al.* (2002). The measurement of satisfaction with healthcare: implications for practice from a systematic review of the literature. *Health Technology Assessment*, **6**(32).
- Davies AR, Ware, JE. (1991). *GHAA's consumer satisfaction survey and manual*. Washington, DC: Group Health Association of America.
- Dawn AG, Lee PP. (2004). Patient expectations for medical and surgical care: a review of the literature and applications to ophthalmology. *Survey of Ophthalmology*, **49**:513–24.

- Dijksterhuis GB and Gower JC (1991). The interpretation of generalised procrustes analysis and allied methods. *Food Quality and Preference*, **3**:67–87.
- Donabedian A. (1980). *The definition of quality and approaches to its assessment*. Ann Arbor, MI: Health Administration Press.
- Faller H, Vogel H, Bosch B. (2000). Patient expectations regarding methods and outcomes of their rehabilitation – a controlled study of back pain and cancer patients. *Rehabilitation*, **39**:205–14.
- Donovan D, Saunders C. (2005). Key issues in the analysis of qualitative data in health services research. In: A. Bowling, S. Ebrahim (eds). *Handbook of health research methods. Investigation, measurement and analysis*. Maidenhead: Open University Press.
- Fishbein M. (1967). Attitude and the prediction of behavior. In: M. Fishbein (ed). *Readings in attitude theory and measurement*. New York: Wiley.
- Fitzpatrick R. (1993). Scope and measurement of patient satisfaction. In: Fitzpatrick R, Hopkins A. (eds). *Measurement of patient satisfaction with their care*. London: Royal College of Physicians.
- Frewer LJ, Salter B, Lambert N. (2001). Understanding patients' preferences for treatment: the need for innovative methodologies. *Quality in Health Care*, **10**:SI:i50–4.
- Gower JC. (1975). Generalised procrustes analysis. *Psychometrika*, **40**:35–51.
- Janzen JA, Silvius J, Jacobs S. *et al.* (2006). What is a health expectation? Development of a pragmatic conceptual model from psychological theory. *Health Expectations*, **9**:37–48.
- Kelly GA. (1955). *The psychology of personal constructs: a theory of personality*. New York: Norton.
- Kravitz RL, Callahan EJ, Paterniti D. *et al.* (1996). Prevalence and sources of patients' unmet expectations for care. *Annals of Internal Medicine*, **125**:730–37.
- Lambert N, Rowe G, Bowling A, Ebrahim S, Thomson R, Laurence M, Dalrymple J. (2004). Reasons underpinning patients' preferences for various angina treatments. *Health Expectations*, **6**:246–256.
- Like R, Zyzanski SJ. (1987). Patient satisfaction with the clinical encounter: social psychological determinants. *Social Science and Medicine*, **24**:351–57.
- Linder-Pelz S. (1982a). Social psychological determinants of patient satisfaction: a test of five hypotheses. *Social Science and Medicine*, **16**:583.
- Linder-Pelz S. (1982b). Towards a theory of patient satisfaction. *Social Science and Medicine*, **16**:577–582.
- Linder-Pelz S. and Struening EL. (1985). The multidimensionality of patient satisfaction with a clinic visit. *Journal of Community Health*, **10**:42.
- Mays N. and Pope C. (1996). Rigour and qualitative research. In: N. Mays and C. Pope (eds). *Qualitative research in health care*. London: BMJ Publishing Group.

McKinley RK, Stevenson K, Adams S., Manku-Scott TK. (2002). Meeting patient expectations of care: the major determinant of satisfaction with out-of-hours primary medical care. *Family Practice*, **19**:333–8.

Olsen JM, Roese NJ, Zanna MP. (1996). Expectancies, in: Higgins ET, Kruglanski AW (eds). *Social Psychology: handbook of basic principles*. New York: Guilford press.

Rao JK, Weinberger M, Kroenke K. (2000). Visit-specific expectations and patient-centred outcomes. *Archives of Family Medicine*, **9**:1148–55.

Ritchie J, Spencer L. (1994). Qualitative data analysis for applied policy research. In: Bryman A, Burgess RG. (eds). *Analysing qualitative data*. London: Routledge.

Roscoe JA, Bushunow P, Morrow GR. *et al.* (2004). Patient expectation is a strong predictor of severe nausea after chemotherapy. *Cancer*, **11**:2701–8.

Rowe G, Lambert N, Bowling A, Ebrahim S, Thomson R. (2005). Ascertaining patients' preferences for treatment for angina using a modified repertory grid method. *Social Science and Medicine*, **60**:2585–2595.

Ruta, DA, Garratt AM, Leng Met. *Et al.* (1994). A new approach to the measurement of quality of life. The Patient Generated Index. *Medical Care*, **32**:1109–26.

Stacey M. (1976). The health service consumer: a sociological misconception. *Sociological Review Monograph*, **22**:194–200.

Staniszewska S. (1999). Patient expectations and health-related quality of life. *Health Expectations*, **2**:93–104.

Thompson AGH and Sunol R. (1995). Expectations as determinants of patient satisfaction: concepts, theory and evidence. *International Journal for Quality in Health Care*, **7**:127–141.

Ware JE, Hays RD. (1988). Methods for measuring patient satisfaction with specific medical encounters. *Medical Care*, **26**:393–402.

Williams S, Weinman J, Dale J, Newman S. (1995). Patient expectations: what do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction? *Family Practice*, **12**:193–201.

III. ANALYSIS OF COSTS

Please read the accompanying guidance notes before completing the following details

ALL COST SHOULD BE GIVEN IN GBP (£).

For joint applications (i.e. 2 or more institutions) please repeat this section for each institution

UCL WILL BE ADMINISTERING THE GRANT. BBSRC IN NORWICH WILL SUBMIT ITS CLAIMS TO US FOR PAYMENT.

A. DIRECTLY INCURRED COSTS

This should include staff to be funded on actual salaries. For principal investigator and co-investigators see Directly Allocated Costs

A.1 Research Staff

Job Title and % time on project	Grade	Year 1 (1 Nov 2007 – 31 Mar 2008)		Year 2 (1 April 08 – 31 Mar 09)		Year 3 TOTAL (1 April 09 – 31 Oct 2009)	
		Salary	Employers NI/SA	Salary	Employers NI/SA	Salary	Employers NI/SA
UCL RA: Research assistant 100% for fieldwork and management: 12 months From 1st Sept 2008 to 31 October 2009 [Year 2=UCL RA starts in month 17 (month 5 of year 2; 5 months in year 2 – From 1st Sept 2008 to 31 October 2000] Year 3 = UCL RA continued to 31 Oct 2009 = 7 months in year 3 12 month contract] UCL increment date: August	7.29	[28,301 & 2676 LW Across years 2–3 only]	[6,726 Across years 2–3 only]	Cost 5 months salary = 16,509	Cost 5 months ni/sa = 2,803	Cost 7 months salary = £35,028 11,792	Cost 5 ni/sa = 3,924
UCL Statistician Two days (pro-rata of salary grade 7 as above in year 3)	7.29					£399 plus £523 £26 LW	£98
Norwich RA: Research scientist BBSRC scale 6-PD; salary £25641; Increment date July; c. 50% for 12 months year 1.	6-PD	£13,382	£2,850 + £1,191			£17,423	
A.1 TOTAL						£52,974	

A.2 Admin/Secretarial Staff

Job Title and % time on project	Grade	Year 1 (1 Nov 2007 – 31 Mar 2008)		Year 2 (1 April 08 – 31 Mar 09) CR starts in month 17 (month 5 of year 2)		Year 3 (1 April 09 – 31 Oct 2009) CR continues to 31 Oct 2009 = 7 months in year 3 12 month contract		
		Salary	Employers NI/SA	Salary	Employers NI/SA	Salary	NI/SA	TOTAL
UCL: Clerical assistant grade 5, point 20, 20% for 12 months (full time salary costs = £17454 plus £2440 LW; Sup./NI: £3454)	5.20	£17,454 plus £2,440 LW; Sup./NI: £3,454 20% pro-rata in years 2–3 only]	[years 2–3 only]	£2,272	£455	£2,272	£455	£5,454
A.2 TOTAL				£2,272	£455	£2,272	£455	£5,454

A.3 Other Staff

	Grade	Year 1 (Apr – Mar)		Year 2 (Apr – Mar)		TOTAL
		Salary	Employers NI/SA	Salary	Employers NI/SA	
		200x – 200x		200x – 200x		
Norwich: Senior statistician, Mr Ian Wakeling, BBSRC, consultancy requested 5 days in year 1		£350 per day×5 days				£1,750
A.3 TOTAL		£1,750				£1,750

A.4 Travel and Subsistence

	Year 1 (Apr – 07 Mar 08)	Year 2 (Apr – 08 Mar 09)	Year 3 (Apr 08 – Mar 09)	TOTAL
	200x – 200x	200x – 200x	200x – 200x	
UCL: All travel to advisory group meetings	£320	£400	£400	£1120
UCL: Travel and subsistence for practice/trust recruitment, training staff in sample recruitment/despatch of patients' packs; travel for face- to-face interviews, 2nd class public transport		£2300	£500	£2800
UCL: All travel/subsistence for advisory group meetings	£50	£100	£50	£200
UCL: RA's travel/conference fees/costs for dissemination			£200	£200
Norwich: travel for 40 interviews phase 1	£480			£480
Norwich: RA's travel/conference fees/costs for dissemination of phase 1	£200			£200
A4.TOTAL	£1050	£2800	£1150	£5000

A.5 Equipment

	Year 1 (Apr – Mar)	Year 2 (Apr – Mar)	Year 3 (Apr – Mar)	TOTAL
	200x – 200x	200x – 200x	200x – 200x	
n/a existing research PCs and printers available				
A5. TOTAL				0

A.6 Consumables

	Year 1 (Apr – Mar)	Year 2 (Apr – 08 Mar 09)	Year 3 (Apr – Mar)	TOTAL
	200x – 200x	200x – 200x	200x – 200x	
UCL: Library costs for updated review 50 i/l loans @ £3.50 each	£175			£175
UCL: Stationary, paper, envelopes, photocopying, postage and pre-paid envelopes	£50	£300	£50	£400
UCL: Printer cartridges, diskettes, networking, software;	£50	£100	£50	200
Printing costs for: questionnaires and interview schedules, address labels, coding sheets, data processing, study reports		£300	£200	£500
UCL: Trust/practice costs re: sample identification, printing of patient address labels and attaching them to patients' (provided by us) pre-paid envelopes – matched to serial numbers and confidential sample ID list; despatch of patient packs and reminders; room hire for interviews – phase 1 (Norfolk general practice and hospital clinics in year 1) and subsequent main study (Norfolk, Essex, London general practice and hospital clinics)	£200	£2000	£300	£2500
This is equal to £300 per each of the 6 sites (3 hospital, 3 GP) for the main study = £1800;				
+				
plus an additional £100 per 2 Norwich sites (1 hospital, 1 GP) for exploratory RGA phase 1 = £200;				
+				
plus an additional £250 for the 2 London sites (1 hospital, 1 GP) for the test phase = £500.				
Total = £2500.				
(calculated using estimates from PCT research networks).				
Norwich: Stationary, envelopes, postage, paper, printing, photocopying for sample recruitment, baseline interview schedules, show cards, transcripts, follow-up questionnaires, categorisation, analysis; printer cartridges, diskettes; networking, software; audio-cassette tapes for interviews; inter-library loans, report writing	£300			£300
A.6 TOTAL	£775	£2700	£600	£4075

A.7 Any other Directly Incurred Costs

	Year 1 (Apr 07– Mar 08)	Year 2 (Apr 08– Mar 09)	Year 3 (Apr – Mar)	TOTAL
	200x – 200x	200x – 200x	200x – 200x	
UCL: Reimbursement of two lay patient representatives attending advisory group meetings @ £30 per person x 2 = 8 meetings over study period	£120	£180	£180	£480
UCL: Interpreters for survey (estimated 30 hours x £20 per hour)	£50	£400	£150	£600
UCL: Freelance interviewer for four months during the initial questionnaire testing phase and the main survey fieldwork phase, with NI costs, at £18 per hour, over four months = £10,368.		£5,000	£5,368	£10,368
UCL: Freelance coder (for the additional interview open and closed questionnaire coding), plus additional data processing, with NI costs, at £18 per hour = £2,592.			£2,592	£2,592
A.7 TOTAL	£170	£5,580	£8,290	£14,040

B. DIRECTLY ALLOCATED COSTS

B.1 Staff

This should include people contributing to the project whose salaries are not itemised under Directly Incurred Costs (e.g. PI and co-investigators).

Name	Role on project	% FTE on project
Professor Ann Bowling (PI, UCL)	Systematic review and report, overall survey and study management, supervision, co-design, analyses	10% for 24 months
Professor Amanda Howe (co-applicant from UEA staff costs)	Facilitate identification and recruitment of practices in diverse areas, advice on progress, interpretation of results and writing up, dissemination	1.3% for 24 months
Dr Gene Rowe (<i>Promoted to Head of Consumer Science 2007+</i>)	Management and supervision of interviews, analyses of phase 1; co-design and analysis of data for main survey questionnaires; advice on progress, interpretation of results and writing up throughout; dissemination	10% for 24 months
B.1 TOTAL		

* To calculate this figure, you may use the average cost used by the employing institution for this level of academic staff, and not necessarily the actual salary.

B.2.1 Estates Charges

Estate charges (calculated on basis of TRAC methodology) apply to higher education institutions only, other types of applicant should enter a value of zero).

B2.1

UCL Total Estates Charges for AB and staff

Prof Amanda Howe UEA Estates Charges

BBSRC Norwich Total Estates Charges for GR and RA

(BBSRC Breakdown: FEC for RA: £11819 c. 50% pro-rata for 6 months full time in year 1: £5,764; FEC for GR £11,819 10% pro-rata × 24 months = £1,182 in year 1, £1,182 in year 2)

B.2.2 Other Costs

E.g. Costs of using shared facilities owned by your institution

Description
Not applicable
B2.2 TOTAL

C. INDIRECT COSTS

Indirect costs charge (calculated on the basis of TRAC methodology) apply to applicants from higher education institutions only, other types of applicant should enter a value of zero.

C

UCL Indirect costs AB and staff

Prof Amanda Howe UEA Indirect costs charge

BBSRC Indirect costs

(BBSRS Breakdown: FEC for RA: £40,920 c. 50% pro-rata 6 months FT = £19,995 in year 1; FEC for GR: £40,920 10% pro-rata in: year 1 = £4,092; year 2 = £4,092).

D. SUMMARY

These totals should be copied from the itemised tables already completed under Sections A, B and C.

D.1 The Full Economic Cost *Directly Incurred Costs*

A.1 Research Staff

A.2 Administrative Staff

A.3 Other Staff

A.4 Travel and Subsistence

A.5 Equipment (up to £50k max)

A.5 Equipment (balance of amount requested, if total is over £50k)

A.6 Consumables

A.7 Any other directly incurred costs

TOTAL A

Directly Allocated Costs

B.1 Staff

UCL Ann Bowling 10% 24 months & costed staff

UEA Amanda Howe 1.3% 24 months

BBSRC Gene Rowe 10% 24 months & costed staff

B.2.1 Estates Charges

UCL Ann Bowling 10% 24 months & costed staff

UEA Amanda Howe 1.3% 24 months

BBSRC Gene Rowe 10% 24 months & costed staff

B.2.2 Other Costs

TOTAL B

Indirect Costs

C Indirect costs charge
UCL Ann Bowling 10% 24 months & costed staff
UEA Amanda Howe 1.3% 24 months
BBSRC Gene Rowe 10% 24 months and costed staff
TOTAL C

TOTAL FULL ECONOMIC COST OF THE PROJECT

Total A + Total B + Total C	£139,871 (B,C) + A?£83,293 Total = £223,163
-----------------------------	--

D.2 Research Grant Requested

If applicants are from a higher education institution then the 'Proportion to be paid ...' should be left at 80%; however, for applicants from other types of organisations, the 'proportion to be paid ...' should be set to 100%.

	£	% to be paid by Methodology Programme	Total Grant Requested
Full Economic Costs, (only including equipment up to £50k max).	£223,163	80%	£179,000
Equipment (balance of amount requested, if total is over £50k)		100%	0
TOTAL			£179,000

SECTION IV: INSTITUTIONAL CV

Name and address of Institutions in receipt of grant:

Principal applicant: University College London, Hampstead Campus, Rowland Hill Street, London NW3 2PF

Co-applicant: Institute of Food Research (BBSRC), Norwich Research Park, Colney, Norwich, NR4 7UA

Why is the institution to which you are attached particularly suited to this work?

The research will be conducted at University College London, and at the Institute of Food Research (BBSRC), Norwich.

Both University College London and the Institute of Food Research provide excellent academic research environments and infrastructures, with many opportunities for staff development, learning and interaction via courses and seminars. These organisations have well established capacity to host research, including the proposed research.

University College London (UCL): UCL has 24,500 staff and students in 72 departments. An outstanding range of UCL expertise is engaged with international networks of students and researchers, former staff and students, visionary companies, research organisations, local and national governments, and international policymaking and regulatory bodies. UCL's academic community includes 35 fellows of the Royal Society, 27 Fellows of the British Academy, 13 Fellows of the Royal Academy of Engineering and 75 Fellows of the Academy of Medical Sciences, and Nobel Prizes have been awarded to 18 academics and graduates. The Department of Primary Care and Population Sciences at UCL is a multidisciplinary department including primary care clinicians, epidemiologists, statisticians, social scientists and health services researchers and is committed to high calibre research and teaching.

Institute of Food Research (IFR): The Institute of Food Research's aim is to be a world-leading contributor to issues relevant to food safety, diet and health, and food materials. It is the UK's only integrated basic science provider focused on food. IFR is a not-for-profit company with charitable status, sponsored by the Biotechnology and Biological Sciences Research Council. The scientific research collaboration of IFR stretches across the world through informal and formal partnerships. Outcomes feed into national and international strategies, delivering advice and solutions for UK Government, public sector bodies, regulatory authorities, industry and consumers. A staff of 290 is complemented by many visiting scientists and postgraduate students each year from all parts of the world, who visit IFR for collaborative research and training. IFR has an output of about 500 scientific papers, posters and presentations by staff each year. The Consumer Science Group includes a wide range of biomedical and social scientists, and statisticians. It is internationally renowned for psychological research on consumer perspectives, including attitudes to new technologies and perceptions of risk.

SECTION V: DECLARATIONS

Funding of research is contingent on final approval of the protocol by the appropriate ethics committee(s) and all necessary trial/study authorisations, and your agreeing to conduct the research according to the DH’s Research Governance Framework (and MRC Guidelines for Good Clinical Practice in Clinical Trials if appropriate to the proposed research). Signature of this form is taken to be written confirmation of the research team’s agreement to this.

A: LEAD APPLICANT

I declare that the information given on this form is complete and correct, and I take full responsibility for the accuracy of this submission.

I shall be actively engaged in, and in day-to-day control of, the project.

I understand that progress reports will be required by the Methodology Programme, and that no substantive variation in the scheme as outlined in the application will be permitted without prior reference to the Methodology Programme.

.....
(Signature of Applicant)

Professor Ann Bowling..... (Name: Please print)

20-07-07..... (Date)

B: HEAD OF DEPARTMENT OR INSTITUTION

I confirm that I have *read* this application, and that, if funded, the work will be accommodated and administered in the department/institution and that the applicants for whom we are responsible may undertake this work.

.....
(Signature)

Professor Anne Johnson.....
(Name: please print)

.....
(Date)

Head of Department.....
(Position)

C: FINANCE OFFICER (Institution A)

I agree that the gradings and salaries quoted in Analysis of costs Part A are in accordance with the practice and scales applying in this University/Institution; and that any grant awarded will be administered by this University/Institution in accordance with the Department of Health's Conditions of Contract.

.....
(Finance Officer qualified to make this statement for the Institution)

.....
(Name and Address: please print)

.....
(Date)

C: FINANCE OFFICER (Institution B)

I agree that the gradings and salaries quoted in Analysis of costs Part A are in accordance with the practice and scales applying in this University/Institution; and that any grant awarded will be administered by this University/Institution in accordance with the Department of Health's Conditions of Contract.

.....
(Finance Officer qualified to make this statement for the Institution)

.....
(Name and Address: please print)

.....
.....
.....

.....
(Date)

Appendix 2

Literature review search strategy (*Chapter 2*)

TABLE 50 Search strategies

<i>Database: Dialog AMED</i>	
1. SEARCH:	expectations
2. SEARCH:	expectancy adj theory
3. SEARCH:	1 or 2
4. SEARCH:	health adj care
5. SEARCH:	terminal-care.de. or hospice-care.de.
6. SEARCH:	nursing-care.de. or geriatric-nursing.de. or holistic-nursing.de.
7. SEARCH:	quality-of-health-care.de. or delivery-of-health-care.de. or primary-health-care.de.
8. SEARCH:	health adj services
9. SEARCH:	health-services.de. or child-care.de. or community-health-services.de. or emergency-medical-services.de. or health-services-for-the-aged.de. or mental-health-services.de. or pharmaceutical-services.de. or preventive-health-services.de. or state-medicine.de. or transportation-of-patients.de. or womens-health-services.de.
10. SEARCH:	palliative-care.de. or health-services-accessibility.de. or home-care-services.de.
11. SEARCH:	patient-care.de. or day-care.de. or palliative-care.de.
12. SEARCH:	after-care.de. or ambulatory-care.de. or child-care.de. or comprehensive-health-care.de. or continuity-of-patient-care.de. or critical-care.de. or day-care.de. or delivery-of-health-care.de. or dental-care.de. or ambulatory-care-facilities.de. or general-patient-care.de. or health-care-.de. or hospice-care.de. or long-term-care.de.
13. SEARCH:	patient-care-management.de. or patient-careteam.de. or intensive-care-neonatal.de. or nursing-care.de. or obstetrical-care.de. or palliative-care.de. or pastoral-care.de. or patient-care.de. or patient-acceptance or health-care.de. or postoperative-care.de. or prenatal-care.de. or preoperative-care.de. or primary-health-care.de. or quality-of-health-care.de. or respite-care.de. or self-care.de. or home-care-services.de. or patient-care-team.de. or terminal-care.de.
14. SEARCH:	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13
15. SEARCH:	3 and 14
16. SEARCH:	lg=en
17. SEARCH:	15 and 16
<i>Database: BNI</i>	
1. SEARCH:	expectations
2. SEARCH:	patients-attitudes-and-perceptions.de.
3. SEARCH:	1 or 2
4. SEARCH:	health adj care
5. SEARCH:	primary-health-care.de. or general-practice.de.
6. SEARCH:	primary-health-care.de. or holistic-care.de. or postnatal-care.de. or residential-care.de.
7. SEARCH:	community-care.de.
8. SEARCH:	health adj services
9. SEARCH:	community-health-services.de. or home-care-services.de. or long-term-care.de. or mental-health-community-care.de. or respite-care.de.
10. SEARCH:	children-services.de. or neonates-services.de. or school-health.de.
11. SEARCH:	mental-health-services.de. or prison-health-services.de. or occupational-health-services.de. or learning-disabilities-services.de. or elderly-services.de. or terminal-care-services.de.
12. SEARCH:	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11
13. SEARCH:	3 and 12

Database: CINAHL

1. SEARCH: expectations
2. SEARCH: treatment adj related adj outcome adj expectation
3. SEARCH: positive adj outcome adj expectancy
4. SEARCH: negative adj outcome adj expectancy
5. SEARCH: expectancy adj theory
6. SEARCH: 1 or 2 or 3 or 4 or 5
7. SEARCH: health adj care
8. SEARCH: health-care-delivery.de. or health-services-accessibility.de. or managed-care-programs.de. or national-health-programs.de. or primary-health-care.de. or telehealth.w..de.
9. SEARCH: quality-of-health-care.de. or quality-of-nursing-care.de.
10. SEARCH: patient-care.de. or terminal-care.de. or hospice care.de. or palliative-care.de.
11. SEARCH: primary-health-care.de. or shared-services-health-care.de.
12. SEARCH: health adj care adj services
13. SEARCH: health-services.de. or adolescent-health-service.de. or assistive-technology-services.de. or child-health-services.de. or community-health-services.de. or dental-health-services.de. or emergency-medical-services.de. or health-services-for-the-aged.de. or health-services-for-the-indigent.de. or health-services-indigenous.de. or hospital-programs.de. or institutionalization.w..de. or interpreter-services.de. or mental-health-services.de.
14. SEARCH: health adj services
15. SEARCH: community-mental-health-services.de. or nursing-care.de. or nutrition-services.de. or peer-assistance-programs.de. or rehabilitation.w..de. or rural-health-services.de. or student-assistance-programs.de. or substance-use-rehabilitation-programs.de. or urban-health-services.de. or womens-health-services.de.
16. SEARCH: 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15
17. SEARCH: 6 and 16
18. SEARCH: 17 and lg=en

Database: EMBASE

1. SEARCH: expectations
2. SEARCH: expectation.w..de.
3. SEARCH: treatment adj related adj outcome adj expectation
4. SEARCH: patient adj related adj self adj efficacy adj expectations
5. SEARCH: positive adj outcome adj expectancy
6. SEARCH: expectancy.w..de.
7. SEARCH: expectancy adj theory
8. SEARCH: 1 or 2 or 3 or 4 or 5 or 6 or 7
9. SEARCH: health adj care
10. SEARCH: mental-health-care.de. or home-mental-health-care.de. or mental-health-service.de. or psychosocial-care.de.
11. SEARCH: health-care-organization.de. or health-care-industry.de. or health-care-system.de.
12. SEARCH: patient-care.de. or preoperative-care.de. or postanesthesia-care.de. or rehabilitation-care.de.
13. SEARCH: health-care-system.de.
14. SEARCH: health-care-practice.de.
15. SEARCH: health-care.de. or child-health-care.de. or elderly-care.de. or health-care-delivery.de. or maternal-care.de. or medical-care.de. or mental-health-care.de. or mental-health-service.de. or rural-health-care.de. or terminal-care.de.
16. SEARCH: health adj services
17. SEARCH: 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. SEARCH: 8 and 17
19. SEARCH: 18 and lg=en and human=yes

Database: MEDLINE

1. SEARCH: expectation\$1.ti,ab
2. SEARCH: (positive adj outcome adj expectancy).ti,ab
3. SEARCH: (negative adj outcome adj expectancy).ti,ab
4. SEARCH: hopes.ti,ab
5. SEARCH: (expectancy adj theory).ti,ab
6. SEARCH: exp health services/ or delivery of health care/ or exp after-hours care/ or delivery of health care, integrated/ or exp child care/ or exp community health services/ or exp dental health services/ or exp dietary services/ or exp emergency medical services/ or exp genetic services/ or exp health services misuse/ or exp mental health services/ or exp nursing care/ or exp nursing services/ or exp patient care/ or exp pharmaceutical services/ or exp preventive health services/ or exp rehabilitation/ or exp reproductive health services/ or exp social work/ or exp women's health services/
7. SEARCH: quality of health care/
8. SEARCH: 6 or 7
9. SEARCH: 1 or 2 or 3 or 4 or 5
10. SEARCH: 8 or 9

Database: PsycINFO

1. SEARCH: expectations.w..de.
2. SEARCH: patient adj expectations
3. SEARCH: treatment adj related adj outcome adj expectation\$1
4. SEARCH: patient adj related adj self adj efficacy adj expectation\$1
5. SEARCH: positive adj outcome adj expectancy
6. SEARCH: negative adj outcome adj expectancy
7. SEARCH: attitudes.w..de.
8. SEARCH: hope.w..de.
9. SEARCH: expectancy adj theory
10. SEARCH: treatment-barriers.de.
11. SEARCH: 1 or 2 or 5 or 6 or 7 or 8 or 9 or 10
12. SEARCH: health adj care
13. SEARCH: health-care-delivery.de.
14. SEARCH: health-care-services.de. or mental-health-services.de. or community-mental-health-services.de. or primary-health-care.de.
15. SEARCH: emergency-services.de.
16. SEARCH: quality-of-services.de.
17. SEARCH: quality-of-care.de.
18. SEARCH: 12 or 13 or 14 or 15 or 16 or 17
19. SEARCH: 11 and 18
20. SEARCH: 19 and lg=en

Appendix 3

Narrative review of patients' expectations for health care: summary of evidence (*Chapter 2*)

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Holzner B, Kemmler G, Kopp M, Dachs E, Kaserbacher R, Spechtenthauser B, et al. Preoperative expectations and postoperative quality of life in liver transplant survivors. <i>Arch Phys Med Rehabil</i> 2001;82:73–9 ⁶⁵	AMED	To assess normalisation in the lives of liver transplant patients and the impact of preoperative expectations on postoperative quality of life Cross-sectional study Telephone-structured interview and patient self-completion of postal quality-of-life questionnaires post transplantation Clinical data collected from medical records	Department of Internal Medicine, Innsbruck University Hospital, Austria 62 patients had liver transplant in 10-year period and met criteria; seven excluded because of incomplete study questionnaires; <i>n</i> = 55 participants Mean age 51.9 years; 32/55 were men At least 1 year between transplantation and study Average time since surgery was 4.7 years	Participants were asked to recollect preoperative expectations: 'Before transplantation, did you expect that your life would normalise after the surgery?'. Response categories were 'positive expectations', 'negative expectations' and 'no expectations at all' No information regarding source of this question The effects of group ('normalised', 'not normalised') and expectation on overall quality of life were assessed	None stated Brief reference to a previous study ²³⁴ in which patients who had expected to 'return to normal life' following bone marrow transplantation but did not might experience a greater impairment in their quality of life than patients who had no such expectations	33 patients had expected to lead a normal life after transplantation; 20 did not expect to lead a normal life after transplantation; two patients had no expectations at all Of the 33 who expected to return to a normal life, only 11 rated themselves as living a normal life. Of the 20 who did not expect to return to normal, 10 rated their current status as normal No significant relationship between preoperative expectations and quality of life for the whole group Preoperative expectations had no influence on actual outcome on impairments in overall quality of life Patients whose preoperative optimistic expectations remained unfulfilled claimed to have a markedly lower quality of life than those who from the beginning did not expect their lives would be 'back to normal' after transplantation	Small sample, particularly for subgroup analysis The mean time interval between transplantation and data collection was 4.7 years; potential bias in recall of expectations that patients claimed to have had before surgery No details of source or testing of expectation question

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Metcalf C.J. Klaber Moffett J.A. Do patients' expectations of physiotherapy affect treatment outcome? Part 2: survey results. <i>Int J Ther Rehabil</i> 2005; 12 :112–19 ⁶⁵	AMED	To examine the relationship between patients' expectations of benefit and the outcome of physiotherapy Before-and-after postal cross-sectional questionnaire surveys Patients referred for musculoskeletal outpatient physiotherapy for a peripheral joint problem	688 patients met inclusion criteria, 285 responded (41%). Responders tended to be older and female Mean age 49.6 years; female 60.4% 137 (48.1%) expected to get 'a lot better'; 69 (24.2%) expected a complete recovery; 66 (23.2%) expected to be 'a little better'; 17 (5.9%) expected no benefit (figures unclear as they total 289, whereas there were only 285 responders) Follow-up questionnaires completed by 231 respondents (80.5%)	Patient Expectation Questionnaire ⁶⁵ including expectation of benefit using a 6-point Likert scale (1 = a lot worse; 6 = complete recovery)	Expectations are cognitions, which have been linked to a number of theories suggested in the psychology literature that may affect health behaviour and ultimately treatment outcome. ²⁶⁵ Not discussed here	Outcome expectations were related to lower extremity function and physical health status following therapy Outcome expectations were also predictive of a change in functional disability, a change in the individual's perceptions of physical health and a change to the individual's perceived expectations of improvement Expectation of benefit was a more important predictor of outcome than the duration and type of condition and the treatment given in terms of modality, duration and intensity	Survey's limitations discussed in a previous paper ⁶⁵ There is a discrepancy in the numbers reported for sample characteristics

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Guerra CE, McDonald V.J, Ravenell KL, Asch DA, Shea JA. Effect of race on patient expectations regarding their primary care physicians. <i>Fam Pract</i> 2008; 25 :49–55 ⁶⁷	ASSIA	To determine the association between patient race and patient expectations of their primary care physician Cross-sectional study	Philadelphia, PA, USA Convenience sample of 709 primary care patients from four clinic sites Mean age 51.7 years; 61% male 67% self-identified their race as African American and 33% as white	Patient expectations were measured using a modified version of Peck <i>et al.</i> 's instrument. ^{28,8} It asks, 'Do you think it is necessary for the doctor to be familiar with your medical records?; ask how your condition is affecting your life and family; ask about your personal health habits; ask about previous treatments you've tried for your condition; prescribe new medication and refer you to a specialist' The instrument also asks whether it is necessary for the doctor to perform several physical examination components: examine eyes, nose and/or throat; listen to heart and lungs with stethoscope; check the abdomen for tenderness or organ enlargement; perform a rectal examination and a careful physical examination The instrument also asks about seven specific tests that physicians might order (cholesterol, electrocardiography, exercise stress test, prostate-specific antigen, blood, radiography or scan and urine test), which were condensed into a single entry – 'order tests'. Response choices were 'absolutely necessary', 'somewhat necessary' or 'absolutely unnecessary'	None	African American race was associated with greater expectations of the primary care physicians	Previous research has shown that differences in expectations are related to symptoms and/or type of visit – this study did not record the reason(s) for visit nor examine if the reasons for visit varied by race Single city sample

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Junod Perron N, Secretan F, Vannotti M, Pecoud A, Favrat B. Patient expectations at a multicultural out-patient clinic in Switzerland. <i>Fam Pract</i> 2003;20:428-33 ⁸⁸	ASSIA	To identify and compare expectations of Swiss and immigrant patients attending the outpatient clinic of a Swiss university hospital and to assess physicians' ability to identify their patients' expectations Pre-consultation patient self-administered questionnaire available in French, Serbo-Croat and Albanian (Albanian and Serbo-Croat versions were translated and retranslated back by two independent translators working in the clinic) Matched post-consultation physician questionnaires Questionnaires were structured with closed questions Study completed over a 3-month period	Internal Medicine Department of the University Hospital of Lausanne, Switzerland French-, Serbo-Croat- or Albanian-speaking adult patients coming to clinic without an appointment Of 358 approached, 343 patients agreed to participate: 167 (49%) Swiss and 176 (51%) non-Swiss patients Mean age: 39 years (Swiss) and 33 years (non-Swiss) 333 physician questionnaires were analysed	Patient expectations were defined as desires, wishes or entitlements ²⁵ Expectations about the coming consultation (listening, reassuring, physical examination, diagnosis, investigation, referral to a specialist, counselling, prognosis, medication and sick leave) were adapted from existing scales and scored on a 5-point scale ('not important' to 'very important') ^{26,287}	None	Most expectations were shared by all patients Physicians had inaccurate perceptions of their patients' expectations, regardless of patient origin Main areas where physicians underestimated patients' expectations were counselling, investigations and referrals to a specialist No evidence that immigrant patients' expectations differed from those of Swiss patients, nor that physicians had more difficulty identifying expectations of immigrant patients	For analysis, 5-point scale scoring of expectations was reduced to two categories: 'important' and 'not, a little or moderately important' As physicians were generally poor at identifying patients' expectations, intergroup differences may have been difficult to detect Limitations discussed by authors: grouping population into Swiss and non-Swiss may be misleading because of the heterogeneity of the population; asking about expectations and using a structured questionnaire with closed questions may have affected patients' responses; unable to examine the impact of unfulfilled expectations on satisfaction with the consultation or health outcomes as did not ask

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Shaw A, Thompson EA, Sharp DJ. Expectations of patients and parents of children with asthma regarding access to complementary therapy information and services via the NHS: a qualitative study. <i>Health Expect</i> 2006; 9 :343–58 ⁶⁹	ASSIA	To explore the expectations of adult patients and parents of children with asthma regarding access to complementary therapies through the NHS Qualitative study 50 semi-structured interviews recorded, transcribed verbatim and analysed thematically (21 with adult patients and 29 with parents of children with asthma) Maximum variation sampling in two stages	Bristol, UK Two GP practices chosen: one in an affluent area with no NHS provision of complementary therapies but potential access to private complementary clinics; the second in a relatively deprived area of the city with limited access to subsidised complementary therapies From each practice, random sample of 100 patients (adults and children) with an asthma diagnosis and who received prescription for asthma medication in the last 12 months were sent screening questionnaire on complementary therapy use and willingness to be interviewed. Subsample of responders selected to include a range of ages and sex, both non-users and users of various complementary therapies 32 people responded from first practice, of whom 28 agreed to an interview and 23 were interviewed; 22 people responded from second practice, of whom 17 agreed to be contacted and 10 were interviewed	Qualitative study; thematic analysis guided by principles of constant comparison Topic guide not detailed. Broad areas included: patients' and parents' views and experiences of NHS asthma care, their views and experiences of complementary therapies in general and specifically for asthma and their views about appropriate health-care settings through which to access complementary therapies	None	Two broad themes emerged: expectations about access to <i>information or knowledge</i> about complementary therapies through NHS health professionals, and expectations regarding access to complementary therapy services through the NHS Majority of patients wanted NHS health professionals to be more 'open' towards and know more about complementary therapies than their patients Most were positive about greater NHS access to complementary therapy services, for enhancing patient choice, improving access for less affluent patients and facilitating patients' self-help	Qualitative and therefore not necessarily representative of all patients and parents of children with asthma

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
			<p>After preliminary analysis of data, interviewed a further five parents from the hospital asthma outpatient clinic, five parents from the homeopathic hospital and seven patients and parents from private complementary therapists</p> <p>Total sample, $n=50$; 31 using complementary therapies for asthma, six using complementary therapies for other health problems and 13 non-users</p>				

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Wójcicki TR, White SM, McAuley E. Assessing outcome expectations in older adults: the multidimensional outcome expectations for exercise scale. <i>J Gerontol B Psychol Sci and Social Sci</i> 2009; 64B :33–40 ⁷⁰	ASSIA	To examine the validity of a theoretically consistent three-factor (physical, social and self-evaluative) outcome expectations exercise scale in middle-aged and older adults Self-selecting sample Postal questionnaire	Urbana, IL, USA 320/343 returned questionnaires Mean age 63.8 years; female 80.1%	Multidimensional Outcome Expectations for Exercise Scale (MOEES) An initial 135 items derived from a content analysis of 15 other outcome expectations scales, broadly reflecting physical, social and self-evaluative categories of outcome expectations A final total of 31 items was derived: 15 items reflecting physical, 10 items reflecting self-evaluative and six items reflecting social outcome expectations. Participants were asked to rate how strongly they agreed with each of these 31 items on a 5-point scale (1 = 'strongly disagree', 2 = 'disagree', 3 = 'neutral', 4 = 'agree' and 5 = 'strongly agree')	Self-efficacy expectations encompass individual beliefs in one's capabilities to successfully execute a task and have been consistently identified as a correlate of physical activity Outcome expectations are an important element of social cognitive theory ^{30,57} Outcome expectations reflect beliefs that a given behaviour will produce a specific outcome and have also been associated with physical activity, but less consistently Bandura ³⁰ noted three related but conceptually independent subdomains representing physical, social and self-evaluative outcome expectations. Physical outcome expectations reflect beliefs about pleasant and aversive physical experiences resulting from engagement in physical activity. Social outcome expectations reflect beliefs about physical activity resulting in increased opportunities for socialisation and attaining social approval. Self-evaluative outcome expectations capture beliefs relative to the feelings of satisfaction and self-worth associated with involvement in physical activity	Initial factorial and construct validity for the MOEES was demonstrated, based on the hypothesised theoretical structure Further construct validity of the three outcome expectations scales was demonstrated by significant association with physical activity and self-efficacy and differential associations with age and health status	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Zenz M, Strumpf M. Redefining appropriate treatment expectations. <i>J Pain Symptom Manage</i> 2007; 33 :S11–18 ⁷¹	ASSIA	To identify gaps in physician–patient communication that contribute to patients' overall perceptions of medical care	None detailed	N/A	Descriptive paper describing previous studies	<p>Patients' treatment expectations in the consultation are concerned with diagnostic and prognostic information, prescriptions, tests, referrals, good communication from health-care provider and involvement in decision-making process</p> <p>There is a gap between patient expectations and health-care provider response – residual concerns and expectations being the strongest correlates of patient dissatisfaction and, likewise, the strongest correlation of satisfaction with care was the absence (resolution) of any unmet expectation^{297–299}</p> <p>Impact of expectations on outcome – placebo effect (examples in depression and pain trials)</p>	<p>No search criteria detailed</p> <p>No information regarding how papers were identified or selected for review</p>

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lelliott P, Beevor A, Hogman G, Hyslop J, Lathlean J, Ward M. Carers' and users' expectations of services – carer version (CUES-C): a new instrument to support the assessment of carers of people with a severe mental illness. <i>J Ment Health</i> 2003;12:143–52 ²	BNI	To develop an instrument to measure experiences of caring for those with severe mental illness Pilot and field trials: carers recruited 'through a variety of routes' including mental health service contacts and carers groups Postal survey 14-day follow-up	Recruitment in England, Wales and Northern Ireland 94 carers initially completed questionnaires; 243 participated in field trial Response rate not given Mean age 60 years; approx. 75% female	Part A: 13 normative expectation statements set, against which carer invited to make comparisons of experiences on a 3-point Likert satisfaction/partial satisfaction/dissatisfaction). Parents asked to rate their experiences of how to get help and advice; information about care workers; information about mental illness and its effects; involvement in planning of treatment and care; support for carers; their own life; relationship with the person you care for; family and friends; money; their own well-being; stigma and discrimination; risk and safety; and choice to care	None given	Instrument covers carers values, was acceptable and had reasonable test–retest reliability	Questionnaire developed from literature searches Sample not random, unknown representativeness Expectancies measured in terms of another concept: satisfaction rather than measuring expectations. Expectations were thus assumed Limited psychometric data presented. Section correlations and test–retest reliability given

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Redsell S, Jackson C, Stokes T, Hastings A, Baker R. Patient expectations of 'first-contact care' consultations with nurse and general practitioners in primary care. <i>Qual Prim Care</i> 2007;15:5–10 ⁷³	BNI	To explore patient expectations of their consultations with nurses or GPs, whether or not they are met and their overall satisfaction Semi-structured interviews with attenders in primary care	Two UK GP surgeries 28 interviews pre consultation with 19 of these also interviewed post consultation; 18 pairs available for analysis (adults) Age range 21–77 years; 17/28 male	None used	Based on whether expectations underpin satisfaction: 'The nature of the relationship between patient expectations and satisfaction has not been clearly defined, yet evidence suggests there is a positive association between meeting expectations and satisfaction, and some evidence suggests unmet expectations are associated with dissatisfaction' ^{46,1,38}	Participants did not understand nurses' skills and may have reported higher satisfaction because they had fewer prior expectations of them than of the GP	Local study; small number of paired interviews
Richardson LA. Seeking and obtaining mental health services: what do parents expect? <i>Arch Psychiatr Nurs</i> 2001;15:223–31 ⁷⁴	BNI	To examine parents' expectations about seeking and obtaining mental health care Face-to-face interview survey	Urban setting in south-eastern city of USA 235 parents with children aged 5–29 years recruited by participants and networking from local health department. Sample mainly African American Mean age 35.5 years; 87% female	37-item Expectations of Mental Health Care survey, assessed on 4-point Likert scale Expectations assessed in four areas: treatment effectiveness, provider/client relationship, accessibility of mental health services, and social and cultural factors	Social cognitive theory framework, ⁴⁹ e.g. judgemental processes involve making comparisons with personal and normative standards, with personal valuation of the activity and with beliefs about performance. Key determinants are outcome expectations and self-efficacy States that outcome expectancies refer to perceptions that positive outcomes occur as a result of specific behaviour/encourage specific behaviour	A number of negative expectations reported. Attitudes and expectations may influence parents' decisions to seek mental health care for their child Scale 'developed from the literature'; no details given; Cronbach's alpha = 0.76 = only moderate internal consistency	Small, localised sample; not random; sample bias inevitable; not generalisable Scale 'developed from the literature'; no details given; Cronbach's alpha = 0.76 = only moderate internal consistency

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Roberts D, McNulty A, Cress AL. Current issues in the delivery of complementary therapies in cancer care – policy, perceptions and expectations: an overview. <i>Eur J Oncol Nurs</i> 2005;9:115–23 ⁷⁵	BNI	Review paper on policies on and perceptions and expectations of complementary therapies for cancer care	Selective, non-systematic review	N/A	None given	Need for more understanding of benefits of therapies	Selective, non-systematic review Little explicit on expectations. No concepts used
Russell D, Luthra M, Wright J, Gobry M. A qualitative investigation of parents' concerns, experiences and expectations in managing otitis media in children: implications for general practitioners. <i>Prim Health Care Res Dev</i> 2003;4:85–93 ⁷⁶	BNI	To explore parents' ideas, concerns and experiences when consulting for otitis media in children Qualitative design using focus groups	South-west England, UK Focus groups with patients in two urban practices; 17 parents, with range of ages and socioeconomic backgrounds	Semi-structured guide; no direct expectations items; indirect item only on 'wants': 'How much information do parents want from general practice?'	None given	Six major themes emerged suggesting that parents were given little information and had poor understanding of ear infections; they expected the GP to make a diagnosis followed by explanation and discussion	Exploratory research; local in focus Not focused on expectations – expectations omitted from stated aims despite title
Tarjka MT, Lehti K, Kaunonen M, Astedt-Kurki P, Paunonen-Limonen M. First-time mothers' expectations of public health nurses in Finland. <i>Prim Health Care Res Dev</i> 2002;3:96–104 ⁷⁷	BNI	To ascertain what kind of guidance and support first-time mothers expect from public health nurses at child welfare clinics Questionnaire distribution to clinic mothers, with open-ended expectation question	Finnish university hospital clinic 329 invited, 271 completed the questionnaire and 219 completed the open-ended expectation question Mean age 28 years	Open-ended question, no details	None given	Mothers' expectations varied, focusing on the content of support and mode of interaction. Mothers expected child and mother issues to be discussed at the clinic and to receive advice and instruction on childcare; they hoped that the atmosphere of the interaction would be safe, confidential, peaceful and encouraging; and they hoped that the nurse would have knowledge and competence, an empathic attitude and a sense of humour	No random sampling; local study Open-ended question embedded in questionnaire survey; no details given

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Wardman L. and the Bolton Research Group. Patients' knowledge and expectations of confidentiality in primary health care: a quantitative study. <i>Br J Gen Pract</i> 2000; 50 :901–2 ⁷⁸	BNI	To investigate patients' understandings of confidentiality Postal survey of random sample of patients	Six practices in Bolton, Greater Manchester, UK 1000 patients mailed. 816 replied. 756 valid for analysis Sociodemographic characteristics not given	None used	None given	Most believed that the doctor and nurse only had access to their medical records. A substantial minority wished to restrict access to their records	No information about question design. The questions measured knowledge of who had access to their records and preferences for who should have access to their records, rather than expectations explicitly
Chunta KS. Expectations, anxiety, depression and physical health status as predictors of recovery in open-heart surgery patients. <i>J Cardiovasc Nurs</i> 2009; 24 :454–64 ⁷⁹	CINAHL	To examine the relationships among preoperative and postoperative expectations, anxiety, depression and physical health status (PHS) and to determine predictors of preoperative and postoperative predictors of PHS in open-heart surgery patients Convenience sample Longitudinal study Preoperative data collection in hospital and 4 weeks postoperatively by telephone interview	Two hospitals in rural regions of Pennsylvania and West Virginia, USA 54/72 patients who had undergone coronary artery bypass graft or valve replacement surgery for the first time Mean age 63.46 years; 67% male	Future Expectations Regarding Life with Heart Disease Scale ⁸⁰ 18 belief statements that measure participants' expectations of successfully coping with their heart disease Likert statements range from 'strongly agree' (5) to 'strongly disagree' (1). Scoring ranges from 18 to 90 with a higher score reflecting positive expectations Internal consistency reliability has been reported as 0.88; validity values not reported Cronbach's alpha for participants in this study was $r = 0.887$	Patient expectations can impact recovery after open-heart surgery. Studies have suggested that patients develop specific expectations about surgery and recovery and experience negative feelings of anger, disappointment, frustration and insecurity when their expectations are inconsistent with their expected recovery	Significant relationships were found between the preoperative and postoperative variables: expectations, anxiety, depression and PHS Preoperative expectations, anxiety, depression and PHS were predictors of postoperative PHS Expectations improved after surgery for patients in this study Lower preoperative expectations were associated with increased anxiety and depression preoperatively and postoperatively Positive preoperative and postoperative expectations were associated with better PHS preoperatively and postoperatively	Convenience sample

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Gamble J, Creedy DK, Teakle B. Women's expectations of maternity services: a community-based survey. <i>Women Birth</i> 2007; 20 :115–20 ⁸⁰	CINAHL	To explore women's expectations of maternity services Short, self-report survey with a convenience sample of women attending a Mother and Baby Expo	Brisbane, QLD, Australia 63 women completed the survey	13-item questionnaire developed by members of the Maternity Coalition and the Association for Improvement in Maternity Services, based on the literature on women's preferences and satisfaction with maternity care Questions asked about parity, place of birth, extent of continuity of carer and quality and accessibility of post-birth care. Perception of choice with regards to birth care assessed by three items: existing perception of choice in birth care generally, preference for type of practitioner and preference for where they give birth and receive antenatal and post-partum care. Barriers to accessing homebirth and birth centres, and the level of importance related to safety, bonding, successful breastfeeding and their relationship with their care provider also assessed	None stated Previous study ⁸⁰ , referenced to show that control and having expectations met have been positively related to women's emotional and physical health following birth	Factors associated with safety, control, continuity of care and successful mothering were perceived as important for many women	Exploratory study, small self-selecting sample Questionnaire had been reviewed by other researchers and a stakeholder group. No further testing reported Expectations not explicitly examined

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Horrocks S, Coast J. Patient choice: an exploration of primary care dermatology patients' values and expectations of care. <i>Qual Prim Care</i> 2007; 15 :185–93 ⁸¹	CINAHL	To identify and explore the aspects of care that dermatology patients deemed important in making choices about service use Qualitative study, semi-structured interviews New referrals aged 16+ years requiring routine outpatient appointments were purposively selected from GP referrals, sampling for maximum variation in age, sex, presenting conditions and proximity to the service	UK, primary care patients referred for routine dermatology outpatient appointments 20 interviews undertaken – no response rates given Age range 20–83 years; 50% female	Topics included the following: patients' history and experience of obtaining care for their skin complaint, waiting time for the outpatient appointment, convenience of location and preferences for specialist care	None stated	Patients with minor skin complaints expected their GP to be able to provide more treatments at their local surgery Patients with experience of painful or long-standing conditions unsuccessfully treated by their own GP, and those with a hierarchical understanding of medical expertise who identify the hospital consultant as top of their field, were less accepting of a GP with a special interest in dermatology Participants were more forgiving of a cursory examination or interview by a consultant, as it was considered that these shortcomings were an acceptable trade-off for their perception of the greater knowledge and expertise that a hospital consultant could offer	Self-selecting sample Some interviews took place before and some after treatment to obtain diverse views and experiences' – limitation for exploring expectations? Expectations not explicitly examined

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Ip WY, Chien WT, Chan CL. Childbirth expectations of Chinese first-time pregnant women. <i>J Adv Nurs</i> 2003;42:151–8 ⁸²	CINAHL	To explore the specific childbirth expectations of Hong Kong Chinese first-time pregnant women Cross-sectional descriptive survey Convenience sample of 200 pregnant Chinese women was recruited from the antenatal clinic, June 1999–January 2000 190 questionnaires returned – four incomplete questionnaires rejected	186 first-time pregnant women who first attended the antenatal clinic at a large public hospital in a major geographical region of Hong Kong Mean age 30 years	Chinese version of the Childbirth Expectations Questionnaire ³⁰² 35 items scored on a 5-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5) Four subscales: ability to cope with pain (11 items); nursing support (8 items); support for partner (7 items); and medical interventions (9 items) Negative items are reverse scored and responses on all items are summed to give a total scale ranging from 35 to 175. A higher score indicates a more positive profile of childbirth expectations 'Validity and reliability well established' ^{302,303}	Authors had conducted literature review using CINAHL, MEDLINE, HealthSTAR, PsycINFO and The Cochrane Library. Considered relevant English and Chinese literature from 1980 to 2002. Keywords: 'childbirth expectations', 'childbirth experience' and 'pregnant women'. Search yielded 134 citations, of which they used 30 – did not report how the 30 were chosen References that specifically mention 'expectations' in the title: Beaton and Gupton, ³⁰⁴ Green, ³⁰⁵ Green <i>et al.</i> , ³⁰⁶ Slade <i>et al.</i> , ³⁰⁷ Stanisewska and Ahmed ³⁰⁸ and Thompson and Suno ⁴²	Chinese pregnant women, the majority of whom had not attended childbirth education classes, had high expectations of support from both their partners and midwives during labour and delivery Expectations of their own ability to cope with pain were relatively low They also indicated low expectations about minimal use of medical interventions during labour, i.e. a high level of expectation of the use of medical intervention	Discusses the sample size calculation Descriptive study of first-time pregnant Chinese women in a single obstetric hospital in Hong Kong
				Translation of Childbirth Expectations Questionnaire into Chinese. Conceptual meaning of items checked. Content validity checked by a panel Cronbach's alpha = 0.84 for Chinese version; reliability coefficients for four subscales ranged from 0.31 to 0.87	'High expectations assist women to believe in themselves and act in a positive way, whereas low expectations lead to feelings of failure and dissatisfaction about childbirth' ^{306,307}		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lamley-Dallas VT, Mold JW, Flori DE. African-American caregivers' expectations of physicians: gaining insights into the key issues of caregivers' concerns. <i>J Natl Black Nurses Assoc</i> 2005; 16 :18–23 ⁸³	CINAHL	To determine African American caregivers' expectations of physicians and caregiver distress and perceived level of satisfaction with the physician–patient/caregiver relationship Qualitative study – focus groups Self-selecting sample – snowballing method of recruitment 15 approached with two refusals	Oklahoma County, OK, USA 13 carers of elders diagnosed with Alzheimer's or dementia. Focus groups held with six and seven carers Mean age 53.8 years; 11/13 women	None	None stated Referenced previous work ³⁰⁹ that presented the needs and expectations of caregivers with respect to the formal and informal support they received	'Expectations' was one of three major themes that emerged from the data Caregivers expected the physicians to possess a working knowledge of dementia, make the correct diagnosis and explain the disease process. Physicians were expected to provide routine health care. Physicians were also expected to be compassionate, understanding, forthright and caring of the caregiver's mental and physical health as part of the patient–physician relationship. Caregivers expected to receive information on dementia and services and referrals for respite, financial assistance and legal advice on advance directives and guardianship. The caregivers expected guidance in care decisions and behavioural management as well as moral and emotional support. The caregivers expected physicians to provide assistance in recognising progression through the stages of dementia that would necessitate a change in the living arrangements	Pilot qualitative study with a self-selecting convenience sample

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lindstand P, Brodin J, Lind L. Parental expectations from three different perspectives: what are they based on? <i>Int J Rehabil Res</i> 2002;25:261–9 ⁸⁴	CINAHL	To highlight parental expectations as they are expressed in three different studies: an intervention programme, a study on conductive education and a study on information and communication technology The article focuses on what expectations parents have of different achievements for their child with a disability and what their ideas and concepts are based on	Sweden Study 1: Interviews concerning parental expectations with respect to a problem-solving project with four families with a child with cerebral palsy and communication disorders. Interviews took place three times with 1 year in-between. Interviews were undertaken in family homes, recorded and transcribed Study 2: Interviews with five families with a child with cerebral palsy were conducted on three occasions during a 4-week course of conductive education Study 3: 78 Swedish families with a child with different kinds of disabilities just starting to use computers. Qualitative and quantitative research methods used. 20 parents were interviewed by telephone and a questionnaire comprising 34 multiple-choice questions was employed	Only a mention of one section of the questionnaire used in study 3 that was designated for rating parental expectations and thoughts about the impact of the computer on child development	The link between people, society and development is central when analysing human expectations within different fields Previous research examined expectations of parents with children with multiple disabilities. The 'concept' of expectation may have different meanings: 1. 'to wait for and look forward to something positive that will occur in the future'. The expectation is embedded in the notion 2. Previous experiences are central starting points for our expectations and hopes. Expectations are often related to personal meetings and feelings of being noticed and respected 3. The evolution in developing and implementing family-professional partnerships within early childhood special education has been described as an evolution along a power continuum, which could be influential in parental expectations and experiences ³¹⁰ Fundamental belief systems can interact with the expectations of parents. Parental expectations are embedded in goals that are implicitly demanded from society ³¹¹	Expectations of parents of a child with multiple disabilities are, for example, that intervention programmes, training methods and new technology will create expanded possibilities for the development of their child. Even if the results did not yield exactly what they had expected, they developed new and other expectations It seems to be of utmost importance that the child is inspired with positive expectations in order to develop, as negative expectations often lead to self-fulfilling predictions A process with expectations that are too low may give low results and it is reasonable to believe that it influences learning negatively The parents' background and education are factors that influence their demands for a good life for their child and what expectations they have of support and efforts for their child	Limited information about each individual study regarding methodology

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Metcalfe C.J. Klaber Moffett J.A. Do patients' physiotherapy affect treatment outcome? Part 1: baseline data. <i>Int J Ther Rehabil</i> 2005;12:55–62 ⁸⁵	CINAHL	To explore the relationship between patients' expectations of benefit and the outcome of physiotherapy treatment Before-and-after cross-sectional survey Baseline data presented here to determine which variables were associated with patients' expectations of benefit from physiotherapy	Three NHS hospitals in the Hull area, UK Potential participants identified by reception staff and posted a questionnaire pack when sent an appointment to start physiotherapy Inclusion criteria: 16+ years with lower or upper musculoskeletal condition Response rate = 285/647 = 44% Median age 49 years; female 60.6% Responders statistically more likely to be female ($p = 0.01$) and older ($p < 0.001$)	Patient Expectation Questionnaire Developed through semi-structured interviews with patients a Delphi study with physiotherapists and consultation with experts in the field of questionnaire design ²⁹⁵ Included question on patients' expectation of benefit from physiotherapy: 6-point Likert scale (1 = 'a lot worse', 6 = 'complete recovery')	Expectations exist in each individual's psychosocial profile and have been shown to be directly linked to health beliefs, ³¹ self-efficacy, ³² locus of control, ^{24,33,34} attitudes ^{35,36} and schemata ³⁷ Expectations are not hopes, but the perception that a person has of the world and his or her interaction with the world, based on knowledge or information gained, irrespective of the nature and accuracy of the source. Expectations are also dependent on experience and social learning, and this may add further information to the schema ²⁴ Expectations will be an integral part of the psychosocial make-up of each individual patient. It has been suggested that, to improve the success of health care, treatment should be tailored to fit patients' expectations ^{31,2}	94% expected some level of improvement and no one expected to be 'worse' or 'a lot worse' Higher expectations of benefit were associated with the following pretreatment factors: traumatic condition, upper limb problem, shorter duration of condition, shorter waiting time for physiotherapy, greater awareness/knowledge of what physiotherapy is, lower awareness of alternative treatment, higher locus of control, greater satisfaction with the health care received so far, no anticipation of surgery, no previous experience of physiotherapy and female sex	44% of a self-selecting group who chose to reply to a postal questionnaire

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					<p>Ideal expectations might be most prevalent for those without previous experience, whereas those with previous experience are more likely to have predicted expectations based on previous encounters. There may also be patients with unformed expectations, i.e. they have no idea what to expect⁴²</p> <p>A limited amount of evidence exists to suggest that health professionals should take patients' expectations into account when making clinical decisions and planning treatment²⁵⁰</p> <p>A randomised trial by Skargren and Oberg³¹³ comparing chiropractic and physiotherapy treatments of 323 patients found that expectations were among several predictive factors for the outcome of treatment for low back and neck pain</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Moons P, Pihxten S, Dedroog D, Van Deyk K, Gewillig M, Hilderson D, <i>et al.</i> Expectations and experiences of adolescents with congenital heart disease on being transferred from paediatric cardiology to an adult congenital heart disease programme. <i>J Adolesc Health</i> 2009; 44 :316–22 ⁸⁶	CINAHL	To investigate the expectations and experiences of adolescents on transferring from a paediatric cardiology programme to an adult congenital heart disease programme Qualitative, phenomenological study Semi-structured in-depth interviews in patients' homes	University Hospitals of Leuven, Belgium 14/25 adolescents (aged 15–17 years) with congenital heart disease consented to participation: 6 boys and 8 girls	Expectations questions not stated	None	Respondents expected little difference between the paediatric cardiology and the adult congenital heart disease programme Adolescents expected the information that they received during the outpatient visit to be directed to them. They wanted to be heard. On the other hand, they still had the same expectations towards their parents, i.e. that their parents should be kept posted of all developments as they were still the first point of contact if a problem should occur. They thought that non-medical issues should also be addressed	Questions were field tested in a mock interview

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Newton C, Clarke M, Donlan C, Wright JA, Lister C, Cherguit J. Parents' expectations and perceptions concerning the provision of communication aids by the Communication Aids Project (CAP). <i>Child Lang Teach Ther</i> 2007; 23 :47–65 ⁸⁷	CINAHL	Parents' views of the CAP process and the impact of the aid Qualitative follow-up study Telephone interviews before or just as their child received their communication aid (time 1) and again 6–8 weeks after receiving the aid (time 2) Research team selected a sample of 18 – four non-participants because they either had not received the aid or did not have a functioning aid at time 2 Interview schedule sent to responder in advance	British Educational and Communications Technology Agency (BECTA) held a database of children who had applied to CAP. Parents of 1139 children had given permission to be contacted for research purposes 14 interviews were conducted with parents (of nine boys and five girls)	Expectations of long-term benefit: parents were asked to select 'not at all', 'a bit' or 'a great deal'	None stated	Parents were reported to have accurate expectations regarding the locations in which aids would be used, and the majority of expectations regarding activities were met at time 2 Parents' expectations and perceptions of the short-term benefits of communication aids were not always matched by time 2. Five children had not benefited as much from the aid as anticipated Reasons for expectations not fully being met: the voice output communication aid had not yet been mounted on the child's wheelchair, anticipation of more benefit in the long term Parents expressed different expectations concerning a reasonable length of time to wait for delivery of the aid Parents expectations were considered to be realistic because their children were all aged 7+ years; they all had some experience with a communication system and therefore had some knowledge on which to base their expectations	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Resnick B, Wehren L, Orwig D. Reliability and validity of the self-efficacy and outcome expectations for osteoporosis medication adherence scales. <i>Orthop Nurs</i> 2003;22:139–47 ⁸⁸	CINAHL	To test the reliability and the validity of the self-efficacy and outcome expectations for osteoporosis medication adherence measures (SEOMA and OEOMA) Descriptive study. One face-to-face interview when the SEOMA and OEOMA were administered 202 residents of a continuing care retirement community; 9 ineligible and 41 refused	East coast city, USA 152 older adults in a continuing care retirement community Mean age 85.7 years; 74% female	OEOMA was developed based on two focus groups with 50 older men and women Statements: Taking medication for osteoporosis (1) will help strengthen my bones, (2) makes me more confident and less afraid of falling, (3) will decrease my risk of getting osteoporosis or having it progress, (4) will help maintain my independence and function, (5) will help to prevent fracture Responses to the OEOMA ranged from 1 ('strongly disagree') to 5 ('strongly agree') The scale was scored by summing the numeric ratings for each response and dividing this sum by the number of responses. The score was indicative of the strength of efficacy expectations	Cognitive control of behavior is based on two types of expectations: (1) specific outcome expectancies, which are the beliefs that a certain consequence will be produced by personal action, and (2) self-efficacy expectations, which are an individual's beliefs in their capabilities to perform a course of action to attain a desired outcome Efficacy expectations are dynamic and established and enhanced by four mechanisms: ⁵² enactive mastery experience, or successful performance of the activity of interest; verbal persuasion, or verbal encouragement given by a credible source that the individual is capable of performing the activity of interest; vicarious experience, or seeing like individuals perform a specific activity; and physiological and affective states such as pain and fatigue or positive states such as feeling proud associated with a given activity The theory of self-efficacy suggests that the stronger the individuals' efficacy expectations (self-efficacy and outcome expectations), the more likely they will initiate and persist with a given activity	Evidence of internal consistency of the OEOMA scale: $\alpha = 0.79$ Only one item had $R^2 < 0.5$ (item 2) 73% of the variance in the OEOMA was accounted for using confirmatory factor analysis However, model fit of the measurement model was poor $\chi^2 = 30$, df 5, $p < 0.05$ Ratio of $\chi^2/df = 6.0$ Normed fit index (NFI) = 0.98 Steiger's root square error of approximation = 12 Multiple regression analysis gave evidence of criterion validity Outcome expectations were significantly related to taking osteoporosis medication	Further refinements and testing required Limited by selectivity of sample Adherence based on self-report

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Stein J, Shafiqat S, Doherty D, Frates EP, Furie KL. Patient knowledge and expectations for functional recovery after stroke. <i>Am J Phys Med Rehabil</i> 2003; 82 : 591–6 ⁹⁸	CINAHL	To assess the knowledge and expectation of functional recovery in stroke patients undergoing acute inpatient rehabilitation Survey	50 consecutive stroke patients undergoing inpatient rehabilitation at a single urban rehabilitation hospital Mean age 61 years; female 23/50	Survey included subject self-rating of anticipated future functional abilities at the time of discharge from the rehabilitation hospital and anticipated discharge location 'Expectation' was defined as the subjects' overall understanding of expected outcome, regardless of the source of this understanding	None stated	Regression analysis revealed that the differences between actual and predicted length of stay were greater for patients with longer lengths of stay than for those with shorter lengths of stay Functional abilities, both at initial assessment and at discharge from the rehabilitation hospital, were generally overestimated Optimistic responses (in which the participant's assessment or prediction exceeded the actual functional level) substantially exceeded the number of pessimistic responses (in which the participant underestimated the actual functional level)	Small numbers for subgroup analysis
van Steenkiste B, van der Weijden T, Timmermans D, Vaes J, Stoffers J, Grol R. Patients' ideas, fears and expectations of their coronary risk: barriers for primary prevention. <i>Patient Educ Couns</i> 2004; 55 : 301–7 ⁹⁰	CINAHL	To explore the role of patients in the feasibility of cardiovascular preventive care in general practice 15 GPs audiotaped one or two consultations on primary cardiovascular preventive care 1–2 weeks later, patients participated in semi-structured interviews in their own homes Eight patients excluded because of missing data	Southern Netherlands 22 patients interviewed in their own homes	None	None stated	The expectations for information varied among patients Patients' expectations were sometimes directly influenced by information that they had gathered from other sources, e.g. the internet Patients expected GPs to meet their requests (e.g. for a cholesterol test) and also to use a uniform approach	Opportunity for selection bias by the GPs

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Weems CF. The Anxiety Change Expectancy Scale shows high internal validity and correlation with validated measures of anxiety, self-esteem and hopelessness in varied settings. <i>Evid Based Ment Health</i> 2006; 9 :66 ³¹	CINAHL	Brief commentary on an original study by Dozois and Westra ^{31,4}	Original cohort study based in Canada Study 1: 202 university undergraduates (72% female; average age 20.2 years) who identified themselves as experiencing difficulty with anxiety Study 2: 184 individuals (82% female; average age 47.4 years) who responded to newspaper advertisements for people experiencing anxiety problems Study 3: clinical sample of 43 individuals with <i>Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition</i> generalised anxiety disorder (79% female; mean age 37.9 years)	The Anxiety Change Expectancy Scale (ACES), a 20-item self-reporting survey that assesses current anticipation of being able to change an individual's anxiety level. Each item is scored 1 ('strongly disagree') to 5 ('strongly agree') on a Likert scale; total scores range from 20 to 100 (higher scores reflect a greater positive expectancy for changing anxiety)	N/A	ACES found to correlate with Beck Anxiety Inventory, Beck Hopelessness Scale, Rosenberg Self-Esteem Scale, the Marlowe-Crowne Social Desirability Scale and the University of Rhode Island Change Assessment	Original paper should be reviewed – claimed to have a strong theoretical basis

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Winterling J, Sidenvall B, Glimelius B, Nordin K. Expectations for the recovery period after cancer treatment – a qualitative study. <i>Eur J Cancer Care</i> 2009; 18 :585–93 ⁹²	CINAHL	To explore what expectations patients have concerning the recovery period after completed curative cancer treatment and the degree to which these expectations were realised slightly more than 1 year later Interviews 16 months after treatment completion with a purposive sample of people who had completed curative treatment 57 people approached; 16 participated Interviews at home or at university	Uppsala, Sweden Purposive sample of 16 patients Median age 55 years; nine women, seven men	'When you had completed your cancer treatment, how did you think your first year afterwards would be?' 'Now, slightly more than a year after completion of the cancer treatment, how do you think the first year actually turned out?'	It is possible that patients' expectations about their recovery period, and whether expectations are realised, may influence their well-being as well as how satisfied they are with the recovery period	Patients' expectations for their recovery period were generally to become well, but they often lacked plans for how to recover If the recovery period was perceived as 'smooth', expectations were always met; however, if the period was perceived as 'tough', expectations were often unfulfilled Patients who had less complex expectations, i.e. who took for granted that they would get well, all experienced a 'smooth' recovery period and felt that things had turned out 'as expected'. In contrast, this was not true for those who had complex expectations, i.e. 'hoped to get well' or 'had specific plans for getting well' All patients 'who took for granted' that they would get well were men whereas the other two categories included both men and women, so is sex important for how expectations turn out? Unfulfilled expectations for the recovery period were not related to lower levels of well-being	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Witt Sherman D, Ouellette SC. Patients tell of their images, expectations and experiences with physicians and nurses on an AIDS-designated unit. <i>J Assoc Nurses AIDS Care</i> 2001;12:84–94 ⁹³	CINAHL	To explore patients' perceptions of and experiences with physicians and nurses on an AIDS-designated unit Descriptive, explorative, qualitative study Semi-structured, audiotaped interviews	25-bed AIDS-designated unit of a large medical centre in New York City, NY, USA Mean age 43 years; 14 men, 2 women and 1 transsexual woman No response rates given	One of the specific research questions was, 'What are your expectations regarding the care offered by physicians and nurses?'	None stated	Expectations were centred around three themes: competence, professionalism and developing caring relationships	Small sample; one location Qualitative and explorative
Barker Bausell R, Lao L, Bergman S, Lee WL, Berman BM. Is acupuncture analgesia an expectancy effect? Preliminary evidence based on participants' perceived assignments in two placebo-controlled trials. <i>Eval Health Prof</i> 2005;28:9–26 ⁹⁴	Cochrane database	To contrast the analgesic efficacy of acupuncture following dental surgery with the analgesic effects based on expectation of benefit in two independent placebo-controlled trials evaluating acupuncture in dental surgery Two independent placebo-controlled trials	Maryland Dental Clinic, MD, USA Actual samples unclear. Tables show $n=39-100$ No age/sex details given No response rates given	None used	None given	Patients' beliefs about the receipt of acupuncture bore a stronger relationship to pain than any specific action of acupuncture	Unclear sample/response rates Expectations were not measured

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Benedetti F, Pollo A, Lopiano L, Lanotte M, Vighetti S, Rainero I. Conscious expectation and unconscious conditioning in analgesic, motor, and hormonal placebo/nocebo responses. <i>J Neurosci</i> 2003;23:4315–23 ⁹⁵	Cochrane database	To investigate the role of expectation and conditioning in different placebo responses in pain in healthy volunteers (using a tourniquet method coupled with patients squeezing a hand springer exerciser), motor performance in Parkinson's disease patients, and growth hormone and cortisol secretion	Turin, Italy 60 healthy volunteers (pain); 10 patients with Parkinson's disease; 95 healthy volunteers for hormone secretion Summary figures for age/sex not provided	None used	None given	Conscious expectation and unconscious conditioning are involved in different circumstances, and this is true for placebos and nocebos. Negative expectations led to negative outcomes	No expectations measure used The authors assumed that 'verbal suggestions' affected expectations (The term 'nocebo effect' refers to the negative consequences arising from the administration of a placebo)
Benedetti F, Arduino C, Costa S, Vighetti S, Tarenzi L, Rainero I, <i>et al</i> . Loss of expectation-related mechanisms in Alzheimer's disease makes analgesic therapies less effective. <i>Pain</i> 2006;121:133–44 ⁹⁵	Cochrane database	To investigate whether, in Alzheimer's disease patients, in which cognition is severely impaired, the efficacy of treatments is reduced 1-year follow-up study Clinical measures	Turin, Italy 28 non-consecutive communicative patients with Alzheimer's disease (mean age 73.5 years; 11 men, 17 women); 16 healthy volunteers matched by age and sex Study response rate not given	None used	None given	Patients with reduced Frontal Assessment Battery scores showed reduced placebo responses to the analgesic treatment, leading to increases in treatment doses to produce adequate analgesia	Small sample Response rate to study not stated No patient-based subjective measures of expectations used

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Cheng JD, Hitt J, Koczwara B, Schulman KA, Burnett CB, Gaskin DJ, et al. Impact of quality of life on patient expectations regarding phase 1 clinical trials. <i>J Clin Oncol</i> 2000;18:421–8 ⁹⁷	Cochrane database	To measure the expectations of patients, doctors and nurses of the potential benefits and toxicities from experimental and standard therapies Cross-sectional design Face-to-face interviews with patients; self-administered questionnaires to staff	New York, NY, USA 30 cancer patients (20 men, 10 women; mean age 57.8 years) enrolling in phase 1 clinical trials and the clinical staff treating them Study response rate not given	Items developed by research team	None given	Patients had high expectations of success of the experimental therapy Compared with their doctors, patients overestimated potential benefits and discounted potential toxicity	Small sample Response rate to study not stated No details of reliability and validity of questions used to measure expectations, nor of the process of their selection
Fulda KG, Slichko T, Stoll ST. Patient expectations for placebo treatments commonly used in osteopathic manipulative treatment (OMT) clinical trials: a pilot study. <i>Osteopathic Med Prim Care</i> 2007;1:3 ⁹⁸	Cochrane database	To determine expectations of three treatments [high-velocity low-amplitude (HVLA), placebo light touch (LT) and placebo subtherapeutic ultrasound] Randomised cross-over design	Adults from the Family Medicine Clinic of the Texas College of Osteopathic Medicine, TX, USA 30/40 eligible people participated Mean age 43 years; 22 women	Expectations measured with four items on belief, each with a 4-point Likert response scale ('strongly agree' to 'strongly disagree'); 'I believe this treatment would allow me to get better quicker', 'I believe this treatment would decrease my low back pain', 'I believe this treatment would make me more able to do the things I want to do', 'This seems like a logical way to treat low back pain'	None given	There were differences in expectations between HVLA and LT. Subtherapeutic ultrasound is the better placebo because the expectations for this treatment were similar to those for HVLA	Small sample size No details of reliability and validity of questions used to measure beliefs, nor of the process of their selection

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Goossens MEJB, Vlaeyen JWS, Hidding A, Kole-Sijders A, Evers SMAA. Treatment expectancy affects the outcome of cognitive-behavioural interventions in chronic pain. <i>Clin J Pain</i> 2005;21:18–26 ⁸⁹	Cochrane database	To assess determinants of patients' treatment expectancy and extent to which this predicts outcomes of cognitive-behavioural treatment of pain Secondary analysis of two published randomised controlled trials of cognitive behaviour therapy for fibromyalgia and chronic low back pain. Intervention groups only used because of lack of expectancy measures in other groups	Maastricht, the Netherlands 171 patients (fibromyalgia 74, chronic low back pain 97 'available for analysis') Mean age 42 years; 75% female Response rates not given	Five questions developed by research team: (1) Do you expect that the treatment programme will help you to better cope with your pain (in the next 6 months)? (visual analogue response scale: 'not at all' to 'very strong'); (1b) For this expectancy I am: (circle) not at all/little/reasonably/strongly/very strongly convinced; (2) Do you expect the treatment programme will help chronic pain patients to cope better with their pain? (visual analogue response scale: 'not at all' to 'very strong'); (2b) For this expectancy I am: (circle) not at all/little/reasonably/strongly/very strongly convinced; (3) Do you think learning to relax and concentrate is a logical treatment for chronic pain? (visual analogue response scale: 'not at all' to 'very strong')	Three assumptions of response expectancy theory; ^{3,15} expectancies for non-volitional outcomes are sufficient to cause the expected outcome; response expectancy effects are not mediated by other psychological variables; and effects of response expectancies are self-confirming and apparently automatic No underpinnings of this theory given	Pretreatment expectancy predicted outcomes (pain coping and control and disability compensation) immediately after treatment and at 12 months' follow-up	No details of reliability and validity of questions used to measure expectations, nor of the process of their selection, apart from a reference to rationales Visual analogue response scale wording mismatch with questions ('very strong')

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kucukarslan S, Schommer JC. Patients' expectations and their satisfaction with pharmacy services. <i>J Am Pharm Assoc</i> 2002;42:489–96 ¹⁰⁰	Cochrane database	To identify whether previous experiences, ideal referents or market-based expectations affect patient satisfaction with pharmacy services Cross-sectional, prospective study of adults purchasing prescriptions from two hospital pharmacies; pharmacists recruited volunteers; volunteers randomly allocated to one of three expectancy questionnaires (previous experience, ideal referents or market based)	University of Minnesota College of Pharmacy, MN, USA 769 questionnaires mailed out, response rate 47% Mean age 47 years, sex not provided	Questions developed by research team: Previous experiences expectations: 'How did your last experience with XYZ pharmacy compare with your previous experience at the same pharmacy in terms of wait time?' Ideal referents expectations: 'How did your last experience at XYZ Pharmacy compare with the best possible service a pharmacy should provide in terms of wait time?' Market-based expectations: 'How did your last experience with service provided by other pharmacies in terms of wait time?' 6-point Likert scale for each from 'much better' to 'much worse' (plus 'not applicable') Overall satisfaction with wait time, directions on label, communication and skill of pharmacist and willingness to help, personality and accessibility of pharmacist, decisions, availability and quality of written information, availability of assistance with non-prescription medicine, amount of time to respond and response to complaints/problems was measured on a 6-point Likert scale from 'extremely dissatisfied' to 'extremely satisfied'	Disconfirmation of expectation model ³¹⁶ Patients rate the quality of a service and their level of satisfaction according to comparisons of service expectations with actual service experiences Two expectancy dimensions – choice of which can affect outcomes of questionnaires: predictive (what people expect the service experience will be, e.g. based on previous experience and awareness of market/what is provided) and normative (ideal referent – what people believe the service experience should be, e.g. based on needs)	Each model was associated with patient satisfaction with experience at the pharmacy Different service items were significant in each model Tangible aspects of a service such as wait time and information leaflets are evaluated against expectations based on previous experiences Less tangible, cognitive aspects are evaluated against ideal referents Patients' expectations play a significant role in their satisfaction with a service encounter	Based on volunteers attending two pharmacies; recruitment by pharmacist staff High non-response rate No details of reliability and validity of confidence items used

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Larrosa F, Hernandez L, Morello A, Ballester E, Quinto L, Montserrat JM. Laser-assisted uvulopalatoplasty for snoring: does it meet the expectations? <i>Eur Resp J</i> 2004; 24 : 66–70 ¹⁰¹	Cochrane database	To provide evidence of effectiveness of laser-assisted uvulopalatoplasty for snoring Randomised placebo-controlled study: laser-assisted uvulopalatoplasty treatment vs placebo 3-month follow-up	Barcelona, Spain 28/33 eligible patients agreed to participate; three dropped out leaving 25 who completed the study No age/sex details given	None used	None given	No differences in patient's symptoms or quality of life were observed between groups before and 3 months after treatment; the intervention did 'not meet the expectations generated by the procedure'	Small numbers Expectations were not measured
Mercado R, Constantoyannis C, Mandat T, Schulzer M, Stoessl J, Honey CR. Expectation and the placebo effect in Parkinson's disease patients with subthalamic nucleus deep brain stimulation. <i>Movement Disord</i> 2006; 21 :1457–61 ¹⁰²	Cochrane database	To determine whether the degree to which patients with Parkinson's disease expect therapeutic benefit from subthalamic nucleus deep-brain stimulation Cross-sectional design No patient feedback or questionnaires Clinical measures	British Columbia, Canada 10 patients with idiopathic Parkinson's disease and bilateral subthalamic nucleus deep-brain stimulation Age range 42–78 years; eight men, two women Study response rate not given	None used	None given	Information given to patients about whether the brain stimulation was on or off influenced objective measures compared with when patients were blind to its status (Unified Parkinson's Disease Rating Scale motor scores) Clinical benefit was heightened when patients were told that the stimulation was on, and clinical worsening was increased when patients were told that it was off	Small sample Response rate to study not stated No patient-based subjective measures of expectations used

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Spinhoven P, terKuile MM. Treatment outcome expectancies and hypnotic susceptibility as moderators of pain reduction in patients with chronic tension-type headache. <i>Int J Clin Exper Hypnosis</i> 2000; 48 :290–305 ⁰³	Cochrane database	To determine whether hypnotic susceptibility (1) independently predicts pain reduction post treatment and at follow-up and (2) predicts persistence of pain reduction during follow-up Random allocation of patients to self-hypnosis or autogenic training 1-week and 6-month follow-up	169 patients completed the study (with complete data for 165) out of 205 invited patients with chronic tension-type headaches Almost 25% of those who did not respond to treatment did not respond to follow-up	Single item on generic treatment expectancy: patient rating of the amount of headache pain they expected to have directly after the treatment period compared with their headache pain at the start of the treatment, using a 0% to 200% scale (0 = total pain relief, 100% = same pain as pretreatment, 200% = twice as much pain as pretreatment)	None given	Pain reduction post treatment was independently significantly associated with hypnotic susceptibility	No details of reliability and validity of question used to measure pain outcome expectation, nor of the process of its selection
Wei SJ, Hampshire K, Devine PA, Metz JM. Differences in expectations of clinical trials between patients who participate in clinical cancer trials and those who do not. <i>J Clin Oncol</i> 2005; 165 :6065 ⁰⁴	Cochrane database	To understand differences in expectations of clinical trials in patients who have enrolled in trials and those who have not Website recruitment and two radiation oncology clinics	605 patients Response rates not given No age/sex division provided	Assumed that a question on likely benefit from enrolment in trials measured expectations	None given	Trial patients were less likely than non-trial patients to require a high degree of benefit from a trial in order to enrol in it	Response rates not given Assumed that expectations were measured by belief in benefit from enrolment in trials No details of reliability and validity of questions used to measure beliefs, nor of the process of their selection

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Campbell C. <i>The role of patient expectations in perceptions of treatment outcome for low back pain</i> . PhD thesis. Middlesbrough: University of Teesside; 2002 ¹⁰⁵	Dissertations & Theses	To examine the role of expectations in the low back pain health-care trajectory Self-completed patient questionnaires Follow-up three times during 1 year	Two north-east England spinal assessment clinics and two pain clinics 234 adults with low back pain (for at least 6 months) recruited from secondary care; most lived within the Teesside area 211/234 responded at baseline; 116 (50%) at follow-up	Pain Expectation Inventory developed by the author: 19 statements with 5-point disagree-agree visual analogue numerical response scale	Expectations about experience and treatment of pain determine how a person will view that pain experience Expectations embedded within several theories of social cognition: social learning theory, ²⁴ expectancy value theory, ³¹⁷ social cognitive theory ⁴⁹ Accepts definition of Linder-Peiz ²⁰ that expectations are a cognitive belief, extended by Oscar ³¹⁸ as an expectation being an individual's probability belief that a specific behaviour will occur in a specific situation The study of expectations in psychology began with Rotter, ²⁴ who distinguished between generalised and specific expectations in his social learning theory (generalised are held in situations in which a person has little or no previous experience vs specific, which develop out of previous experience of a particular situation). He later extended the theory to incorporate a measure of generalised expectancy – the locus of control ²⁶	Utilisation of primary care may be related to individual well-being Psychocognitive intervention reduced pain	Power calculations for sample size included Not a clinical trial; observational study only Focus was on pain and theories related to behaviour (theory of planned behaviour; locus of control) High non-response to follow-up

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					<p>Feather²⁷ suggested that with expectancy-value theory potential outcomes can be perceived negatively, positively or both, and expectations encompass beliefs about whether a particular action can be performed to achieve a successful outcome; he extended his theory to include values, as well as needs, in influencing individual's perceptions</p> <p>Self-efficacy theory³⁶ maintains that psychological processes of change operate through a person's sense of personal mastery or efficacy – the belief that one is or is not capable of performing specific behaviours – incorporating outcome expectancy (that the behaviour will lead to a given outcome or not) and self-efficacy expectancy (the belief that they are capable of performing the behaviour or not)</p> <p>Attribution theory, an explanation for the outcomes (as a result of ability, effort, difficulty of the task and luck),³¹⁹ also influences expectations and vice versa, and both have been proposed to be influenced by perceived control³²⁰</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					In relation to health care, Ditto and Hilton ³²¹ argued that the sequential nature of health care implied that a failure to negotiate any step in the sequence of interaction of expectations between patient and doctor leads to overall failure. Relational expectations are particularly salient (based on past history of similar relationships combined with perceptions) ³²²		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Fryman RJ. <i>The expectations of men undergoing surgery for benign prostatic obstruction</i> . PhD thesis. Sheffield: University of Sheffield; 2007 ¹⁰⁶	Dissertations & Theses	To develop and validate a questionnaire to measure expectations of surgery for benign prostatic obstruction Pilot study Mailed questionnaire to those identified as eligible and undergoing surgery 10-day follow-up post surgery	Institute of Urology, Bristol, UK 40/50 responded	Piloting of questionnaire	Expectations are complex and there is no consensus over their conceptualisation or measurement. Basically an expectation is a type of belief, or perception, about future events and is not static; expectations are the result of complex cognitive processes modified by previous experiences. ²¹ Beliefs make up an attitude towards a particular phenomenon. ²² Controversy surrounds their components. An expectation can include wants, hopes and desires and anticipations. What is desired and what is expected in real life are distinct beliefs. Swan and Trawick ²⁸ divided expectations into predictive and desired – the latter being necessary for the achievement of satisfaction. Some define expectations in terms of what is deserved, for example Miller ³⁰ divided expectations into ideal, expected, what is deserved and the minimum tolerable	Questionnaire valid and reliable	Small sample Conclusions mainly related to performance of questionnaire than types of expectancy theory Good theoretical basis

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					<p>Expectancy theory proposes that the difference between what one receives or expects to receive and wants determines satisfaction (e.g. patient satisfaction). Satisfaction is itself an attitude and refers to affect. However, expectations are not straightforward. For example, social comparison theory suggests that satisfaction is based on perceptions of what has been received compared with others.⁵⁹ Relative deprivation theory expands on this. Equity and discrepancy theory holds that satisfaction is obtained when perceived inputs and outputs are balanced. Katzell⁶⁰ argued that satisfaction was the difference between the amount received and that which is desired. However, Locke⁶¹ argued that perceived differences are of greater importance than actual differences; therefore, satisfaction is determined by perceived net actual differences. Another approach to discrepancy theory is based on how much a person expects to receive, although this has been rejected as contentious, given the complexities of receiving more than expected⁶¹.</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					<p>Empirical evidence in support of one type of expectation over another is limited and is largely based on small-scale or qualitative studies</p> <p>Awareness of expectations and their formation is important for policy development and service provision. For example, if health-care providers are aware of patients' expectations for care, they can aim to address them in a timely way to better meet their needs and, in turn, aim to increase patient satisfaction. There is also the unknown influence of expectations for treatment outcomes on the placebo effect, which needs to be considered when assessing the efficacy of new treatments. The positive placebo effect is well established and needs to be included in assessments of treatment efficacy and the potential influence on it of patients' expectations</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mitchell HL. <i>The nature and role of patient expectations in exercise behaviour in osteoarthritis (OA)</i> . PhD thesis. London: University of London; 2007 ¹⁰⁷	Dissertations & Theses	To explore expectations and their role in exercise behaviour in knee OA Cross-sectional qualitative study of outcome and treatment expectations to develop a questionnaire on OA beliefs 1-year follow-up for small number to assess change in condition and perceptions The developed questionnaire was used to measure expectations in consecutive primary care OA patients already enrolled in a clinical trial with follow-up at 8 weeks and 8 months	South-east London, UK OA patients in four GP settings and one rheumatology clinic Small convenience (<i>n</i> = 26 baseline and 8/10 selected and followed up) and consecutive (80/90) samples	Testing of questionnaire	Focused largely on health-related behaviours but also gave overview of main approaches to expectations generally, e.g. the debate on components of expectations: affective vs cognitive components/both; wants and predictions; ⁴³ desires, wishes, entitlements ¹²⁵ Eight expectations vs desires (cognitive values) ⁴⁰ vs hopes (distinct – what a patient expects is not necessarily what they hope for or desire) ⁴¹ Thompson and Sunol's review-based theoretical model: ⁴² (1) ideal – what people would most like to happen (sometimes labelled as cognitive, creating confusion, when they are in fact hopes); ¹⁹ (2) normative – what users think should happen/what is usual; (3) predicted – what they think will actually happen; and (4) unformed – unable/unwilling to articulate expectations as have no previous experience on which to base them Hopes and expectations often used interchangeably, but are distinct	Knee pain beliefs questionnaire developed with satisfactory reliability and validity; two of its four factors were on future state/illness expectations and defensive optimism Higher illness expectations and lower defensive optimism scores related to higher activity levels	Small convenience sample Main focus health behaviour

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					<p>Studies indicate that expectations <i>may</i> affect outcomes – complex to measure as expectations have several components and global items may be inadequate/insensitive</p> <p>Studies need to measure them separately and examine interactions and overlaps</p> <p>Expectancies have been unable to account for large amounts of variance in behaviour change</p> <p>Dispositional, relatively stable beliefs about future outcomes may influence expectancies – optimistic vs pessimistic beliefs.</p> <p>Optimists may experience more favourable outcomes than pessimists, perhaps because they adopt more self-protective behaviours (e.g. adaptive coping)³²³</p> <p>Expectations have long been present in medicine in the form of the placebo effect ('applied expectations')</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					Expectations have been related to patient satisfaction: the expectancy disconfirmation theory is the over-riding theory in this context and holds that satisfaction is the result of the comparison of expectations with outcome. ⁴² In theory, a person with negative expectations and positive outcomes would experience more satisfaction than someone with positive expectations and a positive outcome. Research is inconsistent on expectancy disconfirmation theory as the model is cognitive and excludes social factors, such as social comparisons, or affective factors, such as anxiety or depression		
					Lack of theoretically informed research on interactions and experiences		
					Less research on expectations of future course of a condition		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Al Issa A. Patients' experiences and expectations from an emergency department: a survey of 4392 patients. <i>Middle East J Emerg Med</i> 2007;7:57–60 ⁹⁸	EMBASE	To determine patients' experiences and expectations of the health-care services within the emergency department, and to improve those services and achieve patient satisfaction Cross-sectional survey 4392 questionnaires distributed	Emergency department, King Hussein Medical Center, Amman, Jordan 59% male No information regarding response rates	Patients were asked about their expectations with respect to waiting time, consultation time, total length of stay at the emergency department, presence of attendant at the time of consultation, investigations, intravenous fluids, involvement in treatment decision, agree to hospitalisation if recommended No reference as to where these items came from	None stated 'Failure to identify patient expectations can lead to patient dissatisfaction with care, lack of compliance and inappropriate use of medical resources' ³²⁴	81% expected to wait < 20 minutes; 95% expected a consultation time between 10 and 20 minutes 73% expected investigations 71% expected intravenous fluids 68% expected involvement in treatment	Poor-quality study
Baumann M, Euler-Ziegler L, Guillemin F. Evaluation of the expectations of osteoarthritis patients have concerning healthcare, and their implications for practitioners. <i>Clin Exp Rheumatol</i> 2007;25:404–9 ¹⁰⁹	EMBASE	To evaluate expectations of osteoarthritis patients in France and to consider how the information gathered may be used to improve health-care provision and the doctor–patient relationship Qualitative research: 10 focus groups Semi-structured interview guide	96 osteoarthritis patients recruited among customers who came to purchase osteoarthritis medication at 10 pharmacies in 10 towns in 10 regions (selected at random from 22 regions in France) Age range 42–89 years (mean 65 years); 81% female Response rate 96%	Each respondent asked, 'What are your expectations with respect to osteoarthritis?' This was read out to the rest of the group Also one of the main themes of the focus group was 'Expectations (15 minutes): foreseen improvements, ideals, new treatments'	Discussed 'gap models': the degree of discrepancy between expectations and experience to elucidate the social and cultural components of patient satisfaction. Also, the model of patients' expectations and requests, which focuses on the difference between the actual care provided and what patients were told beforehand ^{25,325,326}	The care offered by health professionals met expectations in the areas of information, communication skills and social support Improvements required were reported as developing greater trust within the patient–practitioner relationship; improved communication skills and expressions of sympathy by the practitioners; and by GPs to act as mediators and facilitators in improving recognition and understanding of osteoarthritis by employers and public decision-makers	Small sample Focus group methodology

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Chapple A, Sibbald B, Rogers A, Roland M. Citizens' expectations and likely use of a NHS walk-in centre: results of a survey and qualitative methods of research. <i>Health Expect</i> 2001;4:38–47 ¹⁰	EMBASE	To find out which groups of people would use a NHS walk-in centre that would offer mainly health-care advice, staffed by nurses; to understand the circumstances in which people would use a walk-in centre and to ascertain to what extent it would meet patients' expressed health-care needs	Wakefield, Yorkshire, UK 34% response rate to postal survey (811 questionnaires returned)	Not stated	None	Patients' expectations of the walk-in centre exceeded planned provision in the following respects: range of services, staffing by doctors and nurses, availability of interpreters Expectations were mainly shaped by patients' own experiences of general practice	Not random sample
		Postal survey of 2400 people. Samples were chosen by selecting blocks of health authority records that had been separated into groups according to sex and age. A 75% white sample was selected in this way. A 25% non-white sample was selected by first identifying common Asian surnames and then as for the white sample					

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Chiolero A, Prior J, Bovet P, Masson J-C, Daroili R. Expectation to improve cardiovascular risk factors control in participants to a health promotion program. <i>J Gen Intern Med</i> 2008;23:615–18 ¹¹	EMBASE	To assess expectations to improve cardiovascular disease risk factors (CVD-RF) in participants of a health promotion programme	Vaud, Switzerland 1598 volunteers from the general public Mean age 56.7 years; 40% male	Participants were asked about their expectation to have their CVD-RF improved at a next visit scheduled 2–3 years later: 'At which category of risk do you expect to be at the next scheduled visit?' Answers included 'expectation to have CVD-RF in the same current risk category' or, for those in the medium- or high-risk categories, 'expectation to have CVD-RF improved to a lower risk category' Among smokers, being in the pre-contemplation stage of change was considered as an expectation not to quit smoking, whereas being in the contemplation, preparation or action stages was considered as an expectation to quit smoking	None	Expectations for improved control were found in 90% of participants with elevated blood pressure; 91% with elevated blood glucose; 45% with elevated blood total cholesterol; 44% who were overweight; 35% who were smoking Expectation for total cholesterol improvement was reported more often by men, those with a high total cholesterol level and those who had consulted a doctor in the last 12 months Expectations to lose weight and to quit smoking were found more often in younger participants than in older participants	Self-selecting sample Participants had to pay a fee to take part and so, sample potentially 'healthier and wealthier' than the general population Expectation questions had not been validated Expectation questions were administered after participants had received an explanation about the need for CVD-RF control

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Christiaens W, Verhaeghe M, Bracke P. Childbirth expectations and experiences in Belgian and Dutch models of maternity care. <i>J Reprod Infant Psych</i> 2008; 26 : 309–22 ^{11,2}	EMBASE	To compare the childbirth expectations and experiences of four groups of women: Belgian and Dutch women with a hospital or home birth Questionnaire survey: one at 30 weeks of pregnancy and one within the first 2 weeks of childbirth, at home or in hospital	Belgian and Dutch hospitals and independent midwifery practices Convenience sample of 611 women (827 filled out the prenatal questionnaire; 611 completed the second questionnaire) (Belgian $n=265$, Dutch $n=346$) Mean age 31.2 years	The Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ versions A and B) was developed to assess feelings of uncertainty and anxiousness accompanying the subjective experience of the anticipated delivery as unknown, uncontrollable and unavoidable The instrument is in Dutch and has been validated ³²⁷ and is used to specifically measure fear about childbirth by women's appraisal of expectations and experiences Expectations represent what women think will happen, not what women hope will happen 33 items are 'statements concerning intensities of emotions and magnitude of cognitions regarding the delivery' Originally, scores ranged between 0 and 5, but a neutral response category in the middle was provided for this study. The higher the score the more negative the appraisal and thus the more the respondent feels uncertain and anxious Internal consistency for this study: Cronbach's $\alpha_A = 0.92$, Cronbach's $\alpha_B = 0.94$	The influence of expectations on the birthing experience is acknowledged and documented Women's expectations and experiences of childbirth can affect how women look back at labour and birth. An imbalance between expectations and experiences is often linked to fear of childbirth, which is associated with expecting more negative and less positive events during childbirth and with a more eventful childbirth Expectations can affect how women respond to their birth experience during the post-partum period The more expectations are met, the more women are satisfied. These results affirm satisfaction theories, e.g. the value-expectancy model, discrepancy theory and the fulfilment theory. Nevertheless, the association between expectations and satisfaction is problematic in relation to the quality of care. Rising quality of care can bring about rising expectations. As a consequence, high-quality care may result in low satisfaction	Expectations and experiences were positively associated; expectations were found to be a strong predictor of women's experiences of childbirth Women's experiences turned out to be more positive than they expected in advance, but the discrepancy is small Women planning a home birth were more optimistic during pregnancy and had more positive experiences than women intending to give birth in hospital Belgian women had more positive expectations and experiences regarding childbirth than Dutch women, regardless of place of birth	No information regarding non-responders Questions were framed in terms of predicted expectations (taking into account practical and situational restrictions) and not ideal expectations (referring to aspirations, preferences and desires in an ideal world)

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					It has also been highlighted that there is an increased risk of post-partum distress in cases in which expectations are not met, as the imbalance between expectations and reality generates fear		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Cutts C, Tett SE. Do rural consumers expect a prescription from their GP visit? Investigation of patients' expectations for a prescription and doctors' prescribing decisions in rural Australia. <i>Aust J Rural Health</i> 2005;13:43–50 ¹³	EMBASE	To assess patients' expectations of receiving a prescription and patients' expectations of a prescription. Matched questionnaire study completed by patients and GPs. Target sample was 500 patients; actual sample 481 patients consulting 17 GPs. No practices approached refused to participate	Convenience sample of seven general practices in rural QLD, Australia. Age range 2 months to 89 years; 63% female. Average response rate (matched forms as a proportion of total patients seen) was 64% (range 40–85%)	Patients' expectations of receiving a prescription and GPs' perceptions of patients' expectations. Patients were asked if they were hoping for a prescription (ideal expectation) and could answer 'yes', 'no' or 'maybe'. Second question asked if they thought that it was likely that the doctor would give them a prescription (actual expectation), with same response categories. Doctors were asked for their perceptions of the patients' expectations of a prescription. Responses were categorised as: 'definitely wanted a prescription', 'probably wanted a prescription', 'unsure', 'probably did not want a prescription' or 'definitely did not want a prescription'. These five categories were subsequently collapsed into three (combining definitely and probably for 'wanted' and for 'did not want')	In urban settings there has been a mismatch in doctors' perceptions of patient expectations for a prescription and actual patient expectations, with evidence of overestimation of expectation by doctors. In rural settings, anecdotally, it has been claimed that doctors report being 'expected' or 'forced' to provide prescriptions for patients who travel large distances ^{326,328,329}	Some ideal expectation (hope) for a prescription was expressed by 57% (274/481) of patients. 65% thought it was likely or possibly likely (actual expectation) that the doctor would give them a prescription (313/481). Doctors accurately predicted hope or lack of hope for a prescription in 65% of consultations (314/481), but were inaccurate in 19% (93/481). No increase in patients' expectations, doctors' perceptions of an expectation or a decision to prescribe were detected for patients living a greater distance from the practice. A significant association with patients' ideal expectation (hope) for a prescription was detected in certain patient groups including male patients, those aged > 50 years, those living within 10 km of the practice, those travelling < 30 minutes, those in retirement, those who had seen the doctor before about their problem and those who had been prescribed a medicine for the problem before	Questionnaire was piloted. Non-random selection of doctors' surgeries. Doctors and patients knew they were being 'assessed'

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Dady KF, Rugg S. An exploration of individuals' expectations of their stay on an elderly care unit. <i>Br J Occup Ther</i> 2000; 63 :9–16 ¹⁴	EMBASE	To explore the relationship between the expectations and experiences of individuals with regard to their stay on an elderly care unit Qualitative, cross-sectional study Semi-structured paired interviews 300+ individuals admitted of whom 29 met study criteria; 20/29 agreed to participate	British study 100-bed unit providing non-acute care for elderly people Convenience sample of 20 individuals admitted to the unit from an acute care hospital: 14 women and six men Age range 61–97 years, mean age 81.65 years	Question for the initial interview: What do you expect it will be like for you while you are in the unit? Cues: Do you have a picture of how things will be? What do you forecast or predict about your stay? What will happen to you? What will you do? What do you expect will happen most often to you while in the unit? What do you expect will happen least often to you while in the unit? What are the things you expect are almost certain to happen to you here? What are the things you expect are least certain to happen to you here? Where do you expect to go when you leave this unit? Questions for the second interview: Was this what you had expected it would be like for you when you arrived at the unit? What things were as you expected? What things were not? How closely would you say your overall experience matched your expectations?	Expectations in relation to the growth of consumer participation and the related concepts of patient collaboration and satisfaction ^{330,331} Two studies referenced that examined elderly British people's expectations of health-care provision ^{332,333}	A significant relationship was seen between positive-patient expectation for a prescription and male doctors, doctors in less isolated practices and doctors practising in multiple partner practices Five themes identified from data Expectations were limited. Expectations that were found were in relation to sense of time, people, the physical environment and the recovery process Variety of expectations about the tangible and conceptual elements of their experience, which focused primarily on outcomes experienced rather than on the processes occurring Expectations appeared to change in conjunction with both time and experience Participants' expectations were formed on hunches and/or previous information. They described their situation largely in terms of a mismatch between their expected and actual experiences or with regard to unexpected situations Some had noted that they had limited their initial expectations to reduce potential disappointment	Study carried out in a single setting with a convenience sample Interview schedules were developed from the literature and discussion with colleagues and patients. Initial versions were piloted and minor modifications were made

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Cues: As expected/more positive/negative than expected. Not as expected/better or worse than expected. Did any of the things you thought were most likely to happen actually occur? Did these things occur as often as you thought they would? Did any of the things you thought were least likely to happen actually occur? Did these things occur as often as you thought they would? Is where you are living now where you expected to go when you arrived at this unit?</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Dawn AG, McGwin G, Lee PP. Patient expectations regarding eye care. <i>Arch Ophthalmol</i> 2005; 123 :534–41 ¹¹⁵	EMBASE	To develop an instrument [the Eye Care Expectations Survey (ECES)] that can identify and quantify the expectations of patients visiting eye-care providers Initial qualitative phase with six focus groups involving 38 patients to develop pilot version of survey Then, 240 patients approached to participate in the survey: 20 ineligible, 202/220 participated (92%) 20 patients completed ECES on the 16 items concerning ongoing care on two occasions approx. 2 weeks apart to assess test–retest reliability	Durham, NC, USA 202 patients attending four ophthalmology practices Mean age 53.3 years; 124 women, 78 men	This paper is about development of ECES	Key papers about expectations were reviewed Most patients have explicit expectations when they visit their physician ^{25,38,39,4} Disagreements over the best way to measure expectations ²⁵ Value expectations, which refer to patients' desires, hopes or wishes concerning clinical events, are the dominant model throughout the expectations literature, which mostly involves studies in primary care settings ^{40,47} The 10 most commonly addressed areas of patient expectations and requests are medical information, medication/prescription, counselling/psychosocial support, diagnostic testing, referral, physical examination, health advice, outcome of surgery or treatment, therapeutic listening and waiting time	Pilot version included 16 items to rate expectations for ongoing care on a 5-point scale ranging from 'not important' to 'extremely important'; 21 items to rate expectations for the specific visit on a 5-point scale ranging from 'not important' to 'extremely important'; and demographic questions Intraclass correlation coefficients ranged between 0.80 and 0.95 Factor analysis on the 37 items yielded factors that described four distinct types of expectations: patient involvement in eye care, interpersonal manner, information about diagnosis and prognosis and communication and clinical competence	Pilot version of ECES developed through review of expectations literature and the initial focus group work Participants completed pilot version and then factor analysis of responses was used to identify performance characteristics of ECES
Dogra N. What do children and young people want from mental health services? <i>Curr Opin Psychiatry</i> 2005; 18 :370–3 ¹¹⁶	EMBASE	To review the literature reporting on children and young people's views on child and adolescent mental health services	None stated	N/A	None stated	The limited research presented described young people, their parents and health-care providers often having different expectations of services	No information regarding how research was identified for review

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Figaro MK, Williams-Russo P, Allegrante JP. Expectation and outlook: the impact of patient preference on arthritis care among African Americans. <i>J Ambul Care Manage</i> 2005; 28 :41–8 ¹⁷	EMBASE	To explore the knowledge, attitudes and beliefs of black subjects with osteoarthritis as determinants of their consideration of total knee replacement (TKR) as a therapeutic option; to identify beliefs or expectations regarding TKR as a treatment modality that are associated with patients' self-reported quality of life	Manhattan and Harlem, NY, USA 145 potential participants; 114 met entry criteria, 94 interviews completed (84 women, 10 men) Average age 71 years	Expectation items of interview developed from the literature and expert opinion ‘Questions on expectations of TKR were piloted and modified for comprehension and relevance in at least 10 subjects as needed prior to study’	Patients can have differing expectations of treatment, which can influence their choice for care ^{17,5,246}	Expectations that very or extremely likely that TKR relieves pain (36%), relieves disability (26%), improves walking (45%) Concerns that after TKR very or extremely likely to have postsurgical pain (43%), postsurgical disability (43%), postsurgical decreased walking (48%) Participants underestimated the future benefit of surgery and were concerned regarding the future risks of surgery. Information gathered from family sources and a fear of surgery appeared to affect decisions about the efficacy of knee surgery In this sample a large minority of those who had not already had TKR were unwilling to have surgery and did not think it would significantly improve their current health	Non-random purposive sample. Patients had not been formally evaluated for TKR

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Fosnocht DE, Swanson ER, Bossart P: Patient expectations for pain medication delivery. <i>Am J Emerg Med</i> 2001; 19 :399–402 ¹¹⁸	EMBASE	To determine patient expectations for time to delivery of pain medications Prospective study Convenience sample of emergency department patients presenting with a painful injury or illness 620 patients surveyed; 458 had complete data	UT, USA Descriptive characteristics for total sample not presented No response rates as total number of patients eligible not recorded	Patients were asked to report what they felt was a reasonable time to wait for pain medication and this was compared with the actual time to the delivery of pain medication	None stated	Patients expected rapid delivery of pain medication after arrival in the emergency department and this did not vary widely by chief complaint Actual time to delivery of pain medication fell far short of patient expectations In contrast to patient expectations, actual time to delivery of pain medication varied significantly by chief complaint, i.e. pain associated with isolated extremities injuries was treated more quickly than abdominal pain and headache	No comment regarding origin of questions Convenience sample of patients

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Goldsteen M, Hautepen R, Proot IM, Abu-Saad HH, Spreeuwenberg C, Widdershoven G. What is a good death? Terminally ill patients dealing with normative expectations around death and dying. <i>Patient Educ Couns</i> 2006; 64 :378–86 ¹⁹	EMBASE	To offer insight into how terminally ill patients define their dying trajectory and how they use current normative ideas and expectations about dying in their stories Qualitative study using a hermeneutic approach Terminally ill patients with a life expectancy of < 3 months who lived at home	Limburg, south Netherlands 13 terminally ill patients Age range 39–83 years; 10 men and 3 women	No specific 'expectations' questions	Research based on theoretical ideas of Seale ³⁵ and Frank ³⁶ Seale ³⁵ states that people make sense of events, relationships and themselves by using cultural scripts offered by systems of expertise. In searching how to die well, terminally ill patients will refer to these scripts and thereby organise their personal story Frank ³⁶ argues that people do not make up stories for themselves but make use of current ideas, formal structures of narrative and standards of what is and what is not appropriate to tell. These elements can embody normative expectations that shape the stories and colour their identity	Normative expectations around death and dying; awareness and acceptance; open communication; living one's life till the end; taking care of one's final responsibilities; dealing adequately with emotions Diversity in referring to and dealing with normative expectations. A good death cannot be defined in general terms and is not the same for everyone	Interview guide appended in paper

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Hundley V, Ryan M. Are women's expectations and preferences for intrapartum care affected by the model of care on offer? <i>Br J Obstet Gynaecol</i> 2004;111:550-60 ²⁰	EMBASE	To examine whether women who have access to systems of care that offer greater continuity of carer value this attribute more highly than women for whom the attribute is not a realistic option Simple rating scales and a discrete choice experiment were used to elicit women's preferences for different aspects of intrapartum care Midwives gave an anonymous self-completed questionnaire to women at the booking visit	Three geographical areas of the Grampian region in Scotland, UK, each with a different system of maternity care provision 301 women at low obstetric risk; mean age 27.9 years Overall response rate 40%	Six attributes considered: continuity of care by the same midwife, types of pain relief available, types of fetal heart rate monitoring, physical appearance of the birth setting, involvement of medical staff, involvement of women in decision-making Questionnaire had three sections: Section 1: Respondents were asked to choose their preferred level for each attribute and then rate the importance of each attribute using a 4-point scale: 'very important', 'quite important', 'of little importance' or 'not important' Section 2: Discrete choice experiment with 16 scenarios to establish (1) whether or not an attribute was important in the delivery of services for intrapartum care, (2) the relative importance of different attributes, and (3) the effect of hypothetical changes in service provision Section 3: Demographic questions	Authors claimed that 'consumer preference for individual attributes within a service may also depend on the availability of these attributes and that this may influence future expectations of care. That is, consumers will prefer those aspects of care that are realistically available within their area'	Women were most likely to prefer to have a midwife who they had met during their pregnancy and who would be present throughout labour and delivery; all methods of pain relief available; intermittent monitoring; homely surroundings; involvement of medical staff only if required; and greater involvement in/control of decision-making Involvement in decision-making was the attribute rated by most women as being very important An initial endowment of expectations was found to influence preferences ('endowment effect' taken from economics literature). This suggests that even respondents without experience of a service may be influenced simply by its availability Explanations regarding the impact of initial endowments on preferences include loss aversion, minimisation of the psychological feelings of regret and disappointment, a lack of information about the alternative and whether respondents consider the options to be realistic	Sample size calculation reported Recruitment method did not allow any assessment of response bias or selection bias Main outcome measure: women's preference for different attributes of intrapartum care Further information regarding instrument development in Hundley <i>et al.</i> ³⁷ Inconsistency reported between findings from the rating tool and findings from the discrete choice experiment, raising concerns about convergent validity

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Ibrahim SA, Siminoff LA, Burant CJ, Kwok CK. Differences in expectations of outcome mediate African American/white patient differences in 'willingness' to consider joint replacement. <i>Arthritis Rheum</i> 2002; 46 :2429–35 ¹²¹	EMBASE	To determine whether African American patients differ from white patients in their 'willingness' to consider joint replacement and to determine the factors that influence this relationship Cross-sectional survey 1351 patients were approached at Veterans Affairs outpatient clinics; 776 met study criteria, 38 patients refused. The first 600 who were eligible and willing to participate were included in the study – four had partially missing data	Veterans Affairs outpatient clinics, USA 596 elderly male, African American or white patients with moderate-to-severe symptomatic knee or hip osteoarthritis who were receiving primary care Mean age 65 years African American patients, 66 years white patients	To assess outcome expectations, patients were asked: 1. How often do you think someone dies as a result of hip or knee replacement surgery? Response categories ranged from 'never' to 'often' 2. How long do you think someone who has hip or knee replacement surgery would be in hospital or another health-care facility? Response categories ranged from '1–3 days' to '> 2 weeks' 3. How long do you think it would take someone to fully recover from hip or knee replacement surgery? Response categories ranged from '< 2 weeks' to '> 12 months' 4. Sometimes people who experience extreme pain in their hip or knee choose to have joint replacement surgery. How much pain do you think people will still have after they have recovered from their surgery? Response categories ranged from 'none' to 'an extreme amount' 5. Sometime people who have extreme difficulty walking choose to have joint replacement surgery. How much difficulty walking do you think people will still have after they have recovered from their surgery? Response categories ranged from 'none' to 'an extreme amount'	None	African American patients were more likely than white patients to expect a longer duration in hospital, of pain and of functional disability following replacement surgery	No justification of sample size Study sample was from one geographical location and all male

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Janzen JA, Silvus J, Jacobs S, Slaughter S, Datzel W, Drummond N. What is a health expectation? Development of a pragmatic conceptual model from psychological theory. <i>Health Expect</i> 2006; 9 :37–48 ¹⁹	EMBASE	To present a conceptual model for the development of health expectations with specific reference to Alzheimer's disease The focus of the paper is on understanding the process of expectation development, with specific reference to the influence of that process on health attitudes and behaviours, rather than on satisfaction specifically Using material from one research interview, involving a person with early-stage dementia and his or her caregiver, the authors describe some broad concepts and definitions of expectancies and follow with a proposed conceptual model that attempts to describe the process by which an expectation is realised	Calgary, AB, Canada	Using psychological theory, they use the term 'expectancy' and 'expectation' to differentiate between general concepts and specific applications	Thompson and Sunol's conceptual framework ⁴² that identified four types of expectation: ideal (desired or preferred outcomes), predicted (actually expected outcomes), normative (what should happen) and 'unformed'. This model was explicitly designed to examine the role of expectations in the formation of satisfaction. A limitation of this model is that it does not adequately address actuality Olson <i>et al.</i> 's model ⁶⁵ identified three antecedents to an expectancy: direct experience, other people and beliefs. Emphasis is on the cognitive, affective and behavioural outcomes of the expectancy process rather than on the process of expectancy interaction itself Broadly speaking, expectancies are stored associations between behaviours and resulting consequences, which then guide subsequent behaviours ³³⁸	The development of a health expectation is envisaged to incorporate several longitudinal phases: precipitating phenomenon, prior understanding, cognitive processing, expectation formulation, outcome, post-outcome cognitive processing	No method detailed for identifying the expectation literature reviewed Model proposed is unsupported by empirical evidence but through illustration by the case hypothetical validity is implied Examined existing literature with respect to health expectations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kallestrup P, Bro F Parents' beliefs and expectations when presenting with a febrile child at an out-of-hours general practice clinic. <i>Br J Gen Pract</i> 2003;53:43-4 ²²	EMBASE	To describe why parents of febrile children use the GP out-of-hours service, how parents handle children before they seek medical advice and what their expectations are of a visit to the out-of-hours GP service	Aarhus, Denmark All parents presenting with a child aged up to 12 years were consecutively invited to be interviewed prior to consultation with the GP Parents were included on the basis of their self-stated reason for encounter being fever and/or any symptoms relating to the respiratory tract 146 interviewed, one refusal	Open-ended question about parents' expectations of the consultation Also, 'Do you expect a prescription of an antibiotic?'	None stated	Responses to open question on parents' expectations from consultation: examination 98%, explanation or diagnosis 79%, advice, guidance 20%, prescription 13%, reassurance 9%, referral to hospital 1% Responses about the expectation of a prescription: 'no' 71%, 'yes' 19%, 'don't know' 10%	Origins of expectation questions unknown

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Karydis A, Komboli-Kodovazenith M, Hatzigeorgiou D, Panis V. Expectations and perceptions of Greek patients regarding the quality of dental health care. <i>Int J Qual Health Care</i> 2001; 13 : 409–16 ¹²³	EMBASE	To investigate the perceptions and expectations of patients regarding the quality of dental health care they received and the criteria they used to select a dentist Descriptive study 14-item questionnaire in clinic and a second questionnaire at least 1 week later	Periodontal Clinic, School of Dentistry, University of Athens, Greece 200 consecutive adult dental patients Age range 18–80 years; 93 men, 107 women	An expectations questionnaire assessed patients' demands and expectations of the desired dental care and consisted of 14 Likert-type questions: (1) adherence to rules of antiseptics and sterilisation, (2) use of disposable gloves, (3) careful and scrupulous examination and proper diagnosis, (4) information regarding the oral health problem and the treatment plan, (5) creation of a feeling of security and tranquility, and punctuality in appointments, (6) understanding and sensitivity in the dentist's approach, (7) use of a mask, (8) information regarding oral diseases and preventive methods so as to maintain oral health, (9) reference to other specialised dentist/physician when necessary, (10) disposition of sufficient time for communication, (11) continuous and up-to-date information, education in recent technology and procedures at national and international congresses and seminars, (12) respect for and application of the instructions suggested by the dentist, (13) specialised dentist, and (14) general dentist	None stated	Patients' first priority regarding the quality of dental health-care services was the adherence to rules of antiseptics and sterilisation Expectations and demands regarding empathy and assurance were placed at the top of the patients' priorities Statistically significant difference between the desires and expectations of the patients and their perceptions of the dental service provided The largest gap concerned information received about oral health diseases and the preventive methods that can help maintain oral health The largest quality gap was observed in responsiveness followed by empathy and reliability	It is unknown where the items included in the expectations questionnaire come from

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>A perceptions questionnaire assessed patients' perceptions of the dental care provided and consisted of eight Likert-type and four multiple-choice questions</p> <p>The questions related to dentists' possible qualities and qualifications and existed in both questionnaires. Patients gave a mark (from 1 to 10) for each characteristic in the expectations questionnaire according to how important and necessary they considered it, and in the perceptions questionnaire according to how satisfied they were with their dentist and to what degree he/she possessed each characteristic</p> <p>The characteristics examined were classified into four quality dimensions of dental health care: assurance, reliability, responsiveness and empathy, according to Zeithaml <i>et al.</i>³³⁹</p> <p>Reliability of scales: Cronbach's alpha for responsiveness was 0.75, assurance 0.63 and reliability 0.57. A Pearson correlation coefficient of 0.53 was obtained for the empathy scale (comprised two items)</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Koller M, Lorenz W, Wagner K, Keil A, Trott D, Engenhardt-Cabillic R, <i>et al.</i> Expectations and quality of life of cancer patients undergoing radiotherapy. <i>J R Soc Med</i> 2000; 93 :621–8 ²⁴	EMBASE	To analyse the interplay between patients' expectations, their quality of life and clinical variables (such as therapeutic approach and objective health status) Before-and-after study Questionnaire administered on day 1 or 2 of inpatient stay. Questionnaire administered again on discharge from hospital (4–6 weeks after the first assessment)	Marburg, Germany 55/76 (72%) consecutive patients who had been admitted for inpatient radiotherapy Mean age 66.8 years; 27 men, 28 women All 55 patients completed the first questionnaire; 46 patients completed the second questionnaire, with nine patients lost to follow-up	An expectation checklist was developed in co-operation with patients, physicians and nurses of the radiotherapy department for the purposes of the present study Which of the following expectations do you personally hold towards your radiation therapy? You may check any of the following items': (1) healing, (2) stop tumour growth, (3) relief of tumour-related symptoms, (4) prevent metastases, (5) prevent tumour relapse, (6) pain relief, (7) free from pain without medication, (8) psychological stabilisation, (9) reduction of tumour size; (10) prevent pain increase Checklist was successfully pre-tested with 10 radiotherapy inpatients Items that measured patients' expectations at the beginning of therapy reappeared in second questionnaire measuring success of therapy Expectations checklist was subjected to a factor analysis	Expectations are beliefs about future states ⁵⁵ Expectations and objective health are inter-related ^{317,340,341} Expectations influence the perception and evaluation of illness, patients' help-seeking behaviour, the course of the diagnostic process, the degree to which ingredients or treatments are considered effective (placebo effect) and even doctor's prescribing behaviour ^{265,342,343} Expectations are related to health outcomes ^{344–347} Expectations can contain both realistic and unrealistic elements ³⁴⁸	Before radiotherapy: expectation most commonly expressed was that of healing (58%); the least popular item was 'prevent pain increase' (15%) Three independent factors accounted for 59% of the variance: pain/emotional control, healing and tumour/symptom control The expectation of healing was associated with high quality of life, and the same was true of perception of healing after radiotherapy In the group as a whole, quality of life was altered little by radiotherapy but became substantially worse in the group who had expected healing but perceived that this had failed (even though physician-assessed Karnofsky performance status had not changed) Authors claim that these findings indicate that the expectation of healing in cancer patients is a component of a good global quality of life, whereas more limited expectations (pain control, tumour control) relate to lower quality of life	Sample calculation confirmed that 55 patients would be sufficient to detect differences in global quality of life index Sample representative of county The exact temporal sequence of healing expectations and quality of life was not tested

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kravitz RL. Measuring patients' expectations and requests. <i>Ann Intern Med</i> 2001;134:881–8 ²⁵	EMBASE	To review the conceptual relationships linking patients' expectations, requests and satisfaction with care; to survey contemporary approaches to the measurement of expectations and requests; and to highlight recent empirical findings	Review paper	N/A	Expectations and requests are central to most theories of patient satisfaction	<p>Patients' expectations for care occupy a critical place between patients' experiences of symptoms and evaluation of care</p> <p>Studies have shown a high prevalence of patient expectations for testing, medical prescribing and speciality referral</p> <p>On reviewing methods of measurement, authors conclude that, for most purposes, post visit-only designs that directly ask about unfulfilled expectations are adequate. Studies that wish to describe the dynamics of expectations formation and modification during the course of the visit require multiple measurements</p> <p>Four major sources of patients' unmet expectations: perceived vulnerability to illness, previous experience with illness or the health-care system, transmitted knowledge and somatic symptoms</p>	<p>Non-systematic review</p> <p>Define expectations to mean desires, wishes or entitlements</p>

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lam TP. Chinese fisherman's expectations on medications. <i>Subst Use Misuse</i> 2003; 38 : 85–96 ¹²⁶	EMBASE	To explore the expectations about medications of Chinese fishermen, a group of culturally distinct people, when they consult their family doctors Recruitment through a primary care clinic and a hostel for the elderly Purposeful sampling – range of demographic variables and experiences Eight group interviews; each group interview had had up to five participants	Southern side of Hong Kong 29 participants, four refusals Age range 30–89 years; 11 men, 18 women	No information regarding topic guide	Expectations are related to prescription, investigation, specialist referral Expectations can comprise information on diagnosis; discussion of prognosis, prevention, continuing care Physicians' knowledge of patients' expectations can enhance patients' satisfaction with consultations Little information regarding expectations of nationalities with cultures different from those of the West Patients' expectations can be significantly influenced by their ethnic and cultural background	Participants expected medications to lead them to a fast recovery from their illnesses	Non-random sample Some participants known to researcher as he had practised as a family doctor in the locality for 5 years
Larsen T, Nguyen TH, Munk M, Svendsen L, Teisner L. Ultrasound screening in the 2nd trimester. The pregnant woman's background knowledge, expectations, and experiences. <i>Ultrasound Obstet Gynecol</i> 2000; 15 : 383–6 ¹²⁷	EMBASE	To explore pregnant women's background knowledge, expectations, and experiences and acceptances of second trimester ultrasound screening 500 consecutive pregnant women of gestational age 16–20 weeks; seven women declined Questionnaire survey	Copenhagen, Denmark	Open questions – not stated. Unclear if these questions are asking about expectations or what the women would like to find out from the ultrasound scan, i.e. their 'wishes', which is a phrase used in the paper Also closed questions with a yes/no response: Are your expectations fulfilled? Has the ultrasound examination made you more insecure? The ultrasound examination has not made any difference Has the ultrasound examination made you more secure?	None	The women's expectations were met in 96% of cases Their responses were classified as a significant wish for a 'well-grown fetus' or 'to exclude malformations' Are your expectations fulfilled? – 96% yes Has the ultrasound examination made you more insecure? – 98% no The ultrasound examination has not made any difference – 86% no Has the ultrasound examination made you more secure? – 89% yes	The development of questions not discussed Very little discussion regarding expectations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lelliott P, Beevor A, Hogman G, Hyslop J, Lathlean J, Ward M. Carers' and users' expectations of services – user version (CUES-U): a new instrument to measure the experience of users of mental health services. <i>Br J Psychiatr</i> 2001; 179 :67–72 ²⁸	EMBASE	To develop and test a self-assessment instrument to enable users of mental health services to rate their experiences across the range of domains that they consider to be important Literature review and interviews with service users (two focus groups and seven in-depth interviews) to identify main domains Pilot version was tested and refined with 82 service users CUES-U was field tested with 449 service users; 99 service users made a second rating between 2 and 14 days after the first to examine test–retest reliability In a substudy, 84 paired ratings were made with the HoNOS (Health of the Nation Outcome Scales)	England, Northern Ireland and Wales 449 participants of main field trial Mean age 42 years; 53% male	CUES-U is a self-rated measure and has 16 items: where you live, money, help with finances, how you spend your day, family and friends, social life, information and advice, access to mental health services, choice of mental health services, relationships with mental health workers, consultation and control, advocacy, stigma and discrimination, medication, access to physical health services, and relationships with physical health workers Each item is introduced with a normative statement that describes what a service user should expect to be the case for the issue if it did not constitute a problem. After reading each normative statement, the person is asked to respond to two simple questions, each with a 3-point scale. Part A asks how the person's situation compares with that described by the normative statement ('as good as this'/'worse than this'/'very much worse than this') and part B asks whether the person is satisfied with the issues described ('yes'/'unsure'/'no'). There is also space for a free-text response to each item (part C)	None	Piloting suggests that the items covered the important domains. Most notable omission is an item(s) relating to symptoms of mental illness The test–retest correlations for six of the Part A and five of the Part B questions were 0.41–0.60, and for nine of the Part A and 11 of the Part B questions were 0.61–0.80. The exception was the item relating to medication The comparison between CUES-U and HoNOS suggests that CUES-U scores reflect severity (Spearman's rho = 0.42; $p < 0.01$)	Participants were not selected in any systematic or random way Needs to be tested further by people from minority ethnic groups (great majority of participants were white)

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lindrooth RC, Hoerger TJ, Norton EC. Expectations among the elderly about nursing home entry. <i>Health Serv Res</i> 2000; 35 : 1181–202 ²³	EMBASE	To assess whether the covariates that explain expectations of nursing home entry are consistent with the characteristics of those who enter nursing homes Modelling from survey data	USA Data source: Asset and Health Dynamics Among the Oldest Old (AHEAD) survey	Expectation measure used is the probability that the respondent places on entering a nursing home in the future (however, some concern that the concept of probability may vary by individual) In this study, expectations about entering a nursing home were modelled as a function of expectations about living beyond 10 years, expectations about leaving a bequest, health shocks and other characteristics. An econometric method developed by Hausman and Taylor ²⁴ was applied	Three reasons why it is important to understand the expectations of the elderly about nursing home entry: (1) it has implications for the purchase of private long-term care insurance, (2) it can lead to changes in financial behavior, and (3) it can indirectly improve quality of care through competition between nursing home providers	Expectations about nursing home entry are consistent with the characteristics of actual entrants	
				Specification tests were conducted to determine the validity of the instruments			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Melzer D, McWilliams B, Brayne C, Johnson T, Bond J. Socioeconomic status and the expectations of disability in old age: estimates for England. <i>J Epidemiol Community Health</i> 2000; 54 : 286–92 ¹³⁰	EMBASE	To estimate healthy and disabled life expectancy (using definitions including dependency in activities of daily living and cognitive impairment), contrasting occupational classes I and II (professional and managerial) with the rest	Cambridgeshire, Newcastle, Nottingham and Oxford, UK 10,377 people aged ≥ 65 years Participants were classified as disabled if they had evidence of dementia (using the Automated Geriatric Examination for Computer Assisted Taxonomy) or scored ≥ 11 on the modified Townsend Disability Scale at baseline screen	Healthy life expectancy is the number of years that a person at a particular age can expect to live in a health state (however health is defined) Healthy and disabled life expectancies together with confidence intervals were calculated using Sullivan's method. This involves dividing expected years lived from the life table for the study population into active and inactive years, based on age-specific prevalence estimates of the proportion of the population that is active or inactive (disabled)	Theories about the effect of rising life expectancy in populations over time vary from those that predict that additional years of life will be spent in a dependent state to those that envisage a compression of morbidity into an increasingly brief period before death. Establishing the expectation of disability in longer-lived subgroups is of considerable policy importance in efforts to prepare health and welfare institutions for an ageing society	The prevalence of disability overall and the need for 'constant care' was lower in both men and women in social classes I and II than in the rest. Relatively privileged socioeconomic groups in England, especially men, can expect fewer years of disability despite longer overall life expectancy	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mohr DC, Boudewyn AC, Likosky W, Levine E, Goodkin DE. Injectable medication for the treatment of multiple sclerosis: the influence of self-efficacy expectations and injection anxiety on adherence and ability to self-inject. <i>Ann Behav Med</i> 2001; 23 : 125–32 ¹³¹	EMBASE	To examine a model that includes cognitive, affective, behavioural, disease and social variables as they relate to adherence to an interferon beta-1a (IFNβ-1a) protocol. Naturalistic study. Telephone interviews. Patients were contacted by telephone four times over 6 months; 2 weeks before initiation of medication, at 2 weeks post initiation, at 8 weeks' follow-up and at 6 months' follow-up. Adherence measured through patient self-reports and pharmacy report of prescription being refilled at 6 months. Path analysis	NC, USA 105 consecutive patients from the Kaiser Permanente Medical Care Program of North Carolina who were diagnosed with a clinically definite, relapsing form of multiple sclerosis and who were approved to begin treatment with IFNβ-1a met inclusion criteria 101/105 agreed to participate Mean age 41.7 years; 78.2% female	Pretreatment injection self-efficacy expectations were assessed using an expectation rating previously developed for IFNβ-1b ³⁵⁰ . Patients responded to the question 'How difficult do you expect it will be to give yourself the injection?' by rating their expected level of difficulty on a 6-point-anchored Likert scale ranging from 1 ('I will not have any problems injecting myself') to 6 ('I will not be able to tolerate it [the injection] at all'). Pretreatment adherence expectations were assessed using an expectation rating previously developed for Mohr <i>et al.</i> ³⁵⁰ Patients rated how likely it was that they would discontinue IFNβ-1a on a 4-point-anchored Likert scale ranging from 1 ('not at all likely') to 4 ('extremely likely'). Pretreatment injection anxiety expectations were assessed using an expectation rating previously developed for Mohr <i>et al.</i> ³⁵⁰ Patients were simply asked to rate their expectation for injection anxiety on a 4-point-anchored Likert scale ranging from 1 ('not at all') to 4 ('certain to occur')	Self-efficacy expectations have been shown to play an important role in phobic and anxiety disorders and can have a significant impact on health-related behaviours. Patients' expectations of their ability to execute the self-injection may be important in moderating avoidant behaviour and anxiety over injection and may also be related to subsequent discontinuation of the injectable medication ^{351,352}	Pretreatment injection self-efficacy expectations were significantly related to 6-month adherence. Pretreatment adherence expectations were not related to adherence. Pretreatment injection anxiety expectations were unrelated to adherence, injection administrator or experienced injection anxiety.	101 participants small for path analysis. Variables all measured using a single question, which can reduce reliability, thereby attenuating effect sizes.

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Montgomery DA, Krupa K, Wilson C, Cooke TG. Patients' expectations for follow-up in breast cancer – a preliminary, questionnaire based study. <i>Breast</i> 2008; 17 :347–52 ³²	EMBASE	Questionnaire-based survey of the expectations for follow-up in women prior to attending their first annual review appointment for breast cancer	Glasgow, UK All patients attending for their first annual review appointment were invited to participate (n = 102); 79/102 returned questionnaires Mean age of respondents 59 years Response rate 79/102 (77%)	Questionnaire designed by senior consultant breast surgeons Expectations for frequency and duration of follow-up and opinion on whether more frequent follow-up would lead to greater anxiety or greater reassurance were sought Patients were also asked what they felt the main purpose of the follow-up clinics was and how useful they thought routine clinic visits were for detecting relapse compared with their own self-examination	None stated	Most women expect some follow-up but expectations for length, frequency and goals vary dramatically Aside from relapse detection, women's expectations are not the same as their clinicians', who place the importance of detection of side effects of therapy and psychological concerns far higher than patients	No testing of questionnaire
Morlock RJ, Lafata JE, Nerenz D, Schiller M, Rosenblum M. Expectations, outcomes, and medical costs in patients with low back pain referred to physical therapy. <i>Dis Manag</i> 2002; 5 :185–8 ³³	EMBASE	To describe treatment expectations among patients referred to physical therapy for low back pain and to examine the relationship among expectations, outcomes and medical care costs Prospective cohort study Convenience sample	Detroit, MI, USA 111 patients referred to physical therapy for low back pain within a managed care environment Mean age 45.7 years; 63% female	Patients were asked to rank, on a scale from 1 to 5 (1 = 'not at all likely' and 5 = 'extremely likely'), the results they expected from their treatment in five domains: (1) relief from symptoms (pain, stiffness, swelling, numbness, weakness); (2) to do more everyday household or yard activities; (3) to sleep more comfortably; (4) to go back to my usual job; and (5) to exercise and do recreational activities The five items were combined into an expectations scale and scored from 0 to 100, with 0 representing the lowest level of combined expectations and 100 the highest	Expectations have been shown to be predictive of outcomes ^{333,354}	Patients reported an average expectation score of 77 (range 0–95) Low back pain patients' expectations about treatment were associated with outcomes, and additionally predictive of medical care expenditures Patients with the highest level of expectations reported the greatest level of improvement at physical therapy discharge and had the lowest 12-month average medical care expenditures. Conversely, patients with the lowest level of expectations reported the lowest level of improvement and had the highest 12-month average medical care expenditures	Convenience sample Outcome measures are self-reports and therefore patients may have reported outcome assessments to be consistent with their initial expectations Associations identified were not necessarily causal

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Myers SS, Phillips RS, Davis RB, Cherkin DC, Legedza A, Kaptchuk T J, <i>et al.</i> Patients expectations as predictors of outcome in patients with acute low back pain. <i>J Gen Intern Med</i> 2007; 23 :148–53 ³⁴	EMBASE	To evaluate the association between patients' expectations and functional recovery in patients with acute low back pain and to determine whether that association is affected by giving patients choice of therapy	Boston, MA, USA 444 adults attending for initial evaluation of low back pain and who scored > 3 on a 0–10 pain scale Patients were randomised to usual care or usual care plus CAM therapy Complete data for 442 respondents Mean age 43.0 years; 53% female	Two measures of patient expectations were collected at baseline General expectation: The participants' general expectation was based on the question: 'Using a scale from 0–10, with 0 being no improvement and 10 being completely recovery, how much improvement do you expect in 6 weeks?' Specific expectation for those randomised to choice group: The second expectation variable was the participants' specific expectation of the CAM therapy that they chose. Before randomisation, patients were asked: 'Using a scale from 0–10 (where 0 is not at all helpful and 10 is extremely helpful), how helpful do you believe that [specified CAM therapy] would be for you current episode of back pain or sciatica?' For each participant, the number they assigned to the therapy that they ultimately chose was used as their measure of specific expectation	Positive patient expectations have been shown to be associated with better health outcomes But ... Are patients who are generally optimistic about their recovery more likely to get better than patients who are pessimistic? Are there sociodemographic or clinical factors associated with having high expectations? Are there other factors that modify the effect of expectations on outcome? Is expectation a component of the placebo effect and might it be different among patients who chose their own therapy vs those who were prescribed therapy by their clinicians?	Participants' general expectations for improvement, but not their specific expectations for chosen therapies, were significantly associated with improvement in functional status at 5 and 12 weeks Association between general expectations and outcome appeared to be substantially higher in the usual care vs the choice group On average, patients rated CAM therapies similar to conventional physical therapy in terms of their likely helpfulness for their current episode of back pain	Expectation questions not tested No response rates reported here

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Peremans L, Hermann I, Avontis D, Van Royen P, Denekens J. Contraceptive knowledge and expectations by adolescents: an explanation by focus groups. <i>Patient Educ Couns</i> 2000; 40 : 133–41 ¹³⁵	EMBASE	To determine the needs and expectations of adolescent girls concerning contraceptive use as well as their attitude to health-care providers Qualitative research Direct sampling – school principal of four secondary schools picked out a small fifth-grade class of 17-year-old girls	Antwerp, Belgium Four focus groups of 17-year-old girls. Groups ranged from six to seven girls; 26 girls participated in total Mean age 17.8 years	One of the statements used for the focus group discussion was, 'Does the health-care professional understand my expectations at this moment?'	None stated	Adolescents had clear expectations concerning health-care professionals and especially their GP or gynaecologist The girls expected confidentiality from their GP and wanted sufficient consultation time	Small sample Background to the origins of the five statements used for the focus group discussion not discussed

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Price M, Anderson P, Henrich CC, Rothbaum BO. Greater expectations: using hierarchical linear modelling to examine expectancy for treatment outcome as a predictor of treatment response. <i>Behav Ther</i> 2008; 39 :398–405 ¹³⁶	EMBASE	Using hierarchical linear modelling to examine the influence of expectancy on self-reported treatment outcomes in individuals who underwent cognitive behavioural therapy (CBT) for fear of flying Intervention study Volunteers were randomly assigned to either individualised virtual reality exposure (VRE) therapy or in vivo exposure therapy Survey instruments completed pre treatment, mid-treatment (after the fourth session), post treatment (6 months after treatment and 12 months after treatment)	GA, USA 72 volunteers Retention rates for 6- and 12-month follow-ups were 64/72 (89%) and 55/72 (76%) respectively	Outcome expectancy was assessed with a 3-item questionnaire adapted from a measure developed by Borkovec and Nau ³⁵⁵ Clients were asked to rate 'Confidence that therapy would reduce fear of flying-related symptoms', 'Confidence that therapy would reduce other fears' and 'How logical the treatment seemed' on a 9-point (1–9) scale, with higher scores indicating greater expectancy Internal consistency was poor: Cronbach's alpha = 0.49 Therefore, scale was reduced to a single item that best estimated the construct of outcome expectancy: 'Confidence that therapy would reduce fear of flying-related symptoms'	Outcome expectancy, defined as the extent to which clients believe that they will benefit from therapy, has been identified as one of the most important non-specific determinants of treatment gains Reviews of the literature indicate that high levels of outcome expectancy are associated with better overall treatment outcome, a stronger therapeutic alliance, improved compliance with treatment exercises and lower attrition Recent studies on the impact of outcome expectancy on the treatment of anxiety disorders show mixed results	Expectancy scores ranged from 1 to 9, with a mean score of 6.97 No significant differences in mean expectancy scores between the two treatment groups Higher outcome expectancy at the start of therapy is related to a greater rate of improvement during treatment Outcome expectancy was not related to symptom change during the follow-up period	Self-selecting sample Outcome expectancy measured using a single item

Reference	Source	Main study aim and design	Measure of expectations used any evidence of validity, reliability			Comments	
			Setting and participants	Theoretical underpinning	Key findings		
Rao JK, Weinberger M, Kroenke K. Visit-specific expectations and patient-centred outcomes. <i>Arch Fam Med</i> 2000; 9 : 1148–55 ³⁸	EMBASE	To examine the effect of fulfilment of patients' visit-specific expectations on their satisfaction as well as on health status and compliance Literature review	MEDLINE search 1966–1999 Included studies conducted in primary care settings; that systematically recruited patients; that elicited pre-visit and/or post-visit expectations relative to specific visits; and that measured patient-centred outcomes	N/A	Confusion between expectation fulfilment and patient satisfaction What are the effects of expectation fulfilment on important clinical outcomes?	23 studies: seven trials, four cohort studies and 12 cross-sectional studies. In all studies, patients' expectations and outcomes were measured within the context of single visits Patients frequently expected information rather than specific physician actions, but physicians did not accurately perceive patients' visit-specific expectations A positive association between meeting patient expectations and overall satisfaction was demonstrated in 11/19 studies that assessed post-visit patient satisfaction	Primary care settings only Majority of studies were performed in academic settings

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Rao JK, Weinberger M, Anderson LA, Kroenke K. Predicting reports of unmet expectations among rheumatology patients. <i>Arthritis Rheum</i> 2004; 51 : 215–21 ¹³⁷	EMBASE	To examine whether changes in health status can predict unmet expectations Baseline and follow-up survey Initial telephone survey within 2 weeks of appointment, and subsequent surveys at 6 (baseline) and 12 (follow-up) months	IN, USA Chronic arthritis patients enrolled from six outpatient sites 203 respondents to baseline survey; 177/203 (87%) responded to the follow-up survey Average age 56.5 years; 74% female	12-month survey contained questions on unmet expectations Respondents were asked: 'Sometimes patients have expectations of what the doctor should do at their visit. Remembering your last visit to the rheumatologist, do any of the following statements apply to you?'. The respondents were then asked to choose from a list of six statements pertaining to unfulfilled desires: 'I wished the doctor would: (1) change my medication, (2) refer me to a surgeon or other specialist, (3) give me information on my disease or treatment, (4) order laboratory tests, (5) spend more time examining me, or (6) other (please specify)' ^{236,356}	The term 'expectations' is frequently used to describe desires or beliefs about what will happen, regardless of whether patients explicitly verbalise these perceptions to the physician during the visit. Most patients come to the encounter with expectations and approximately 15–25% leave with unmet expectations ^{40,47,48,125,356,357}	58 patients (33%) reported unmet expectations, most often for information (47%) and new medication (31%) Unmet expectations were more common among patients with greater baseline helplessness [odds ratio (OR) 1.9, 95% confidence interval (CI) 1.0 to 3.6] and short doctor visits at follow-up (OR 5.6, 95% CI 2.4 to 13.1) Unmet expectations were less common among those experiencing a decline in pain (OR 0.3, 95% CI 0.1 to 0.9)	This paper presents secondary analyses of data from a longitudinal study of patients with arthritis. Recruitment strategy and study methods are not described Expectations before the visit to the rheumatologist were not examined
Richardson J. What patients expect from complementary therapy: a qualitative study. <i>Am J Public Health</i> 2004; 94 :1049–53 ¹³³	EMBASE	To assess the expectations of patients who use complementary therapy Qualitative research Self-completed SF-36 before treatment and were asked to record qualitative comments about their expectations of complementary therapy. Participants posted replies back to hospital research unit	British NHS complementary therapy clinic that provided outpatient acupuncture, osteopathy and homoeopathy All patients who attended the clinic during a 9-month period ($n=327$) were included; 237/327 (72.5%) returned the questionnaire, 86% of whom recorded qualitative statements regarding their expectations of complementary therapy 69 (29%) men, 168 (71%) women	Open question: 'What do you expect from the [complementary therapy] service?'	Patients who are dissatisfied with conventional treatment may have high expectations of complementary therapies. Conversely, dissatisfaction with conventional treatment may lead to low expectations for any other form of intervention	Patients expected symptom relief, information, a holistic approach, improved quality of life, self-help advice and wide availability of such therapies on the NHS	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Ruiz-Moral R, Pêrula de Torres LA, Jaramillo-Martin I. The effect of patients' met expectations on consultation outcomes. A study with family medicine residents. <i>J Gen Intern Med</i> 2007;22:86–91 ¹⁴⁰	EMBASE	To determine patients' expectations and the fulfillment of these at family medicine consultations by resident doctors and to assess their effect on some consultation outcomes Prospective cohort study Pre-visit expectations were recorded Patients' perceptions of communication with the doctor immediately post visit were measured Telephone interview with patients to examine if their expectations had been fulfilled, how satisfied they were about the consultation and their future course of action	Cordoba, Spain 38/42 resident doctors agreed to participate Average age 30.82 years; 56.4% male Patients attending family medicine consultations held by the 38 resident doctors; 1301 eligible patients, 702 filled in all questionnaires (54%) Average age 44.58 years; 67.5% female	Pre-visit patient questionnaire: 'Regarding today's consultation with your doctor, please tick what you would like to get: To show interest and listen to me To devote enough time to me To give me support and reassurance To explain my problem and solve my doubts To give me some advice about what I should do To get a medical diagnosis To give me a physical examination To refer me to a specialist doctor To order some test To give me a prescription' Patients' answers were scored on a 3-point scale: 'not important', 'of doubtful importance' and 'important' Patients then had to prioritise the three expectations that they considered the most important at that particular visit and the three least important During the follow-up telephone interview, the respondent was reminded of the three expectations that they had identified on the consultation day. They were asked how much each was fulfilled on a 3-point scale ('a lot', 'so-so', 'nothing at all')	Majority of studies agree that patients' unmet requests and expectations relate to less patient satisfaction Other studies do not associate the fulfillment of expectations with greater satisfaction	Most common expectations: doctor showing interest and listening (30.5%), information about diagnosis (16.3%), sharing problems and doubts (11.1%) Main expectations were met in 76.5% of cases Fulfilling of the patients' main or two main expectations was significantly related to all of the measured outcomes (satisfaction, adherence, clinical evolution, seeking further care)	Response rate 54% No discussion regarding origin of expectation questionnaires

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Sarkisian CA, Hays RD, Mangione CM. Do older adults expect to age successfully? The association between expectations regarding aging and beliefs regarding healthcare seeking among older adults. <i>J Am Geriatr Soc</i> 2002; 50 :1837–43 ¹⁴¹	EMBASE	To measure expectations regarding ageing among community-residing older adults, to identify characteristics associated with having low expectations regarding ageing and to examine whether expectations regarding ageing are associated with health-care-seeking beliefs for age-associated conditions Self-administered postal survey	Greater Los Angeles, CA, USA 429/588 (73%) randomly selected community-residing older adults aged 65–100 years (mean age 76 years) cared for by 20 primary care physicians; 54% female	The Expectations Regarding Aging (ERA-38) Survey (a validated survey): 38-item self-administered survey that measures 10 domains of expectations regarding ageing: general health, mental health, cognitive function, functional independence, sexual function, pain, sleep, fatigue, urinary incontinence and appearance Possible responses are 'definitely true', 'somewhat true', 'somewhat false' and 'definitely false' Possible scores range from 0 to 100, with higher scores more consistent with expecting successful ageing and lower scores more consistent with expecting decline in health and functional status Development, reliability and validity of instrument is reported in Sarkisian <i>et al.</i> ³⁵⁸	None	More than 50% of participants felt that it was an expected part of ageing to become depressed, to become more dependent, to have more aches and pains, to have less ability to have sex and to have less energy Older age was independently associated with lower expectations regarding ageing ($p < 0.001$), as was having lower physical and mental health-related quality of life Having lower expectations regarding ageing was independently associated with placing less importance on seeking health care ($p = 0.049$)	Sample was recruited through physicians and therefore consisted of older adults who seek regular medical care from academically affiliated physicians. Study conducted only in one region, Los Angeles, CA USA

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
So DW. Acupuncture outcomes, expectations, patient-provider relationship and the placebo effect: implications for health promotion. <i>Am J Public Health</i> 2002; 92 : 1662–7 ¹⁴²	EMBASE	To explore whether treatment outcomes are associated with a patient's degree of general hopefulness, expectations regarding treatment, attributions of health status, beliefs about mind-body dualism, and patient-provider relationship factors Interviews before and after acupuncture Snowballing sampling procedure	Baltimore, MD and Washington DC, USA 62 new acupuncture patients About 60% between 30 and 49 years; > 75% women No response rates	Unclear how treatment expectations measured, but Goal Attainment Scale (GAS) used, which rates individualised potential outcomes on a 5-point scale and uses each patient as their own control ¹⁵⁸⁹	None	The higher a patient's treatment expectations, the less favourable his or her outcome	Self-selecting sample Unclear how treatment expectations measured

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Spahr CD, Flugstad NA, Brousseau DC. The impact of a brief expectation survey on parental satisfaction in the pediatric emergency department. <i>Acad Emerg Med</i> 2006; 13 :1280–7 ⁴³	EMBASE	To determine the effect of physician knowledge of parental expectations on satisfaction with emergency department care Prospective, controlled, interventional trial Parents of children presenting to a children's hospital emergency department On arrival, parents assigned to a baseline, control or intervention group. Parents in the control and intervention groups completed the expectation survey on arrival. Physician acknowledged receipt of the expectation survey for the intervention group. All parents completed a satisfaction survey on discharge	WI, USA 930/1013 parents approached were enrolled in study; 614/930 (66%) enrolled parents completed the surveys; physicians acknowledged 81 (42%) of the expectation surveys in the intervention group	'Because a validated measure of parental expectations in the pediatric emergency department does not exist, we created an expectation survey', based on a previous expectation survey Expectation survey: During this visit to the emergency department, I think it is important: 1. To receive understandable explanations for what is being done to my child 2. To have the possible causes of my child's problem explained in an understandable way 3. To have a say in my child's care 4. To be cared for by a courteous emergency room staff 5. To receive adequate discharge instructions and follow-up plans 6. To wait an appropriate amount of time in the emergency department	There is a strong relationship between satisfaction and the expectations that patients have for a visit Satisfaction has been defined as a state 'when the patient's own expectations for treatment and care are met (or exceeded)'. ³⁰ Studies have shown that unmet expectations are associated with lower satisfaction, less symptom improvement, and weaker intentions to adhere to medical advice	Parents rated general expectations as extremely important most of the time General expectations were listed by parents as their most important expectations more frequently than specific expectations The three most commonly identified 'most important' expectations were 'to receive understandable explanations, to have the possible causes of problems explained and to have a say in my child's care' Physician knowledge of written parental expectations may improve parental satisfaction during an emergency department visit	Sample calculation was reported No personal information collected from respondents Low number of expectation surveys in the intervention group checked by physicians (42%)

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments	
				Specific expectations: 7. For my child to have a test done (such as X-ray or blood work) 8. For my child to receive pain medication 9. For my child to receive a prescription 10. For my child to receive IV [intravenous] fluids All responses were on a scale from 1 to 10 (1 = 'not at all important', 10 = 'extremely important') Also included was a question to identify the most important expectation, and an open-ended question to identify any other expectations not addressed by the survey Survey was piloted and revised. Pilot data not used in final analyses				

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Spear J. A new measure of consumer expectations, perceptions and satisfaction for patients and carers of older people with mental health problems. <i>Australian Psychiatry</i> 2003;11:330–3 ¹⁴⁴	EMBASE	To describe the development and evaluation of the Consumer Expectations, Perceptions and Satisfaction Scale (CEPAS)	Perth, WA, Australia Patients discharged from a community mental health service for older people and their carers 115 consecutive patients Median age 74 years Scale was deemed appropriate for 56/115 (49%) patients and 59/115 (51%) carers Response rates for CEPAS were 39/56 (70%) for patients and 45/59 (76%) for carers	Focus group of patients in contact with mental health services for older people was asked to identify what they expected from mental health services Themes: accessing help, being treated with respect, reliability, responsiveness, being understood and participation in decision-making CEPAS included questions about: Access: Do you expect the service to be convenient for you? Did you get the help you wanted? How do you feel about how easy it was to get help? Respect: Do you expect to be treated with courtesy and respect? Were you treated with courtesy and respect? How do you feel about the way staff treated you? Reliability: Do you expect staff to be reliable? Were staff reliable? How do you feel about the reliability of staff? Responsiveness: Do you expect the service to respond quickly? Did you have to wait too long for help? How do you feel about the way that the service responded?	Relationship between expectations and satisfaction is unclear	CEPAS was appropriate, acceptable and brief CEPAS had fair criterion validity and acceptable reliability Association with Clinical Global Impression Scale (CGI): $r=0.29$, $p<0.01$ Association with Client Satisfaction Questionnaire (CSQ-8): $r=0.67$, $p<0.001$ CEPAS' expectations' subscale had acceptable internal consistency with an alpha value of 0.8 There was an association between 'expectations' and 'perceptions': $r=0.56$, $p<0.01$	Study design did not permit the relationship between satisfaction and clinical treatment to be explored, and it was unable to explain the association between satisfaction and outcome Questionnaire was administered after discharge and therefore questions about expectations of service delivery may have been influenced by experiences

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Empathy: Do you expect the staff to understand you? Did the staff understand you? How do you feel about the way the staff understood you?</p> <p>Participation: Do you expect to be listened to and kept informed? Were you involved in making decisions about your treatment? How do you feel about the way that the service involved you?</p> <p>Overall: Overall, did we meet your expectations? How did you feel about your experience with our service?</p> <p>The scale does not include items about the outcome of care</p> <p>The scores for the individual items were combined to produce three subscales: expectations, perceptions and satisfaction</p> <p>Satisfaction was scored using a 5-point scale ranging from 'dissatisfied' to 'extremely satisfied'</p> <p>Concurrent validity was measured using the CGI scale (global outcome measure) and the CSQ-8, a widely used measure of patient satisfaction with mental health services</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Stone DA, Kerr CE, Jacobson, Conboy LA, Kapichuk T.J. Patient expectations in placebo-controlled randomized clinical trials. <i>J Eval Clin Pract</i> 2005; 11 :77–84. ¹⁴⁵	EMBASE	To explore participants' experiences in placebo-controlled randomised clinical trials, specifically in relation to their expectations Qualitative methods In-depth interviews with a semi-structured interview guide	USA Participants were sought from five double-blind placebo-controlled pharmacological trials, completed within the previous year Three investigators conducting four trials agreed to participate 53 past participants were invited to participate; 12/53 returned reply cards to participate; nine interviews were conducted Age range 34–65 years; five men	Within the interview, participants' expectations on entering and throughout the course of the trial were explored	Expectancy is considered to be a critical underlying mechanism of the placebo effect A normative perspective has accepted expectation as a relatively stable and predictable phenomenon that is thought to involve patients' hopes for improvement or cure Little is known about the formation of patients' expectations before and during trials	Eight of the nine respondents did not expect to experience significant improvement in their condition on entering the trial Factors such as past experiences in trials, past experience of ineffective treatment, stress of being off regular medications, fear of being a 'placebo responder', input of non-study doctors or other health professionals, the experience of other participants, measurements of health parameters made during the trial and the presence or absence of side effects all affected patient expectations Expectations in trials are not fixed and instead may be viewed as continuously shaped by multiple inputs that include experience and information received both before and during the trial Variability in placebo response observed in previous studies may be related to the fluid nature of expectations. Trying to control and equalise expectations in trials may be more difficult than previously assumed	Small study Asked to recall expectations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Svensson I, Sjöström B, Hejlamäe H. Influence of expectations and actual pain experiences in satisfaction with postoperative pain management. <i>Eur J Pain</i> 2001; 5 :125–33 ⁴⁶	EMBASE	To assess any association between different pre- as well as postoperative factors, actual pain experiences in the postoperative period and overall patient satisfaction with pain management Pre- and postoperative questionnaires Preoperative questionnaire administered on day of admission; postoperative actual pain rating 72 hours after surgery and questionnaire returned within 1 week of surgery	Sweden 200 randomly selected patients scheduled for elective orthopaedic and open abdominal surgical procedures; 191/200 completed the preoperative questionnaire; 177 completed the postoperative questionnaire	Pre- and postoperative questionnaires detailing presence of preoperative baseline pain, expected and actually experienced postoperative pain and perceived adequacy of the pain relief provided Expectations of pain and pain relief were measured using a 5-category verbal rating scale Questionnaires piloted	None	Most patients (91%) expected pain of moderate-to-severe intensity and 76% reported to have experienced such pain levels. In spite of this, 81% claimed to be satisfied with pain management Patients commonly expect moderate-to-severe pain in the postoperative period and the actual pain experience is mainly in accordance with the preoperative expectations Preoperative expectation was one of the factors associated with the probability of being satisfied/dissatisfied	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Tähepõld H, van den Brink-Muinen A, Maaroos H-I. Patient expectations from consultation with family physician. <i>Croat Med J</i> 2006; 47 :148–54 ⁴⁷	EMBASE	To assess patient expectations from a consultation with a family physician and to determine the level and area of patient involvement in the communication process	Estonia 20 consecutive patients visiting each of 27 family physicians; 530/540 patients agreed to participate; 15/20 video recorded consultations per physician were analysed; two patients were excluded because of incomplete questionnaire data; final sample = 403/540 patients Mean age 40.4 years; 239 (59%) women	Questionnaires detailed elsewhere ⁶¹	None	The most frequent expectation (two-thirds) was to receive an explanation for their symptoms The family physician's performance matched patient expectations and family physicians were able to involve patients in the consultation process Physicians did not meet patient expectations in the case of three biomedical aspects of consultation: cause of symptoms, severity of symptoms and test results	
Tollén A, Fredriksson C, Kamwendo K. Elderly persons' expectations of day-care rehabilitation. <i>Scand J Occup Ther</i> 2007; 14 :173–82 ⁴⁸	EMBASE	To explore elderly patients' conceptions of what they expected to gain from attending day-care rehabilitation centres Purposeful sample selected for interview with regard to age, sex and living conditions (with spouse/alone) Phenomenographic approach Home interviews before receiving information or starting at the day-care centre	Sweden 22 prospective elderly day-care patients from five day-care centres Mean age 79.9 years; 12 women, 10 men	Interview guide with broad questions investigating expectations as well as participants' experiences of their everyday life Two questions pertaining to expectations: Can you tell me why you have applied for day-care rehabilitation? What do you hope to gain from attending day-care rehabilitation? Questionnaire piloted	A lack of knowledge concerning what prospective elderly day-care patients think they will gain from attending day-care rehabilitation	Eight categories depicting different conceptions of what elderly persons expected to gain by attending day-care rehabilitation Expectations of what it would actually be like to attend day-care rehabilitation: social contact, exercise The meaning of these encounters: a change from the monotony of everyday life, an opportunity to be yourself, a safety net, a mastery of everyday activities, an energising spark, a balm for the body	Purposeful sample No additional information appeared after the 17th interview and so saturation was considered after interview 22

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Westburg NG, Guindon MH. Hope, attitudes, emotions and expectations in healthcare providers of services to patients infected with HIV. <i>AIDS Behav</i> 2004;8:1–8 ¹⁴³	EMBASE	To assess the role of hope among health-care providers of HIV services Purposeful sample was selected from a list of 446 HIV/AIDS intervention sites 30% of sites (134) were randomly selected to receive questionnaires; managers/supervisors were asked to distribute them to the workers	Four-county area of New Jersey, USA 395 questionnaires sent to an unknown number of workers; 94 completed questionnaires returned (response rate based on total number of questionnaires sent and not workers was 24%) Mean age 42 years; 76 women and 15 men (three did not report sex)	Three instruments used: (1) a questionnaire with case scenarios, (2) the Hope Scale and (3) a demographic data sheet Questionnaire developed after consultation with experts in HIV/AIDS. Six versions of the questionnaire, which asked participants to respond to different case scenarios. Cases designed to assess health-care providers' attitudes, emotions and expectations about a patient with regard to sex, sexual orientation and method of acquiring HIV. Respondents were blind to the purpose of the case scenarios	None	Expectations for the future of their patients Approximately 50% reported an uncertain future for their patients; 35% felt hopeful about their patients' future, 9% felt hopeless, 4% had both positive and negative expectations and four did not respond	One geographical area with a small sample size No accurate response rate

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Winterling J, Glimelius B, Nordin K. The importance of expectations on the recovery period after cancer treatment. <i>Psychooncology</i> 2008;17:190–8 ¹⁵⁰	EMBASE	To study expectations concerning recovery-related changes in life, e.g. beliefs regarding future adjustment back to 'normal' life after curative cancer treatment, whether these expectations were met and their importance for both patients' and spouses' quality of life and psychological distress	Sweden 62/67 patients and 42/50 spouses participated at baseline Patients: 54 women, 8 men; median age 55 years Spouses: four women, 38 men; median age 56 years At follow-up 1: 53 patients and 35 spouses At follow-up 2: 46 patients and 29 spouses	Study-specific questionnaire measuring recovery-related expectations (RRE) was developed First part (RRE1) concerns what expectations a person has for the future, within five domains (socioeconomic situation, physical health, psychological health, sexuality and thoughts about lifestyle), when they have completed curative treatment or have a partner who has done so Second part (RRE2) asks whether the same domains have changed since completion of treatment The RRE has 20 items based on problems commonly reported by cancer survivors Response choices range from 1 ('change a lot for the worse/increase much') to 7 ('change a lot for the better, decrease a lot') A higher value always indicates that the domain is expected 'to become better' or has 'changed for the better'	Two types of expectations: situation-specific expectations and dispositional expectations across a broad range of situations After completion of cancer treatment, the first type can include expectations for the patient's future physical and psychological health, sexuality, socioeconomic situation and thoughts about their lifestyle. In the current study, such expectations are referred to as 'recovery-related expectations' Most studies suggest that, if expectations for a medical treatment are met, this is associated with better well-being Dispositional optimism is the tendency to believe that one will generally experience good rather than bad outcomes in life. It is relatively stable across time and context, and forms the basis of an important characteristic of personality A number of studies in cancer demonstrate an association between optimism and well-being	Patients and spouses have high recovery-related expectations for their future when the patient has completed cancer treatment, and many of these are not met at > 1 year post-cancer treatment Patients generally had higher recovery-related expectations than their spouses, and their expectations were also fulfilled to a lesser degree at both follow-ups. However, the expectations, or whether these were met, were generally not associated with their quality of life or psychological distress The few associations that were made indicated that fulfilled expectations meant higher quality of life and/or less distress Optimism influenced the participants' quality of life and psychological distress Instrument was largely based on the literature, although open interviews confirmed most of the items in the RRE to be appropriate. Even so, the authors felt that there is a need to further explore the concept of expectations in this specific situation in order to create valid and reliable instruments measuring expectations	Item 4 was excluded in the RRE2 because of an administrative failure Strength of study: data were measured prospectively Weakness of study: sample size is too small to carry out complex multivariate analysis and the attrition rate is large because of recurrence of cancer. However, attrition was not biased by individuals with different recovery-related expectations, quality of life or psychological distress Instrument was largely based on the literature, although open interviews confirmed most of the items in the RRE to be appropriate. Even so, the authors felt that there is a need to further explore the concept of expectations in this specific situation in order to create valid and reliable instruments measuring expectations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Young J, Tschudi P, Periat P, Hugenschmidt C, Welge-Lüssen A, Bucher HC. Patients' expectations about the benefit of antibiotic treatment: lessons from a randomised controlled trial. <i>Forsch Komplementarmed Klass Naturheilkd</i> 2005; 12 :347–9 ¹⁵	EMBASE	To estimate the association between patients' expectations and time to cure in patients with clinically diagnosed acute bacterial rhinosinusitis Secondary analysis of a randomised controlled trial: expectations about the benefit of antibiotic therapy were measured before treatment with an antibiotic or placebo	General practice, Switzerland 1565 patients were screened; 693 patients were invited to participate; 252 adult patients were successfully recruited	Before randomisation, patients were asked to score the benefits that they expected from antibiotics They were asked if they expected antibiotics to reduce (1) the severity of their symptoms and (2) the duration of their symptoms Responses were measured on a 10-point scale, with 1 labelled 'no benefit at all' and 10 labelled 'maximum benefit'	Positive patient expectations are associated with positive health outcomes	> 25% of patients were ambivalent about the benefits of antibiotics with an expected benefit score of 5 at their first interview No evidence of an association between expectations and time to cure in those who gave consent	441 (64%) patients refused to participate in the trial: low external validity, selection bias

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Zablene E, Razgauskas E, Basy V, Baubiniene A, Gurevicius R, Padaiga Z. <i>et al.</i> Meeting patient's expectations in primary care consultations in Lithuania. <i>Int J Qual Health Care</i> 2004; 16 :83–91 ⁵²	EMBASE	To investigate how the meeting of patients' expectations is related to increased satisfaction with medical consultation	Lithuania 40 physicians from 22 primary health-care centres attending courses on general practice at university were recruited Every third adult coming to a practice during a 5-day period was invited to participate Study sample $n=609$ adults; response rate 76% (460/609) Mean age 58 years; 63% female	Patient intentions Questionnaire (PIQ) ³⁶² before the consultation: 42 statements defining what the patient wants from a GP: a 3-point scale is used ('agree'/'uncertain'/'disagree') The Expectations Met Questionnaire (EMQ) ⁴⁴ measures whether patients consider their expectations to have been realised, immediately after the consultation. Same 42 statements expressing the expectations as met during the consultation. The same 3-point scale used to determine patients' opinions The Medical Interview Satisfaction Scale (MISS) was also used after the consultation to measure patient satisfaction with the encounter Questionnaires were translated into Lithuanian by one of the researchers and validated in group discussions with other researchers. The questionnaire was then translated back into English by another researcher and the translation was compared with the original Overall, Cronbach's alpha for the questionnaire was 0.95; PIQ α 0.9139; EMQ α 0.9290; MISS α 0.8455	According to the literature, fulfilment of patients' expectations can explain between 8% and 25% of the variance in satisfaction	A principal components analysis showed that patients mostly expected information and explanation and understanding The four factors that explained 41.5% of the total variance of patients' expectations were emotional support (23.8%), understanding and explanation (8.7%), information (4.7%) and diagnosis and treatment (4.4%) Satisfaction with medical consultation is higher among patients who have a greater number of expectations met Explanation and understanding had the strongest influence on satisfaction, followed by emotional support	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Zebracki K, Drotar D. Outcome expectancy and self-efficacy in adolescent asthma self-management. <i>Child Health Care</i> 2004; 33 :133–49 ¹⁵³	EMBASE	To assess the relation of outcome expectancy and perceived self-efficacy for asthma prevention and management to asthma self-medication, adherence to treatment and asthma morbidity Children and caregivers completed questionnaires and interviews while in the clinic	Cleveland, OH, USA Adolescents recruited during routine pulmonology clinic visits at a Midwest tertiary-care children's hospital 77/80 adolescents and their caregivers consented to participate Adolescent mean age 13.8 years; 52% male Caregiver mean age 42.8 years; 78% mothers	Outcome Expectancy Scale developed to assess adolescents' outcome expectancies in this study Adolescents were asked to report their personal beliefs with regard to whether appropriate engagement in asthma self-management behaviours would result in better health outcomes (e.g. how helpful is avoiding things that cause allergic reactions in preventing asthma episodes?), it was pilot tested. The Outcome Expectancy Scale demonstrated good internal consistency in this study (8 items; α 0.84)	Evidence indicates that outcome expectancy and perceived self-efficacy for illness management, which have been derived from social cognitive theory and the health belief model, are important psychological constructs that predict health behaviour, particularly self-management in adults with asthma Outcome expectancy is defined as individuals' expectations with regard to the effectiveness of the recommended treatment and relevant health-related behaviours In health-related research, positive outcome expectancy refers to the perceived benefits that result from the performance of an action (i.e. the prevention or reduction of current or future health-related difficulties) Negative outcome expectancy refers to the perceived costs or difficulties (i.e. side effects) that result from specific behaviours and may act as a psychological barrier that limits that particular action	Outcome expectancy for asthma management was significantly correlated with income: $r = -0.35$, $p < 0.005$. Adolescents from lower-income families reported more positive outcome expectancies than adolescents from families with higher incomes High outcome expectancy predicted greater asthma morbidity ($p < 0.01$), but was unrelated to self-management or treatment adherence Some findings were unexpected and so the authors questioned the scale. The Outcome Expectancy Scale is a brief measure (8 items) that may not adequately assess the broad construct of outcome expectancy. Moreover, the scale assesses personal beliefs on specific aspects of asthma treatment but does not allow the opportunity for adolescents to report on additional personal beliefs regarding asthma treatment	Generalisability limited as sample mainly consisted of middle-income to high-income families and highly educated caregivers Authors question whether social cognitive theory and health belief models are generalisable to adolescents because psychological factors, such as expectations, may still be developing in adolescence

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
					Self-efficacy refers to individuals' expectations about their ability to successfully perform a health-related behaviour to manage a chronic condition. With respect to the management of treatment for chronic illness, self-efficacy refers to individuals' confidence in their perceived self-management skills. Individuals with high perceived self-efficacy often anticipate successful outcomes of their behaviour, which functions as a positive guide for their performance ^{30,36,52,363,364}		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Baron-Epel O, Dushenat M, Friedman N. Evaluation of the consumer model: relationship between patients' expectations, perceptions and satisfaction with care. <i>Int J Qual Health Care</i> 2001;13:317–23 ¹⁵⁴	MEDLINE	To evaluate the consumer model in a health-care system by studying the relationship between four variables: expectations, perceived degree of fulfilment, satisfaction and changing of physicians	The Maccabee health plan, Israel Random sample of 759 adult patients; response rate to telephone interview 50.7% (<i>n</i> = 385) Average age 39.5 years; 61% female	A questionnaire was devised after 19 telephone interviews using a semi-structured questionnaire. The questionnaire included questions regarding expectations of this visit and perceived degree to which these expectations were fulfilled, referred to here as the perceived expectation fulfilment (PEF) An open question as well as a closed question evaluated expectations of the respondents Open question: 'Did you have any expectations of the doctor?' Closed question: 'To what degree did you expect . . .', and consisted of 11 attributes outlined in the literature as characteristics of the patient-physician relationship PEF was measured by asking to what degree did the physician stand up to the expectation using the same 11 attributes Expectations, PEF and patient satisfaction were scored on a scale from 1 to 6 (6 = 'very much', 1 = 'not at all'). The gap between PEF and expectations was the difference between the scores given by the respondents to the two variables	If patients are viewed as 'consumers', a consumer model such as the expectancy disconfirmation model can be applied from marketing theories to health service provision. In this model, the assumption is that patients have expectations of the visit to the physician and that the degree to which these expectations are fulfilled can be measured The higher the perceived fulfilment of the expectation, compared with the expectation, the higher the satisfaction. When fulfilment is lower than the expectation the greater the gap and the lower the satisfaction. When fulfilment is higher than the expectation the greater the difference and the higher the satisfaction When expectations are low, clearly they will be more easily met and a high level of satisfaction maintained. However, if patient expectations are high, the physician will have a harder task meeting these expectations and satisfaction is likely to be lower	Open question: 63% could not express a specific expectation from the doctor; of the 37% who did, 40.3% expected a prescription, 15.6% came for a referral for a test, 12.8% wanted a referral to a specialist and the remainder reported other requests Closed question: 79–90% rated their expectation of their physician as high and very high for 'answers questions', 'listens to problems' and 'explanation and discussion', three attributes describing the physician's level of interaction with the patient; 82% rated their expectation as high and very high for getting a diagnosis and 77% as high and very high for being examined by the physician. Relatively speaking, preventive health care and lifestyle counselling issues were not highly ranked by the respondents A large percentage of the study population gave a high score to the fulfilment of their expectations. The differences between the attributes were small The gap between the expectations and their fulfilment showed a low correlation with satisfaction	Sample mainly had minor ailments

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Billittier AJ, Lerner EB, Tucker W, Lee J. The lay public's expectations of prearrival instructions when dialling 9-1-1. <i>Prehosp Emerg Care</i> 2000; 4 :234-7. ⁵⁵	MEDLINE	To determine whether the lay public expects public safety answering points (PSAPs) to provide pre-arrival instructions	Buffalo, NY, USA 1024 individuals were successfully contacted; 524/1024 (51%) were adults and agreed to participate Mean age 50 years; 65% female	The questionnaire was reviewed by three experts in the field to determine its face validity and modifications were made. The questionnaire was then piloted on 30 respondents and final adjustments made accordingly Internal consistency of the different items of expectations and PEF was 0.635 and 0.784, respectively, using Cronbach's alpha	None	Fulfillment itself explained more of the satisfaction variable than the difference between the expectation and the fulfillment variables The consumer model, in its present form, is far from enough to explain the variance in patient satisfaction with physicians' services	Only 26% of the target population participated
		Telephone survey Random sample of 2000 telephone numbers from all listed residential numbers in a county containing urban, suburban and rural communities		Respondents were asked whether they would expect telephone instructions from the dispatcher if a close relative was choking, not breathing, bleeding or giving birth		76% expected pre-arrival instructions for all four medical conditions (88% for choking, 87% for not breathing, 89% for bleeding, 88% for childbirth) 99/117 respondents served by a PSAP that did not provide pre-arrival instructions expected to receive telephone instructions in all four emergencies	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Cooke T, Watt D, Wertzler W, Quan H. Patient expectations of emergency department care: phase II – a cross-sectional survey. <i>Can J Emerg Med</i> 2006; 8 :148–57 ¹⁵⁶	MEDLINE	To explore emergency department patient expectations regarding staff communication with patients, wait times, the triage process and information management Cross-sectional computer-assisted telephone interview (CATI) survey among patients aged 18+ years who visited emergency departments in the Calgary Health Region in 2002	Calgary, AB, Canada 2219 patients identified from sample population; 1493 successfully contacted; 941 surveys undertaken; 837 had complete data for analysis 421 (50.3%) men	Survey items were based on a preceding qualitative study of 12 focus groups with patients and regional emergency department staff. Six thematic areas of expectation emerged: staff communication with patients, appropriate wait times, the triage process, information management, quality of care and improvements to existing services ³⁶⁵ Using these expectations, question wording and approaches to scaling were developed. Questions were developed and field tested with 40 patient respondents. A total of 12 revision cycles was used to arrive at the final questionnaire. Survey items were designed to measure the relative importance of discrete expectations or to determine the relative proportion of mutually exclusive expectations	None	Patients placed the highest importance on the explanation of test results (96.5%), a description of circumstances that would require the patient to return to the emergency department (94.4%), the use of plain language (92.1%) and the reason for the tests (90.8%) Emergency department patient expectations were similar across all triage levels. Patients value effective communication and short wait times over many other aspects of care. They have expectations for short wait times that are met infrequently and are currently unattainable in many Canadian emergency departments	Potential differences between responders and non-responders were not explored No psychometric data on survey instrument

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Couchman GR, Forjuoh SN, Rascoe TG, Reis MD, Koehler B, van Walsum KL. E-mail communications in primary care: what are patients' expectations for specific test results? <i>Int J Med Inform</i> 2005; 74 :21–30. ⁵⁷	MEDLINE	To assess patients' willingness to use e-mail to obtain specific test results, assess their expectations regarding response times and identify any demographic trends Cross-sectional survey of primary care patients	Central Texas, TX, USA 19 clinics of a large multispecialty group practice associated with an 186,000-member health maintenance organisation Consecutive adult patients presenting to the study clinics on randomly selected days; 2817/3625 agreed to participate; 2314 completed surveys; a further 46 participants were excluded because they were < 18 years and Spanish speakers; data analysed for 2260 patients	Expectations of timeliness of response measured 'What in your opinion is a reasonable response time (n hours) to your email communication for ...' (e.g. routine laboratory results, medical questions, cholesterol level, brain computerised axial tomography scan)? Response categories: < 8 hours, 9–24 hours, 25–48 hours, 49–72 hours, > 72 hours	None	Patients' expectations of timeliness were generally very high, particularly for high-stakes tests such as a brain scan	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Dawn AG, Lee PP. Patient expectations for medical and surgical care: a review of the literature and applications to ophthalmology. <i>Surv Ophthalmol</i> 2004; 49 :513–24 ⁵⁸	MEDLINE	To review the existing literature on patient expectations and draw attention to the limited research in specialty and surgical fields Literature review Objectives: to provide a context for understanding what patient expectations are; to review the different ways that patient expectations are measured; to illustrate the content of patient expectations from empirical research; to outline potential determinants of patient expectations; to discuss the role of patient expectations in ophthalmology	MEDLINE search to identify all potentially relevant articles on patient expectations published in the English language between 1966 and 2002. Initial MEDLINE search terms: (title words: expectations or requests or desires) and (MeSH headings: physician–patient relations or consumer satisfaction or patient satisfaction) 281 citations obtained; 43 contained original empirical data on medical or surgical care and these were reviewed in detail Citations from paediatric, dental, psychiatric or nursing literature as well as letters and editorials were excluded Review articles were used to identify 19 additional relevant articles through examination of their reference lists	N/A	Patient expectations are one of the primary determinants of patient satisfaction. This has important implications for the measurement of quality of care, provision of health services and financial viability of health-care organisations Vast majority of research on patients' expectations has been conducted in primary care settings	62 original articles were reviewed – 47 from the primary care literature, eight from the surgical literature and seven from the non-surgical specialty literature Although most of the existing research uses patient desires as the primary definition of patient expectations, there is almost no literature comparing different definitions of expectations Using elements of Kravitz's taxonomy, ⁴⁷ the following characteristics of measurement approaches in the expectations literature were identified: definitional orientation, speciality, content type, categories of expectations measured, clinical setting type, visit type, timing of data collection and instrument type No standardised instrument currently exists for measuring patient expectations. However, it is worth noting that patient satisfaction does not appear to depend on the expectations instrument used Empirical research reveals key categories of patient expectations, including expectations for medical information, counselling and psychosocial support, medication prescribing, diagnostic testing and referral	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Flynn D, Gregory P, Makki H, Gabbay M. Expectations and experiences of eHealth in primary care: a qualitative practice-based investigation. <i>Intern J Med Inform</i> 2009;78:588–604. ¹⁵⁹	MEDLINE	To assess expectations and experiences of a new eHealth service of patients and staff in three primary care settings; to ascertain attitudes to a range of future, primary care-oriented eHealth services	Three UK general practices introducing an eHealth service for booking patient appointments 90 patients purposively selected from users and non-users of the new service and 28 staff (clinicians, management and administrative staff) Age range of patients: 18–80 years; 54 men, 36 women	Topic guide for semi-structured interviews with patients included a section on 'general expectations of eHealth': What do you think about Access? Why is the practice introducing this eHealth system? Is it a good idea? Who do you think the system will benefit? How might Access change the practice, the relationship with patients? What impact may it have on your health? What impact will it have on the GP/practice? Will the system change your health? Topic guide for interviews with staff before introduction of Access included a section on 'expectations and description of the new system': What do you want Access to do for you? What are you expecting? How can Access help your job? Who will it benefit? Have you been involved in the choice/implementation of the system? Topic guide for staff after introduction of Access: Did the new system meet your expectations?	None	Patients' perceptions: advantages: more choice about appointment times, the selection of GP they wanted to see, quicker than telephoning the practice, was available out of hours, gave independence from practice receptionists; disadvantages: less face-to-face contact Staff perceptions: had not lived up to its expectations	Expectations not a focus of paper despite title

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Fromentin O, Laure Boy-Lefèvre M. Quality of prosthetic care: patients' level of expectation, attitude and satisfaction. <i>Eur J Prosthodont Restor Dent</i> 2001; 9 :123–9 ¹⁶⁰	MEDLINE	To compare pretreatment level of expectation of and attitude to, and post-treatment level of satisfaction with, different types of prosthetic treatment according to socioeconomic and demographic factors Initial questionnaire (IQ) to assess level of expectation and attitude; a second postal questionnaire (SQ) to evaluate level of satisfaction	Paris, France 167 consecutive patients of eight prosthodontic clinics were requested to complete a questionnaire at the start of their treatment; five refusals; 162 patients attending for prosthetic rehabilitation participated; however, 8 patients could not be included in the second part of the study due to missing or unusable data 96/154 (62%) response rate	The IQ was developed from unstructured interviews with patients and analysis of the literature. After staff review and testing on 15 patients, modifications were made to improve content validity and comprehension The IQ was further tested on another 15 patients using a test–retest method over a 1- to 2-week interval to establish reliability. Intraclass correlation coefficients regarding the reliability of the IQ varied between 0.71 (VAS attitude), 0.72 (VAS expectations) and 0.90 (complementary questions) Evaluation of patients' attitudes towards treatment was based on two visual analogue scales (60 mm long) associated with the following questions: 'Do you think you will be satisfied with your prosthetic treatment?' (expected satisfaction), 'Do you think that we could come up to your expectations?'	Pretreatment expectation and attitude have been shown to influence outcomes in dentistry	Attitude and pre-prosthetic treatment expectation were very high There was a significant decrease in satisfaction after treatment compared with the level of expectation and attitude before treatment Level of expectation seemed to be a poor predictor of satisfaction level after fixed or removable prosthetic treatment	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Expectations were explored more deeply with five complementary questions, dealing with four treatment criteria (aesthetics, comfort, masticatory function and phonation function), rated on a 6-point Likert scale from 1, 'little interest' to 6, 'great interest'</p> <p>In the SQ, patients were asked 'Did we come up to your expectations?' and were given a visual analogue scale for response</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Goldberg A, Pliskin JS, Peterburg Y. Gaps in expectations among clients of secondary medical services in the military system compared with the civilian system as a satisfaction index. <i>Mil Med</i> 2003; 168 : 274–9 ¹⁶¹	MEDLINE	To examine the impact of compatibility of expectations from medical services in a secondary medical set-up Questionnaires were distributed on leaving the doctor's office	Israel Defense Forces (IDF) soldiers under treatment within the secondary medical network at IDF specialist clinics (60%) and civilian hospital outpatient clinics (40%) Soldiers were randomly sampled from among patients in four specialties (orthopaedics, dermatology, ophthalmology and gynaecology) representing 60% of all secondary care visits Sample $n = 1\,359$ male and female conscripts (89% response rate); 1211 questionnaires from military clinics and 148 from hospital outpatient clinics; 100 soldiers were interviewed after completing the questionnaire	In the expectation domain of the questionnaire, the respondents in both settings were asked three questions: 'What was the reason for the visit?' 'What treatment did the client expect to receive?' and 'What treatment did he or she receive in practice?'	The more compatibility between the standard of expectation that the client has set regarding the medical services that he or she stands to receive and the service that the client receives in practice, the higher the satisfaction	Comparison of the three parameters (reason for visit, treatment in practice and desired treatment) revealed expectation gaps among all three Design of the gap index developed for this research allowed comparison of compatibility of expectations among personnel between those visiting hospital outpatient clinics and those visiting the military specialist clinics. The gap is between the subjective opinions of the soldier regarding the medical service he or she should receive and the medical service that the soldier received in practice Soldiers who received medical services from the military reported gaps between their expectations and the treatment received – a phenomenon that impacts negatively on satisfaction with the service When soldiers received medical treatment from the public civilian system, in most cases they received the service and treatment they expected and even treatment going beyond their expectations	Sample size required was calculated

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Heymans MW, de Vet HCW, Knol DL, Bongers PM, Koes BW, van Mechelen W. Workers' beliefs and expectations affect return to work over 12 months. <i>J Occup Rehabil</i> 2006; 16 :685–95 ¹⁶²	MEDLINE	To compose a comprehensive prognostic model that determines long-term low back pain in combination with return to work (RTW) after sick leave in occupational health care	Netherlands 299 workers on sick leave for between 3 and 6 weeks because of low back pain visiting their occupational physician (OP) Mean age ($n = 268$) 40 years; 236 men, 63 women	The expectations of the worker with regard to the potential effect of the allocated treatment (usual care by the OP, low-intensity back school or high-intensity back school) were rated on a 10-point scale. A value of 0 indicated that the worker did not expect any benefit from the treatment and a value of 10 that the worker was absolutely convinced that the treatment would be beneficial	None	Expectations about the success of treatment by the OP was one of the factors associated multivariately with RTW for at least 4 weeks	
		Secondary data analysis from a randomised controlled trial that examined the effectiveness of a high-intensity and low-intensity back school compared with usual care in an occupational setting					
		Questionnaires at baseline					

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Hildingsson I, Waldenström U, Rådestad I. Women's expectations on antenatal care as assessed in early pregnancy: number of visits, continuity of caregiver and general content. <i>Acta Obstet Gynecol Scand</i> 2002; 81 :118–25 ⁶³	MEDLINE	To explore women's expectations about antenatal care, preferences regarding number of visits and attitudes to continuity of midwife caregiver in a national sample of Swedish-speaking women	Sweden 593/608 antenatal clinics in Sweden agreed to participate; 3455 women consented to participation; however, 104 later reported a miscarriage 3061/3351 (91%) women completed the questionnaire Mean age 29.4 years	The questionnaire included questions regarding expectations about care. Women were asked to assess the importance of different aspects of antenatal care on a 5-point rating scale with the anchors verbally defined (1 = 'not important', 5 = 'very important')	None	Checking the baby's health was the most important aspect of antenatal care, followed by checking the mother's health and making the partner feel involved The majority of women wanted the standard number of check-ups The vast majority of women (97%) ranked it as 'very' or 'rather' important to meet the same midwife during pregnancy	
		All Swedish-speaking women booked for antenatal care during a 3-week period Postal questionnaire after first visit		Response alternatives to the question about preferred number of visits were standard schedule (as recommended), more visits and fewer visits Attitudes to continuity of midwife caregiver (meeting the same midwife at all antenatal visits) were expressed on a 4-point rating scale (1 = 'not at all important', 2 = 'less important', 3 = 'rather important', 4 = 'very important')			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Hooper R, Rona RJ, French C, Jones M, Wessely S. Unmet expectations in primary care and the agreement between doctor and patient: a questionnaire study. <i>Health Expect</i> 2005;8:26–33 ⁶⁴	MEDLINE	To investigate how patient expectations and patient and doctor reports of doctor's actions in a primary care setting are associated Members of the British Armed Forces with a health problem identified by a screening questionnaire and their medical officers Questionnaire survey undertaken by doctor and patients after consultation complete	British Armed Forces 579 personnel identified as having a health problem by a screening questionnaire; 117/579 (20%) consultations for which patient and doctor returned a questionnaire from a total of 50 Royal Navy, Army and Royal Air Force medical centres	Patients were asked to reply 'yes' or 'no' to the following: Do you think you should have been given a prescription? Do you think the doctor should have referred you to someone else? Do you think you should have had some tests?	Unmet expectations are associated with increased patient dissatisfaction. Doctors' decisions to prescribe are more closely related to perceived than to actual patient expectations	The prevalence of unmet expectations was higher when estimated from doctor's reports than from patient's reports for prescribing ($p=0.016$), referral ($p=0.065$) and tests ($p=0.092$); difference of 6% in each case Patient and doctor were more likely to disagree on what happened if the action reported by the doctor did not match the patient's expectations (all $p<0.01$, except for when doctor reported doing tests $p=0.058$)	Sample size calculation included in paper Response rate low

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Iannotti RJ, Schneider S, Nansel TR, Haynie DL, Plotnick LP, Clark LM, et al. Self-efficacy, and diabetes self-management in adolescents with type 1 diabetes. <i>J Dev Behav Pediatr</i> 2006; 27 : 98–105 ¹⁶⁵	MEDLINE	To develop and evaluate measures of adolescent diabetes management self-efficacy and outcome expectations that reflect developmentally relevant, situation-specific challenges to current diabetes regimens Questionnaire study	MD, USA Phase II: 168/222 (76%) families completed the assessments 93 girls and 75 boys aged 10–16 years with type 1 diabetes; mean age of sample 13.6 years	Phase I: item development 9/11 parent-child dyads recruited through a diabetes support network completed semi-structured interviews addressing diabetes self-management behaviours and perceived influences on these behaviours Paediatric and adult diabetes literature was reviewed to identify existing measures of outcome expectations Findings from the interview and literature data generated sample items to cover the range of outcomes Items were reviewed by an expert panel and face validity confirmed 10-point scale for response choices ranging from 'not at all' to 'a lot' for outcome expectation items. The final long version of the instrument included 40 items assessing outcome expectations. These items were tested with the nine families Phase II: scale development, internal consistency and predictive validity Youth-parent dyads recruited from three paediatric diabetes clinics. Youths completed a self-administered questionnaire that included the outcome expectations instrument. 38 families undertook a test-retest evaluation	Social cognitive theory ⁶² suggests that the acquisition of new skills and perseverance in the face of personal, social and environmental barriers require a strong sense of self-efficacy and outcome expectations Adolescents with a sense of capability and purpose should be more successful in assuming responsibility for their own diabetes self-management and maintaining these behaviours over time Bandura ⁶² highlights that 'outcome expectations may take the form of detrimental or beneficial physical effects, favourable or adverse social reactions, and positive or negative self-evaluation reactions'. Therefore, a measure of adolescent outcome expectations must not only include health outcomes and physical barriers but also reflect their social family and personal reality	19 items met criteria for distributions towards maximum score and were eliminated to create a shorter version Principal components factor analysis of the remaining items identified two independent factors: factor 1, comprising 12 items, representing expectations for negative outcomes and factor 2, comprising 12 items, assessing expectations for positive outcomes. Both subscales had good internal consistency ($\alpha = 0.89$ and $\alpha = 0.84$ respectively) Test-retest intraclass correlations for each scale were $r = 0.80$ and $r = 0.68$ respectively High positive outcome expectations accompanied by low self-efficacy in older children was associated with the poorest glycaemic control and lowest adherence as reported by parents	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Jerome D. Dehaill P, Daviet J-C, Lamothe G, De Sèze M-P, Orgozo J-M, <i>et al.</i> Stroke in the under-75s: expectations, concerns and needs. <i>Ann Phys Rehabil Med</i> 2009; 52 :525–37 ¹⁶⁶	MEDLINE	To assess functional independence in daily living and house holding, changes in home settings, type of technical aid and human help, and expectations in hemiplegic patients 1–2 years after stroke Retrospective, single-centre study Questionnaire administered at home or by telephone	Bordeaux, France 61/94 consecutive patients <75 years admitted to hospital for a first-ever documented stroke Mean age 64 years; 42 men (69%)	Patients and caregivers were asked to state their expectations	None	The patients' main expectations and concerns were related to the recovery of independence, leisure activities and financial resources Family members' expectations and concerns related to a lack of information and the complexity of service delivery, discharge to home and the delay in provision of help and resources Approximately 10% of patients and their carers would have liked to have received more information on stroke	
Keiman L. The broad treatment expectations of migraine patients. <i>J Headache Pain</i> 2006; 7 :403–6 ¹⁶⁷	MEDLINE	To define the overall treatment expectations of migraineurs Retrospective analysis of a large clinical database	Atlanta, GA, USA Consecutive patients treated by the author in his clinical practice: 1750 patients Mean age 37.7 years (range 13.0–80.5 years); 85.6% female	Patient expectations questions During routine first visits to the author's headache clinic, patients were asked five specific questions regarding their expectations of treatment: 1. Are you expecting a cure for your migraine? 2. Are you expecting to be symptom free with treatment? 3. Are you expecting a reduction in frequency of your migraine headaches? 4. Are you expecting a reduction in the severity of your headaches? 5. Are you expecting an improvement in the quality of your life?	None	27.8% expected a cure for their migraines after treatment, 79.9% expected to become symptom free, 95.2% expected a reduced frequency of migraines, 95.6% expected reduced severity of migraines, 95.5% expected improved quality of life Men had significantly greater expectations for a reduction in severity of migraines than women ($p = 0.032$)	No information regarding the source of the expectations questions

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kim SH. Older people's expectations regarding ageing, health-promoting behaviour and health status. <i>J Adv Nurs</i> 2009; 65 :84–91 ⁶⁶⁸	MEDLINE	To explore the influence of expectations regarding ageing on physical and mental health status and to examine the mediating effects of health-promoting behaviour on the relationship between these expectations and physical and mental health	South Korea Convenience sample of 99/120 community-residing Korean older people, identified through 10 randomly selected community-based senior welfare centres Mean age 73.78 years; 81.8% female	Short version of the ERA-12 used. ³⁶⁶ 12-item self-administered questionnaire Three domains of expectations about ageing: physical health (four items), mental health (four items), and cognitive function (four items) 4-point Likert response choices: 1 = 'definitely true', 2 = 'somewhat true', 3 = 'somewhat false' and 4 = 'definitely false' Possible scores range from 0 to 100, with higher scores indicating that older people expect to maintain higher levels of physical health, mental health and cognitive function with age ERA-12 translated from English to Korean and back to English by a bilingual translator Original ERA-12 demonstrated validity and reliability in a previous field test of 588 community-residing older people. Factor analysis supported three 4-item scales, and the internal consistency reliability estimates were 0.74–0.86 for all subscales and 0.89 for the scale ³⁶⁶	Authors state a theoretical framework for the study Expectations regarding ageing influence health status indirectly through the mediator of health-promoting behaviour. This model explains the behavioural pathway by which expectations regarding ageing influence health status: those with more positive expectations regarding ageing would be more likely to participate in health-promoting behaviour, which in turn would lead to higher levels of physical and mental health status. Demographic variables of age, sex and education are considered as confounding variables that influence health-promoting behaviour and health status in older people ³⁶⁷	On average, respondents had low scores for the ERA-12, with a mean score of 23.49 Having a higher expectation about ageing was associated with better physical and mental health, after adjusting for age, sex and education Expectations about ageing were partially mediated through the health-promoting behaviour that influenced physical and mental health	Power and effect sizes of study sample discussed

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				Factor analysis of the Korean version of the ERA-12 used in this study demonstrated a three-factor structure, which was identical to the original instrument and explained 68% of the variance. Internal consistency of the Korean version was 0.78–0.86 for the subscales and 0.89 for the scale			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kolber, CT, Zipp G, Glendinning D, Mitchell JJ. Patient expectations of full-body CT screening. <i>AJR Am J Roentgenol</i> 2007; 188 : W297–304 ¹⁶⁹	MEDLINE	To develop a scientific knowledge base about patient expectations of full-body computerised tomography screening and to determine whether characteristics of patients influence their expectations of its health benefits Pre-test-only descriptive survey design	USA Six study sites that were diverse geographically representative US regions were selected for inclusion in the study 6/10 imaging centres across the six study sites agreed participation; 94 patient volunteers scheduled to undergo full-body computerised tomography screening Response rate was estimated to range from 33% to 57% Age range 35–65 years; 59% male	Patient Expectation Survey consisted of four sections. The first three sections collected data relevant to 13 independent variables: age, sex, marital status, race and ethnicity, educational level, income, referral source, self-estimation of current health status, level of concern for personal health, number of health concerns, number of other health screening tests, number of preventive health activities and patient knowledge The fourth section collected data relevant to the dependent variables: patient expectations of full-body computerised tomography screening. Used a 5-point Likert scale in which respondents indicated their level of agreement or disagreement ('strongly agree', 'agree', 'neutral', 'disagree', 'strongly disagree') with a series of 15 statements designed to assess expectations of the benefits of full-body computerised tomography screening The 15 statements were grouped into six patient expectation dimensions: reassurance, cure, prevention, empowerment, satisfaction and limitations Expert panel determined content and face validity of the preliminary survey instrument Pilot study undertaken	Health belief model was adapted for and served as the theoretical basis of the present study	Patients' highest expectations related to consumer empowerment and their lowest expectations related to the limitations of the procedure Five patient characteristics were found to have significant associations with patient expectations; patient sex, referral method, level of personal health concern, number of other health screening procedures that patient had undergone and patients' self-estimations of their current health status Three of the five significant associations (patients' self-estimations of their current health status, patient sex and referral method) are not explained or are only partially explained by the health belief model	Findings reflect self-reports of individuals who volunteered to participate in the study

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kucukarslan SN, Nadkarni A. Evaluating medication-related services in a hospital setting using the expectations model of satisfaction. <i>Res Soc Admin Pharm</i> 2008;4:12-22 ¹⁷⁰	MEDLINE	To determine the relationship between disconfirmations of expectations with respect to medication-related services and patient satisfaction with medical care Cross-sectional, non-experimental postal survey Patients identified using cluster sampling in which the patient care unit was randomly selected each day	MI, USA Patients on warfarin therapy for the first time, recently discharged from an acute-care hospital to their homes; 553 randomly selected patients Response rate was 34% (n= 187)	Disconfirmation of expectations with respect to the medication-related services provided to the patients was measured. The service attributes were as follows: amount of information received about the medicine; clarity of information; answers to questions about medication given to the patient while in hospital; explanation of changes in drug therapy while in the hospital; getting prescriptions to patients when they were ready to leave; ease in getting prescriptions filled after the patient was discharged from the hospital; and knowing where to call if the patient had any questions after they returned home Consumers were asked to rate these seven attributes using a 5-point scale: 'a lot better than expected' (+2), 'a little better than expected' (+1), 'just as expected' (0), 'a little worse than expected' (-1) and 'a lot worse than expected' (-2) A 'not applicable' option was included to avoid forcing a choice when the option was not relevant to the consumer	The appraisal process commonly used in satisfaction models is the disconfirmation of expectations. A patient compares his or her experience with pre-existing expectations. The resulting satisfaction from this comparison is dependent on whether the patient's experiences are superior, inferior or just as expected	Factor analysis of the seven disconfirmation of expectation items resulted in a two-factor solution: medication counselling (first four items) and discharge medication services (last three items) Structural equation modelling (SEM) demonstrated that the model was significant; however, the disconfirmation of expectation items did not significantly relate to the 1-item satisfaction measure A post hoc analysis using SEM demonstrated that the disconfirmation of expectations factors did significantly relate to a higher-order latent construct and this related to patient satisfaction. Therefore, the disconfirmation of expectations has a role in the post-service experience response expressed by the patient, but not as a direct antecedent to patient satisfaction	Minimum sample size was calculated Satisfaction was measured using a single item, which may have failed to capture the variability experienced by patients

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Leung KK, Silivius JL, Pimlott N, Dalziel W, Drummond N. Why health expectations and hopes are different: the development of a conceptual model. <i>Health Expect</i> 2009; 12 :347–60 ¹⁷¹	MEDLINE	To synthesise a preliminary conceptual model of the relationship between hopes and expectations that is grounded in theory and existing empirical evidence, to conceptualise factors that may serve as their antecedents and to suggest a mechanism that mediates the differentiation between them	Ovid HealthSTAR and PsycINFO database searches from January 1967 to October 2008 were conducted An integrative literature review, synthesis and conceptual model development were carried out	N/A	Although both hopes and expectations are future-oriented cognitions, expectations are distinct in that they are an individual's probability-driven assessment of the most likely outcomes, whereas hopes are an assessment of the most desirable – but not necessarily the most probable – outcomes	Hopes and expectations are distinct, but linked, constructs The model envisaged the differentiation of hope from expectation as a dynamic, longitudinal process consisting of three phases: appraisal of possible outcomes, cognitive analysis for achieving hopes and goal pursuit This preliminary conceptual model presents how hopes and expectations develop and become differentiated and how social-cognitive factors may moderate this relationship Key variables such as temporal proximity, controllability, external resources, goals, affect, agency and pathways may moderate the extent of divergence by influencing the perceived probability of achieving desired outcomes	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Levy JM. Women's expectations of treatment and care after an antenatal HIV diagnosis in Lilongwe, Malawi. <i>Reprod Health Matters</i> 2009; 17 : 152–61 ¹⁷²	MEDLINE	To examine women's decisions about HIV testing and their experience of prevention of mother-to-child transmission (PMTCT) and HIV-related care Qualitative, ethnographic research Semi-structured interviews with 34 women; focus groups discussions with 21 other women recruited from a postnatal support group; a further 21 interviews with key informants from the programme and the health system	One clinic in Lilongwe, Malawi Women who consented participated in up to six interviews, scheduled to coincide with the PMTCT programme and antenatal visits	N/A	None	Women's expectations from testing included the benefits for their own health and for their infant's health. This reflects the information communicated by nurses on the benefits of testing However, the PMTCT programme only poorly met their expectations Barriers to the programme not achieving its full potential: perception of women as still healthy even when they needed treatment; a focus on infant health, health system weaknesses, lack of integrated care and timely referral and defining HIV exclusively as a medical issue while ignoring the social determinants of health	Malawian research assistant translated from Chichewa (all interviews and focus groups discussions were conducted in the local language) and English

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Linde K, Witt CM, Streng A, Weidenhammer W, Wagenpfeil S, Brinkhaus B, <i>et al.</i> The impact of patient expectations on outcomes in four randomized controlled trials of acupuncture in patients with chronic pain. <i>Pain</i> 2007; 128 :264–71 ¹⁷³	MEDLINE	To investigate the influence of expectations on clinical outcome A pooled analysis of four randomised controlled trials of acupuncture in patients with migraine, tension-type headache, chronic low back pain and osteoarthritis of the knee Interviews undertaken at two time points	Munich, Germany 864 patients included in analysis received 12 sessions of either acupuncture or minimal (i.e. sham) acupuncture (superficial needling of non-acupuncture points) over an 8-week period 226 migraine (145 acupuncture, 81 sham); mean age 42.6 years; 89% female 195 tension-type headache (132 acupuncture, 63 sham); mean age 42.6 years; 72% female 219 chronic low back pain (146 acupuncture, 73 sham); mean age 58.8 years; 68% female 224 osteoarthritis of the knee (149 acupuncture, 75 sham); mean age 64.1 years; 69% female	Patients were asked the following two questions at baseline: How effective do you consider acupuncture in general? Answer options: 'very effective', 'effective', 'slightly effective', 'not effective', 'don't know' What do you personally expect from the acupuncture treatment you will receive? Answer options: 'cure', 'clear improvement', 'slight improvement', 'no improvement', 'don't know' After the third treatment session, one of the questions asked: How confident do you feel that this treatment can alleviate your complaint? Response choices from a 7-point Likert scale ranging from 0 = 'not certain at all' to 6 = 'totally certain'	Distinguishing between outcome and self-efficacy expectations	In all four trials most patients expected a clear improvement from treatment After three treatment sessions, the majority of patients were highly confident that they would benefit from the treatment they received; however, there were significant differences between trials with osteoarthritis patients being the most optimistic In the four trials, patients with high expectations were more likely to report better outcomes than patients with lower expectations, both after treatment and 4 months later The size of the expectations effect is (with odds ratios around 2) clearly clinically relevant. This effect was observed in patients receiving both the 'true' and the minimal acupuncture, but it seemed less pronounced in the latter	Expectations not a primary aim of the trials and so a simplistic method used in the measurement Patients in the four trials differed considerably and the analyses of pooled data must be interpreted with caution Pain was determined by patients self-report rather than any objective measure, possible bias due to unblinding

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Llewellyn CD, McGurk M, Weinman J. Striking the balance: a qualitative pilot study examining the role of information on the development of expectations in patients treated for head and neck cancer. <i>Psychol Health Med</i> 2005; 10 :180–93 ⁷⁴	MEDLINE	To investigate the types of expectations that patients treated for head and neck cancer had before treatment and the extent to which these had been met post treatment; to investigate the role that information played in the development of expectations Semi-structured interviews Interview schedule developed over the course of the interviews	Head and neck cancer clinics in two London hospital NHS trusts Convenience sample of 15 patients Response rate 88% – one man refused and data from one male interview could not be analysed Mean age 54 years; 10 women	None	None	Expectations were subcategorised as either 'specific' or 'global' Specific expectations centred around side effects of treatment, post-treatment aesthetics and the recovery process Global expectations centred around the whole cancer experience The role of information for expectations was subcategorised into too much information, too little information and the timing of information There were large variations in the types of expectations that patients had and between patient expectations and their actual experiences. Expectations appeared to be influenced by the information received and retained. Respondents emphasised the fine line between being given 'too much' information at the wrong time and 'not enough' information at the right time	Pilot study

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mahomed NN, Liang MH, Cook EF, Daltroy LH, Portin PR, Fossel AH, <i>et al.</i> The importance of patient expectations in predicting functional outcomes after total joint arthroplasty. <i>J Rheumatol</i> 2002; 29 :1273-9 ⁷⁵	MEDLINE	To evaluate the relationship between patient expectations of total joint arthroplasty (TJA) and health-related quality of life plus satisfaction 6 months after surgery Prospective cohort study Self-report questionnaires prior to surgery (baseline) and at 6 months post surgery	Two tertiary referral centres, Boston, MA, USA and Montreal, QC, Canada 387 patients were eligible; 222 completed the preoperative baseline questionnaire; 192 completed the follow-up questionnaire at 6 months; 103 patients with total hip arthroplasty (THA) and 89 with total knee arthroplasty (TKA) Mean age 67 years; 55% female	At baseline there were four questions on patient expectations: 1. How painful do you expect your hip/knee to be? 2. How limited do you expect to be in your usual activities? Responses for pain relief and activities of daily living were graded on a 4-point Likert scale: 'not at all', 'slightly', 'moderately', 'very painful/limited'. As response patterns were skewed, these were dichotomised into high vs low expectations 3. How likely will your surgery be a complete success? 4. How likely will you have a hip or knee joint complication? Responses for questions 3 and 4 were recorded on a visual analogue scale ranging from 0 ('no success'/no complication) to 100 ('certain success'/certain of complication'). These responses were also dichotomised into high vs low expectations by defining those expecting >90% likelihood of success or <10% likelihood of complications as having high expectations	Patient expectation has been defined as anticipation that given events are likely to occur during or as a result of medical care. This is in contrast to patient desires, which reflect the patient's wishes that a given event occurs ⁶⁰	Patients had high expectations regarding the outcomes of TJA. Over 75% expected to be completely pain free and 40% expected to be unlimited in their usual activities Patient expectations regarding surgery were not associated with age, sex, index joint of surgery, marital status or race Expectations were not correlated with preoperative functional health status Expectation of complete pain relief after surgery was an independent predictor of better physical function and improvement in level of pain at 6 months post surgery Expectations of low risk of complications from TJA was an independent predictor of greater satisfaction	Response rate at 6 months 49.6% No discussion of origin of expectation questions

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mannion AF, Junge A, Elfering A, Dvorak J, Porchet F, Grob D. Great expectations. Really the novel predictor of outcome after spinal surgery? <i>Spine</i> 2009; 34 :190–917/6	MEDLINE	To compare different theories on the role of expectations in a group of patients undergoing lumbar decompression surgery Prospective questionnaire study A substudy of an existing randomised controlled trial, with the final 100 consecutive patients Data collected before surgery and 2 and 12 months post surgery	Switzerland 100 consecutive patients (mean age 65 years; 67 men) 100 baseline questionnaires; 100 questionnaires completed at 2 months; 96 questionnaires completed at 12 months Eight patients had been reoperated on and so 12-month follow-up data were analysed for 88 patients	Expectations of surgery were assessed using a modified version of the 'expectations scale' of the North American Spine Society (NASS) Lumbar Spine Questionnaire The question, 'What changes in the following items do you expect to experience as a result of the operation? (not your hopes and wishes, but realistic expectations)' was asked in relation to each of eight outcome items: leg pain, back pain, walking capacity, independence in everyday activities, general physical capacity (at home and work), ability to do sport, frequency and quality of social contacts and mental well-being. The five response options were: 'much better' (5), 'better' (4), 'somewhat better' (3), 'unchanged' (2) and 'worse' (1); the patients also had the option 'I don't know'	Patients' expectations of treatment are a potentially important predictor of self-rated outcome after surgery. Some studies suggest that high baseline expectations per se yield better outcomes; others maintain that the fulfilment of prior expectations is paramount; and still others assert that it is the actual improvement in symptom status that governs outcome, regardless of patient expectations	Compared with the actual improvement recorded at 12 months, prior expectations had been overly optimistic in about 40% of patients for the domains of leg pain, back pain, walking capacity, social life, mental well-being and independence, and in 50% of patients for everyday activities and sport There was no significant relationship between baseline expectations and follow-up scores for back pain, leg pain, Roland Morris disability score or global outcome Hierarchical multiple regression analysis revealed that 'expectations being fulfilled' was the most significant predictor of global outcome	Expectations questionnaire had not previously been validated Evidence suggesting that questionnaire had good construct validity because of correlations observed between the direct retrospective rating as to whether 'expectations had been met' ('yes', 'partly', 'no') and the score derived from the difference between 'expected improvement' and 'actual improvement' for each item. One exception was for the item frequency and quality of social contacts
				Fulfilment of expectations was sought at follow-up. Using a parallel question to that of the preoperative expectations questionnaire, patients were asked, 'What changes in the following items have occurred as a result of the operation?' in relation to the same eight items presented in the expectations questionnaire. The same five response options were presented: 'much better' (5) to 'worse' (1)			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>In this way, the difference between the preoperative 'expectation score' (1–5) and the follow-up 'actuality score' (1–5) yielded a measure of the extent to which expectations had been exceeded, met or not met for each item (possible range for 'expectations met' scores, –4 to +4)</p> <p>In addition, at 2 months, postoperative patients were asked with a direct question whether, in retrospect, their prior expectations had been met for each of the items in the set of expectations questions (possible answers: 'yes', 'partly', 'no')</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mawajdeh SM, Daabseh KA, Nasir MJ, Al-Qutob RJ. Patient expectation and satisfaction in different hospital in Irbid, Jordan. <i>Saudi Med J</i> 2001; 22 :625–9177	MEDLINE	To identify factors contributing to patients' satisfaction and to examine the relationship between patient satisfaction and patient expectations Patients' expectations assessed by exposing them to video clips of selected patient-provider interactions and reactions Patient satisfaction assessed using a self-administered patient satisfaction questionnaire	Irbid, North Jordan Random sample of 360 patients from two outpatient clinics: a university clinic and a governmental clinic 310 patients participated; data from 194 patients were analysed (92 community sample, 54% 18–24 years, 83% female; 102 university sample, 65% 18–24 years, 55% female)	Three types of video clip: groups A, B and C Group A patients were exposed to clips that demonstrated negative aspects of the patient-provider encounter Group B ($n=92$, community sample) patients watched the clip demonstrating negative and positive aspects alternatively arranged Group C ($n=102$, university sample) patients watched the clip demonstrating negative and positive aspects in random order For each video clip, patients commented on what they saw by indicating whether they considered certain behaviour appropriate or not depending on their expectation of what that behaviour should be. The responses of patients were then quantified: a score of 1 for accurate identification of either satisfactory behaviour or inappropriate behaviour (according to the authors' definitions); a score of 0 for inaccurate identification. The mean expectation values were calculated for each group Group A was dropped from the analysis because the level of expectation was significantly different from those of groups B and C	Increased patient satisfaction when health-care service provided meets expectations In developing countries there has been shown to be high levels of patient satisfaction in spite of poor services. It has been hypothesised that this may be due to a low level of expectation of health-care services	On average, the community sample had a lower expectation level than the university health centre sample ($p<0.05$) Patients with higher levels of expectation were less satisfied than patients with lower levels of expectation This relationship remained significant after adjusting for sociodemographic variables	Not easy to understand the measure of expectations with the video clips

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Meng K, Zdrahal-Urbanek J, Frank S, Holderied A, Vogel H. Patients' expectations, motivation and multi-dimensional subjective and objective socio-medical success in rehabilitation measures. <i>Int J Rehabil Res</i> 2006; 29 :65–9 ⁷⁶	MEDLINE	To investigate the subjective and sociomedical success of rehabilitation measures at the 1-year follow-up and to investigate whether success can be predicted by data concerning patients' motivation, expectations and subjective rehabilitation need at the time of application Multicentre study	Germany Follow-up questionnaire answered by 352 participants Mean age 49.4 years; 72.2% male	FREM-17 questionnaire examined patients' expectations of the rehabilitation measure on the four dimensions of well-being/recovery, health, coping and pension/occupation ³⁶⁸	Various authors have stressed that patients' expectations and motivation play an important part in the success of medical rehabilitation. Furthermore, not only should patients' expectations and motivation be used as prognostic criteria but also social medical experts should make use of these criteria to decide whether or not rehabilitation is required in a particular case	Expectations on the dimension of well-being/recovery were generally high concerning recovery in everyday life. Nearly all patients (> 90%) expected and therefore were motivated to achieve a better state of health. About three-quarters wanted to get help in coping with their illness or occupational stress Expectations on the dimension of pension/occupation were lower comparatively, but the results show that patients also wanted to receive vocational counselling and 32% intended to apply for early retirement at the time of claiming for a medical rehabilitation measure Expectations concerning pension/occupation significantly correlated with subjective rehabilitation need and the functional status quo Patients with lower functional capacity, i.e. high occupational demands and high disability in everyday life, had a higher expectation of occupation-related counselling	No discussion of psychometric properties of FREM-17, just referenced

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Münstedt K, von Georgi R, Eichel V, Kullmer U, Zygmunt M. Wishes and expectations of pregnant women and their partners concerning delivery. <i>J Perinat Med</i> 2000; 28 :482–90 ¹⁷⁹	MEDLINE	To investigate factors related to the expectations and wishes concerning delivery of expectant mothers Self-administered questionnaire handed out to 566 participants	Giessen, Germany Open house information events in three hospitals 545 expectant mothers (n = 336) and fathers (n = 209) Response rate 96.3% Mean age 31 years	69 items concerning various aspects of relevance during the perinatal period were taken from previous work These were ranked according to importance. Factor and item analyses were performed to determine the underlying dimensions of expectant parents' needs concerning hospital standards and services	None	Three major areas of interest were identified by the factor analysis and converted into scales: management and obstetrical equipment' ($\alpha = 0.81$), medical standards ($\alpha = 0.82$) and hospital conveniences ($\alpha = 0.78$) Preferences of participants were influenced by age, sex and parity, as well as by different levels of state and trait anxiety	Unsure if expectations measured as opposed to wishes and demands

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability		Key findings	Comments
				Theoretical underpinning	Key findings		
Murray C.J.L., Kawabata K, Valentine N. People's experience versus people's expectations. <i>Health Affairs</i> 2001;20:21-4 ¹⁸⁰	MEDLINE	Perspective article in response to article by Blendon <i>et al.</i> ³⁶⁹	N/A	N/A	Satisfaction with one's health-care system compares a person's assessment of the health care that is available with his or her expectations for health care	Satisfaction surveys do not necessarily reflect variations in how people are actually treated by the system. Satisfaction with the health-care system has been shown to be higher among poor populations than among the non-poor in 9/17 countries. ³⁶⁹ Rapidly changing expectations may also explain the substantial variability in the responses over time to questions on satisfaction At the conceptual level, comparisons of responsiveness of a health system should be unaffected by differences in expectations. Satisfaction with a health system is not a meaningful basis for comparisons over time or across countries Satisfaction measures are profoundly influenced by expectations. Performance assessment should reflect the reality of people's experiences – in terms of their health, their interactions with the health-care system and the financial burden they bear to pay for that system – not simply their expectations	Authors are World Health Organization researchers

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Noble LM, Douglas BC, Newman SP. What do patients expect of psychiatric services? A systematic and critical review of empirical studies. <i>Soc Sci Med</i> 2001;52:985–98 ¹⁸¹	MEDLINE	A literature review of patients' expectations of psychiatric care Literature up to 1980 will be summarised: (1) the expectations patients held about services, (2) the relationship between expectations and the outcome of care and (3) the impact of interventions to prepare patients for what to expect Systematic review of empirical studies 1980 onwards: (1) the range and nature of patients' expectations of psychiatric services, (2) the relationship between expectations and outcomes and (3) the impact of interventions that prepare patients for what to expect	MEDLINE search (January 1966 to December 1999) with keywords 'psychiatry', 'mental health', 'expectation', 'expectancy' and related terms 21 studies reported in 22 papers	Expectations of outcome most commonly measured, primarily expectations of improvement 70% of investigators used measures devised for their own studies. All measures were questionnaires apart from one standardised interview and one open-ended interview Apparent that there is no established, validated instrument for investigating patients' expectations of the process or outcome of psychiatric care	Distinctions have been made between what patients expect (anticipation about what will happen) and what they want (desires) from services Patients' expectations have been defined as 'usually implicitly held, seldom verbalised beliefs about roles, techniques, content, duration and outcome' ³⁷⁰ Patients' expectations include events they wish to happen, events they do not wish to happen or events about which they have no preference. The concept of expectations is therefore broader than that of requests	Overall, patients expected to improve as a result of psychiatric treatment, and had higher expectations of the helpfulness of psychological and combined treatments than the helpfulness of other interventions Few studies focused on expectations of the process of psychiatric care or determinants of expectations The majority of studies focused on examining the relationship between expectations and outcomes A complex relationship was identified between expectations of improvement and clinical outcomes	Methodological problems with the early research

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
O'Connor SJ, Trinh HQ, Shewchuk FM. Perceptual gaps in understanding patient expectations for health care service quality. <i>Health Care Manage Rev</i> 2000; 25 :7–23 ⁸²	MEDLINE	To assess how well physicians, health administrators, patient-contact employees and especially medical and nursing students understand patient expectations for service quality as measured by the SERVQUAL scale	Midwest City, OK, USA Three settings: multispecialty group practice, a school of medicine and a school of nursing Single merged data of valid cases file ($n=1702$)	SERVQUAL scale ³⁷¹ Five dimensions: reliability, assurance, responsiveness, empathy and tangibles Five dimensions are measured through 22 pairs of item statements. One statement from each pair reflects perceptions, the other expectations. Construct measurement is typically accomplished by subtracting expectations from perceptions, resulting in a service quality score. Positive or zero scores reflect ideal or adequate service quality. A negative score is indicative of a service experience that did not meet consumer expectations	Expectations are a major determinant of a consumer's service quality evaluations, satisfaction and provider choice decisions Expectations have been described as experience-based norms, which do not reflect a prediction of performance but rather desired performance Expectations that are met or exceeded in a service encounter = adequate or ideal service quality evaluation Expectations that are not met will result in negative service quality evaluation	Four of the six groups of respondents assigned highest values to reliability, followed in order by assurance, responsiveness, empathy and tangibles. The exceptions were nursing/medical students who rated expectations for assurance greater than reliability, and empathy higher than responsiveness The students demonstrated the poorest understanding of patient expectations for service reliability, assurance, responsiveness and empathy compared with clinic employees, practising physicians and administrators	Based heavily on consumer literature
		Cross-sectional research and discriminant analysis Postal survey: patients: 775/2069 (38%), practising physicians: 54/81 (67%), administrators: 34/51 (67%), patient-contact employees: 236/382 (62%), medical students: 302 out of 792 questionnaires returned, but only 292 were complete and usable (37%), nursing students: a convenience sample of 121 undergraduates returned questionnaires (no sampling base was given)		Scoring method has been criticised; more appropriate information about an individual's assessment of service quality may be gained by examining expectations and/or perceptions but not the difference between them Reliability (Cronbach's alpha) for each of the five patient expectations subscales was acceptable (reliability 0.88; assurance 0.84; responsiveness 0.84; empathy 0.86; tangibles 0.80). Coefficient alpha for the combined SERVQUAL scale was 0.94	The service quality gap model provides a framework for organisations seeking to systematically improve consumer perceptions of service quality		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Porter E.J. Older widows' expectations of home care nurses. <i>Home Health Care Serv Q</i> 2005;24:79-93 ¹⁸³	MEDLINE	To describe part of the personal-social context of older widows' experience of home care, that of holding expectations of home care nurses Longitudinal phenomenological study Convenience sample of volunteers across six counties of one Midwestern state recruited through service agencies	MO, USA On average, nine interviews over a 3-year period with 11 women who had home care nurses On enrolment, mean age 89.1 years	N/A	Expectations have been defined as beliefs about a service experience that are relevant to satisfaction with that experience	The women expected the nurse to do what the nurse is supposed to do; they expected that the nurse would fulfil certain obligations Specifically, the women expected to know in advance that the nurse was coming and for the nurse to come on time. The women also expected the nurse to come at regular intervals. The women were expecting the nurse to watch their progress, report to the doctor, help them improve, work out the best approach, be available and take care of problems The nurse was expected to be interested in the women as people and to treat the women well The nurse was expected to do only as much as she or he could when with the women at their homes Although professionals should try and meet clients' expectations, home care nurses should consider the impact of their practice on the creation of expectations	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Rankinen S, Salanterä S, Heikkinen K, Johansson K, Kallionen A, Virtanen H, <i>et al.</i> Expectations and received knowledge by surgical patients. <i>Int J Qual Health Care</i> 2007; 19 :113–19 ¹⁸⁴	MEDLINE	To compare surgical patients' knowledge expectations at admission with the knowledge received during their hospital stay Descriptive and comparative design 362 surgical patients admitted to hospital during a 2-month period Questionnaires administered on admission and during the hospital stay	Surgical wards at one randomly selected university hospital in Finland 45 patients declined; incomplete data for a further 80; 237 completed both questionnaires (65%) Mean age 53 years; 64% male	Hospital Patients' Knowledge Expectations questionnaire based on a literature review, an expert panel and practising nurses (assumed content validity) 40-item instrument with six dimensions of knowledge: biophysiological (eight items), functional (eight items), experiential (three items), ethical (nine items), social (six items) and financial (six items) e.g. 'I wish to receive knowledge about symptoms related to my illness' 4-point response scale ranging from 'fully agree' (1) to 'fully disagree' (4); a 'does not apply' (0) option was also provided Cronbach's alpha for total expectations scale = 0.91; 0.87–0.90 for the subscales Questionnaire was piloted	None	Surgical patients expected to receive more knowledge than they actually received on all dimensions. In particular, younger patients, female patients and patients with a higher level of education require more attention	Unsure if this relates to expectations; the questionnaire is about patients' wishes. Authors did not make a conceptual distinction

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Roberts D, Hirschman D, Scheltema K. Adult and pediatric CPR: attitudes and expectations of health professionals and laypersons. <i>Am J Emerg Med</i> 2000; 18 :465–8 ⁸⁵	MEDLINE	To examine health professionals' and laypersons' beliefs about when to terminate cardiopulmonary resuscitation (CPR) Questionnaire study Convenience sample of health professionals and laypersons	MN, USA Several urban and rural hospitals In 1988–89: 135 physicians and 170 nurses recruited at Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) classes and staff meetings In 1998–99: a further sample of 107 physicians and 181 nurses recruited 113 laypersons who were visitors or non-medical employees at the hospital	Short 10-item questionnaire about participants' beliefs regarding CPR in normothermic patients. They were also asked for their opinion about the length of time that unsuccessful CPR should continue before termination of CPR efforts, and also their thoughts about whether or not guidelines would be helpful No further information regarding expectation items	None	The most optimistic respondents were laypersons, who expected a favourable outcome for 52% of adults and 63% of children Nurses expected to be successful in 30% of adult cases and 45% of child cases Physicians expected to be successful in 24% of adult cases and 41% of child cases All groups expected higher success from resuscitation efforts than has been documented – an incongruity between expectations and reality	No information regarding development and testing of instrument

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Saleem T, Khalid U, Qidwai W. Geriatric patients' expectations of their physicians: findings from a tertiary care hospital in Pakistan. <i>BMC Health Serv Res</i> 2009;9:205 ⁸⁶	MEDLINE	To ascertain the expectations of geriatric patients from their physicians and the factors associated with patient satisfaction Cross-sectional survey Face-to-face interviews based on structured pre-tested questionnaires Convenience sample	Tertiary care teaching hospital in Karachi, Pakistan 380/423 patients were interviewed Response rate 89.8% Mean age 73.4 years; 65.3% female	Initial questionnaire developed from literature search and previous experience of investigators Formal pre-testing on 25 respondents of target population Instrument prepared in English, translated into Urdu then retranslated back into English (linguistic validation claimed from this process) Geriatric patients' expectations from physicians were elicited using a set of 11 questions that were graded on a scale of 1–3 (1 = 'not important', 2 = 'important', 3 = 'very important') Four sections: (1) sociodemographic details of respondents, (2) medical ailments and symptoms of patients, (3) expectations from physician, and (4) frequency of visits to doctor and overall satisfaction	None	7/11 expectations were ranked by at least 60% of the sample as very important 79.2% of participants felt strongly that the physician should discuss all available treatment options thoroughly and involve them in decision-making	Sample size calculation recorded No psychometric testing of instrument

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Saunders GH, Lewis MS, Forsline A. Expectations, prefitting counselling and hearing aid outcome. <i>J Am Acad Audiol</i> 2009;20:320–34 ¹⁸⁷	MEDLINE	To determine whether supplementing prefitting counselling with demonstration of real-world listening can (1) alter expectations of new hearing aid users and (2) increase satisfaction over verbal-only counselling	OR, USA 60 new hearing aid users fitted binaurally with behind-the-ear digital hearing aids for a period of 10 weeks 40 participants received prefitting counselling and demonstration of listening situations (20 of whom also received hearing aid fine tuning); 20 received prefitting counselling without a demonstration of listening situations Age range 55–81 years; 42 men, 18 women Three test groups: group 1 prefitting counselling in combination with demonstration of listening situations (additionally participants were given an opportunity to have their hearing aid fine-tuned if at the follow-up appointment they had complaints about sound quality); group 2 prefitting counselling in combination with demonstration of listening situations (but no fine-tuning at follow-up); and group 3 received prefitting hearing aid counselling that did not include demonstration of listening (and no fine-tuning at follow-up)	The Expected Consequences of Hearing Aid Outcome (ECHO) ³⁷² was used to assess pre- and postcounselling expected hearing aid outcome Four scales: positive effects, negative features, service and cost and personal image The Psychosocial Impact of Assisted Devices Scale (PIADS) ³⁷³ measures the psychosocial impact of hearing aids. It was completed pre and post counselling to assess expected psychosocial impacts (PIADS-E)	Expectations (preconceived notions) have been reported to affect outcome, hearing aid satisfaction and the frequency with which hearing aids are worn Higher expectations have been shown to be associated with better outcome, more hours of hearing aid use per day, greater overall reported benefit and greater reported benefit in difficult listening situations	Prefitting hearing aid counselling had small but significant effects on expectations Positive expectations resulted in more positive outcomes, suggesting that hearing aid fine-tuning might lead to a greater number of days of hearing aid use The data also emphasised the need to address unrealistic expectations cautiously before fitting hearing aids so as not to decrease expectations to the extent of discouraging and demotivating the patient	No psychometric properties of scales given

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Shelke AR, Roscoe JA, Morrow GR, Colman LK, Banerjee TK, Kirshner JJ. Effect of a nausea expectancy manipulation on chemotherapy-induced nausea: a University of Rochester Cancer Center Community Clinical Oncology Program Study. <i>J Pain Symptom Manage</i> 2008; 35 :381–7 ¹⁸⁸	MEDLINE	To address the question of whether a modest educational intervention designed to reduce patients' nausea expectancies by dispelling misconceptions about chemotherapy-related nausea and building confidence in the efficacy of their antiemetic drug regimen results in less nausea	USA 18 private medical oncology practice groups 322/358 (90%) completed the study Mean age in control group ($n=163$) 57.8 years; mean age in intervention group ($n=159$) 57.4 years Both groups 73% female	Expectation of developing nausea questionnaire: 5-point Likert scale, anchored at one end by 'I am certain I will not have nausea' and at the other end by 'I am certain I will have nausea' Patients who scored 4–5 were coded as 'expected nausea', whereas patients with a score of 1–3 were coded as 'did not expect or were unsure of nausea'	Patients' beliefs and expectations about whether they will experience nausea and vomiting from chemotherapy have been demonstrated to be strong and independent predictors of chemotherapy-related nausea and vomiting Several hypotheses to explain the relationship between symptom expectancies and subsequent report of symptoms: (1) the predictive capacity of expectancies derives from the patient's previous experience with factors that cause the symptom; (2) cognitive schemas suggest that expectations of symptoms may exacerbate their intensity and frequency; (3) a 'self-fulfilling prophecy' or 'nocebo' effect	Patient expectations for subsequent chemotherapy-induced nausea were reduced in the intervention group but actual nausea severity or occurrence were not reduced Patients who expected nausea compared with those who did not had both more frequent and more severe nausea Patients' expectancies assessed before the intervention were a stronger predictor of nausea severity than expectancies measured after the intervention	The term 'nocebo effect' refers to the negative consequences arising from the administration of a placebo
		To address the question of whether a modest educational intervention designed to reduce patients' nausea expectancies by dispelling misconceptions about chemotherapy-related nausea and building confidence in the efficacy of their antiemetic drug regimen results in less nausea Multicentre study 358 chemotherapy-naïve cancer patients scheduled to receive their first treatment with a chemotherapy regimen Enrolment questionnaire to determine expectations of developing nausea Patients randomly assigned to standard educational materials or same standard educational materials plus a one-page handout emphasising how effective the antiemetic would likely be in controlling the nausea					

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
		Measure of expectations completed again before first chemotherapy infusion Patient-reported diary of nausea and emesis			A self-fulfilling prophecy is a phenomenon by which belief that a future event will occur contributes to that event actually occurring. It plays a powerful role in shaping experiences, and, to the extent that it exists, is causal rather than predictive. Such beliefs about what is going to happen, termed 'response expectancies', can have a direct and unmediated effect on health outcomes. According to this theory, response expectancies for non-volitional outcomes are sufficient to cause the expected outcome, and the effect is self-confirming		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Sigrell H. Expectations of chiropractic patients: the construction of questionnaire. <i>J Manip Physiol Ther</i> 2001;24:440–4. ¹⁸⁹	MEDLINE	To design a questionnaire that can be used to identify patients' expectations of chiropractic management A series of five studies was undertaken to produce a final questionnaire relating to patients' expectations of chiropractic management and this was tested for validity	Private practice of chiropractic, Stockholm, Sweden Patients with low back pain of more than 2 weeks' duration and a history of a total of 30 days with low back pain within the last year Study 1 (interview study): $n=20$; study 2 (questionnaire – closed questions): $n=17$; study 3 (questionnaire – open questions): $n=23$; study 4 (questionnaire – closed questions): $n=13$; study 5 (questionnaire – closed questions): $n=20$	Study 5 produced the final version of the questionnaire Patient expectations in study 5: (1) that I will be free of symptoms, (2) that the chiropractor will find the problem, (3) that the chiropractor will explain the problem, (4) that the chiropractor will give me advice and exercises, (5) that I will feel better, (6) I do not have any expectations, and (7) I do not think the chiropractor can help me Likert 5-point scale used: 'strongly agree' (5) to 'strongly disagree' (1) Also used a visual analogue scale for pain to test patients' pain levels	Conflicting views about whether expectation plays a role in patient satisfaction	Patients' main expectations of the chiropractor are an accurate diagnosis, an explanation of the complaint or affliction and treatment that results in a positive outcome A final questionnaire was produced and collects information regarding expectations as stated above	Study carried out in author's own practice Content validity only discussed

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Sigrell H. Expectations of chiropractic treatment: what are the expectations of new patients consulting a chiropractor, and do chiropractors and patients have similar expectations? <i>J Manip Physiol Ther</i> 2002;25:300–5 ⁹⁰	MEDLINE	To investigate the expectations of new patients consulting a chiropractor and to evaluate differences and similarities in expectations between chiropractors and patients Cross-sectional study Data collected before treatment commenced	30 chiropractors and 336 patients from 17/18 private practices throughout Sweden New patients with current low back pain of more than 2 weeks' duration and a history of more than 30 days with low back pain within the past year Mean age: chiropractors 37 years, patients 48 years 80% male chiropractors; 'almost equal ratio' in patient sample	Questionnaire based on previous study ⁸⁹ Expectation statements by patients and chiropractors 1. I have no expectations (patient); I have no expectations with this patient (chiropractor) 2. I expect that the chiropractor will find the problem (patient); I expect to find the problem (chiropractor) 3. I expect that the chiropractor will explain what is wrong (patient); I expect to explain to the patient what the problem is (chiropractor) 4. I expect to receive advice about training and exercises (patient); I expect to give advice on training and exercises (chiropractor) 5. I expect that I should feel better (patient); I expect that the patient should feel better (chiropractor) 6. I expect that I should be free of symptoms (patient); I expect the patient to be free of symptoms (chiropractor) 7. I do not think the chiropractor can help me (patient); I do not think I can help this patient (chiropractor) Response categories: 'agree', 'uncertain' and 'disagree'	Conflicting views about whether expectation plays a role in patient satisfaction	Chiropractors and patients expected the chiropractor to find the problem and explain it to the patient, and they also expected patients to feel better and become free of symptoms However, the following differences were revealed: patients had lower expectations of the chiropractic treatment than the chiropractors but higher expectations of being given advice and exercises than the chiropractors There was also a tendency for the patients to expect to get better faster than the chiropractors expected them to	Same author as previous study Unknown how many patients declined participation so no response rates

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Toma G, Triner W, McNutt L-A. Patient satisfaction as a function of emergency department revisit expectations. <i>Ann Emerg Med</i> 2009; 54 :360–7 ¹⁹¹	MEDLINE	To measure the effect of meeting emergency department patients' expectations for diagnostic and therapeutic interventions on patient satisfaction Cross-sectional study Expectations collected on arrival using an anonymous self-administered survey. Satisfaction surveyed at completion of emergency department care	Albany, NY, USA Consecutive patients during block enrolment periods surveyed at the beginning and end of their emergency department visit 821/987 met inclusion criteria; 504/821 (61%) provided complete data 40% male (seven missing data)	Survey developed and piloted during 16 hours of data collection; final survey instrument was third draft Patients' expectations about emergency department management: 1. Do you have any expectations about what kinds of investigations you will receive in the emergency department? Yes/no 2. If yes, what investigations do you think you will receive? (List presented with tick boxes) 3. Do you have expectations about what kinds of treatment and medication you will receive in the emergency department? Yes/no 4. If yes, what kinds of treatment and medications do you think you will receive? (List presented with tick boxes)	None	29% had no pre-visit expectations; 24% had a single expectation; 47% had multiple intervention expectations After adjusting for confounders, no relationship between fulfilment of expectations about diagnostic and therapeutic interventions and satisfaction	No formal evaluation of expectations instrument Measurement of overall satisfaction crude Sample size calculation included Patients were excluded if researchers deemed that they were too ill or if they were unable to express themselves. This subset of patients may be expected to report lower scores on satisfaction'

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Velanovich V, Kamolz T, Pointner R, Contini S. Qualitative analysis of the expectations of antireflux surgical outcomes of patients from different nationalities. <i>Dis Esophagus</i> 2006;19:88–93 ¹⁹²	MEDLINE	To assess if qualitative analysis can be used to assess patient expectations for antireflux surgery in different nationalities Prospective study Patients referred for any reflux surgery	Three-centre study USA (n=20; 45% male; mean age 52 years), Austria (n=24; 58% male; mean age 44 years) and Italy (n=18; 47% male; mean age 39 years)	Preoperatively, patients were asked: How do you expect the surgery to affect your symptoms? What do you expect the possible complications or side effects to be? At 2–3 months post surgery, patients were asked: Did your surgery meet your expectations? If not, why not?	None	Expectations were remarkably similar Before surgery, symptomatic relief was the most common expectation Austrian and Italian patients more likely to mention 'conversion' and postoperative side effects Postoperatively, 90% of American, 96% of Austrian and 94% of Italian patients said that their expectations were met Patients who did not mention postoperative adverse events as possibilities preoperatively were more likely to be dissatisfied	No response rates or details of recruitment of patient sample Small number of participants
Weiss MC, Deave T, Peters TJ, Salisbury C. Perceptions of patient expectation for an antibiotic: a comparison of walk-in centre nurses and GPs. <i>Fam Pract</i> 2004;21:492–9 ¹⁹³	MEDLINE	To compare walk-in centre nurses' and GPs' perceptions of the influence of patient expectations on their supply of an antibiotic with a patient with an acute respiratory tract infection presenting with a sore throat or cough All patients presenting with a sore throat or cough at six walk-in centres and six nearby general practices were eligible to participate Data collected from health professional and patient after consultation complete	England, UK 472 health professionals (181 GPs and 291 walk-in centres); 160/472 (34%) patient questionnaires returned	Health professional questionnaire: To what extent did you feel the patient expected an antibiotic? ('extremely', 'quite a bit', 'a little', 'not at all') To what extent did patient expectation for an antibiotic influence your decision to prescribe? ('extremely', 'quite a bit', 'a little', 'not at all') Patient questionnaire: Did you expect to receive a prescription for these symptoms? If so, was there anything in particular you wanted prescribed?	Patient expectation for a prescription is a recognised influence on GPs' prescribing, particularly of antibiotics	GPs more likely than nurses to report that the patient expected an antibiotic ($p < 0.001$) GPs were likely to report that the patient expected an antibiotic when the patient reported wanting a prescription ($p = 0.05$) and to report that the patient expected an antibiotic if the patient thought that an antibiotic would be beneficial ($p = 0.001$) There was a much weaker relationship between nurse perceptions of patient expectation for an antibiotic and either patient desire for a prescription or patient's affirmative belief that an antibiotic would be beneficial	Exact response rates unknown because of method of recruitment 34% refers to the response rate if it is assumed that health professionals distributed patient questionnaires in all consultations for which they completed a questionnaire themselves

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
White JG, Slabber J, Schreuder A. Patient management: measuring patients' expectations and perceptions of service quality in a dental training hospital. <i>S Afr Dent J</i> 2001; 56 : 203–8 ⁸⁴	MEDLINE	To investigate the difference between service-quality expectations and perceptions (experiences) of patients (customers) attending a dental training hospital, using a modified version of the SERVQUAL model ³⁷¹ Cross-sectional survey with questionnaire and structured interview	Dental Training Hospital, University of Pretoria, South Africa 200 patients – no further information	SERVQUAL has five dimensions of service quality: reliability, responsiveness, empathy, assurance and tangibles All personnel at the hospital generated 43 items representing the five dimensions The 43 items were presented to randomly selected patients ($n=50$) who were asked to rank the items according to the following criteria: 'extremely important', 'important', 'neutral', 'not important', 'not important at all' Those items marked as 'extremely important' or 'important' were selected ($n=28$) Questionnaire was formulated, which included the 28 service quality-related items and four open-ended questions, to evaluate patients' expectations and perceptions of the service Each item was evaluated in terms of patient expectations and perceptions on a scale from 1 to 9 (1 = low expectation/negative perception and 9 = high expectation/positive perception) To investigate social desirability bias, structured interviews were also conducted with each of the patients	Service quality briefly discussed in relation to service and retail businesses	The greater the number of visits to the hospital, the smaller the difference between expectations and perceptions Patients in the category 36–45 years showed larger mean differences than younger or older patients Respondents with no academic qualifications had low expectations of the service, whereas professional people seemed to have more realistic expectations before a visit to the hospital than respondents in the technical/clerical category Principal component factor analysis showed that 59% of service-level variance could be attributed to the reliability and assurance dimensions of service quality	No information regarding recruitment or response rates of the 200-patient sample No comparison of the results of the questionnaire and the structured interview

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Wilcox S, Castro GM, King AC. Outcome expectations and physical activity participation in two samples of older women. <i>J Health Psychol</i> 2006; 11 : 65–77 ⁹⁵	MEDLINE	To examine whether initial outcome expectations and their achievement at 6 months (i.e. outcome realisations) predicted subsequent physical activity participation in 118 older women	San Francisco Bay Area, CA, USA Participants were required to be underactive (engaging in physical activity no more than two times per week during the past 6 months), postmenopausal, free of medical conditions that would limit their activity	Outcome expectations measure: 'We would like to know how you would expect the following factors to change, if at all, over the next 6 months due to participation in an exercise program. Please circle the number that most closely corresponds to how you would expect that particular factor to change. I expect: ...' (the factors were listed, e.g. quality of sleep, physical shape and appearance) Response choices were from 0 to 10 (0 = 'to get worse', 1–2 = 'no change', 4–6 = 'moderate improvement', 9–10 = 'extreme improvement'). Thus, higher scores indicated greater expectations for change Participants were also asked to indicate which of 16 benefits was most important to them (originally developed by King <i>et al.</i> ³⁷⁶)	Social cognitive theory (Bandura 1986); self-efficacy and outcome expectations discussed Results of studies that have investigated the association between outcome expectations and physical activity participation have been inconsistent Draws attention to the difference between the adoption of health behaviours in social cognition models and the maintenance of health behaviours Rothman ³⁷⁵ argues that having favourable expectations regarding outcomes of a behaviour may be important in one's decision to initiate a new behaviour, but the decision to maintain the behaviour is more likely to be influenced by perceived satisfaction with outcomes attained. Thus, in intervention studies, the association between outcome expectations and physical activity participation may be dependent on whether outcome expectations are achieved	Four expectation groups: pessimist realists, optimistic realists, surprised pessimists and disappointed optimists ³⁷⁴ Initial outcome expectations alone were not predictive of subsequent physical activity participation during the adoption (1–6 months) or maintenance (7–12 months) phases Outcome realisations at 6 months, however, predicted subsequent physical activity participation ($p < 0.05$) Women with high expectations but low attainment (disappointed optimists) had the lowest subsequent participation rates Women with high attainment, regardless of expectations (surprised pessimists and optimistic realists), had the highest participation rates Findings replicate and extend those of Neff and King ³⁷⁴ – initial outcome expectations must be considered in combination with attainment of those outcomes in predicting physical activity adherence	Format of physical activity interventions was different for the two groups to accommodate the needs of the caregivers Limited generalisability as sample was well educated and primarily white

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				Principal components analysis indicated that the outcome expectations measure represented two domains: physical benefits (physical shape and appearance, appetite, physical fitness, weight and eating habits) and psychological benefits (quality of sleep, depression, tension or anxiety, concentration, alertness, confidence and well-being, energy, stress/coping with stress and mood)			
				Items were averaged across each domain, with possible scores ranging from 0 to 10, to form a physical and psychological composite			
				For caregivers the internal consistency for the physical and psychological benefits domain was Cronbach's alpha (α) test of internal consistency = 0.84 and 0.95 respectively. For non-caregivers, these values were Cronbach's alpha (α) test of internal consistency = 0.81 and 0.95 respectively			
				At 6 and 12 months, outcome realisations were measured using a similar questionnaire			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Wilhelm K, Wedgwood L, Mahi G, Mitchell P, Austin M-P, Kotze B, <i>et al.</i> Great expectations: factors influencing patient expectations and doctors' recommendations at a mood disorders unit. <i>J Affect Disord</i> 2005; 88 :187–92 ⁹⁶	MEDLINE	To examine the factors that influence treatment expectations and psychiatrists' treatment recommendations for patients referred to a mood disorders unit with identified episodes of major depression Self-report questionnaires	Sydney, NSW, Australia 80 male and 102 female outpatients with major depression 182/239 response rate (76%) Mean age 42 years	Expectations of treatment: 'What do you think your visit will do for you?' 11 items were listed relating to enhanced coping strategies, advice on treatment/medication and giving the referring doctor and patient fresh ideas Dichotomous responses ('important'/'not important') were used for the analyses Psychiatrists' treatment recommendations for the referring clinician were assessed according to the 11 treatment domains to determine whether or not the patients' initial expectations were met	Relationship between satisfaction and the fulfilment of expectations	Most frequently rated expectations were 'giving me fresh ideas' (96%), 'treat my depression' (88%), 'receiving advice on medication' and 'giving my doctor fresh ideas' (87%) and least frequently rated were 'being put in touch with support groups' (50%) and 'receiving advice about relationships' (56%) Principle component analysis (PCA) solution revealed three factors related to patients' expectations accounting for 54.2% of the variance: 'enhanced coping', 'providing fresh ideas for the referring doctor' and 'providing fresh ideas to self' Patients' expectations were influenced by sociodemographic and illness-related characteristics. In particular, young female patients typically expected to receive strategies to enhance coping, whereas those with lifetime anxiety expected less active involvement on their part. Individual and illness-related characteristics are important predictors of treatment expectations prior to specialist care	The study did not allow determination of the impact of patients' expectations on the psychiatrists' recommendations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Yee A, Adjei N, Do J, Ford M, Finkelstein J. Do patient expectations of spinal surgery relate to functional outcome? <i>Clin Orthop Relat Res</i> 2008; 466 :1154–61 ¹⁹⁷	MEDLINE	To investigate whether (1) patient factors and preoperative functional outcome scores reflect the degree of expectations that patients have for posterior spinal surgery and (2) patients' expectations for surgery predict improvements in functional outcome scores after surgery Prospective study	Toronto, ON, Canada 165 consecutive surgical patients met inclusion criteria and were approached; 10 declined participation; of the 155, 11 were lost to follow-up and one further declined = 143 participants Mean age: 52 years; male-to-female ratio 1 : 1	Patients' expectations evaluated preoperatively: seven items with 5-point Likert scale ('not at all likely', 'slightly likely', 'somewhat likely', 'very likely', 'extremely likely'); (1) relief from back pain, (2) relief from leg pain, (3) relief from numbness, weakness, instability, (4) to do more everyday household or yard activities, (5) to sleep more comfortably, (6) to go back to my usual job and normal activities, and (7) to exercise and do recreational activities Postoperatively patient-derived satisfaction regarding whether expectations were met was quantified (at 6 months for decompression; 1 year for fusions)	None	In patients undergoing decompression, sex, SF-36 general health domain and SF-36 physical component score predicted patients with high expectations for surgery Patients with high expectations also reported greater postoperative improvements in SF-36 role physical domain scores after surgery Expectations for surgery were met in 81% of patients In a subset of patients (21/143), expectations were not met. These patients reported lower mean preoperative SF-36 general health, vitality and mean mental component scores	Short-term follow-up

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Bell RA, Kravitz RL, Thom D, Krupat E, Azari R. Unmet expectations for care and the patient-physician relationship. <i>J Gen Intern Med</i> 2002;17:817-24 ⁹⁸	PsycINFO	To profile patients likely to have unmet expectations for care, to examine the effects of such expectations and to investigate how physicians' responses to patients' requests affect the development of unfulfilled expectations 4560 patients randomly selected from appointment lists (January to November 1999); 2606 successful patient telephone contacts made (57% contact rate) Patient data: telephone screening questionnaire 1-2 days before visit; self-administered questionnaire completed immediately before and after outpatient visits; follow-up telephone survey administered 2 weeks post visit	Sacramento, CA, USA The offices of 45 family practice, internal medicine and cardiology physicians Of the 4560 patients, 909 provided usable study data; 423 were eligible but not enrolled (of these, 161 were eligible but refused, 162 were eligible but were late withdrawals and for the remaining 100 there was no further information reported); 2407 unknown eligibility, and 821 ineligible A net response rate was calculated using figures above = 32.2% Sample = 909 adults reporting a health problem or concern (mean age 57 years; 44% male) 45 physicians participated (mean age 44 years; 69% male)	Immediate post-visit questionnaire: 'When people go to the doctor, they usually bring some thoughts about how the doctor can be of the most help. Sometimes, however, the doctor may not be able or willing to do exactly what the patient wants. These next few questions are about things you felt were necessary for the doctor to do today but which (for whatever reason) didn't happen: failure to prepare for visit, questions that should have been asked but were not, parts of the physical examination that were not performed, diagnostic tests/radiography that should have been ordered or performed but were not, new medications that should have been prescribed but were not, specialist referrals that should have been made but were not, medical information that should have been given but was not, counselling that should have been provided but was not, other things not mentioned that the patient felt were necessary for the doctor to do but which did not happen'	Patients' evaluations of their medical encounters and health-care providers are made, at least in part, in reference to their expectations for care Clinicians with an awareness of patients' expectations are better able to satisfy a patient's justified desires and to initiate frank discussions about unrealistic expectations Unmet expectations can be predictive of low patient satisfaction The concept of 'expectation' has been used inconsistently. Kravitz ⁹⁷ has observed its use in different ways: probability expectations and value expectations. Expectations have been examined in general terms, as visit-specific expectations and with regard to the structures, processes and outcomes of care	Overall, 11.6% of patients reported ≥ 1 unmet expectation Visits in which a patient held an unmet expectation were rated by physicians as less satisfying and more effortful At follow-up patients who perceived an unmet expectation for care also reported less satisfaction with their visit, less improvement and weaker intentions to adhere Patients with an unmet expectation related to clinical resource allocation had more post-visit health-system contacts. Unmet expectations were typically reported by a patient whose request for a resource was not fulfilled Unmet expectations adversely affect patients and physicians alike. Physicians' non-fulfilment of patients' requests plays a significant role in patients' beliefs that their physicians did not meet their expectations for care Consistent with previous research, unmet expectations were seen more frequently with younger patients, unmarried patients and patients who lack trust in their physicians	Study based on post-visit ratings of unmet expectations. Unclear if these expectations were brought to visit or emerged during visit No attempt was made to distinguish between unmet expectations that were reasonable and those that were not Results reflect patients' perceptions of care rather than objective assessments of the appropriateness of physicians' actions Setting was a single managed care market in California

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
		Physician data: determined how demanding (effortful) and satisfying visit was in comparison with a typical visit on two single-item 5-point scales (5 = "far more demanding")		For each of these nine issues, patients indicated if they felt that the physician had left something out (unmet expectation), felt that the physician had done everything possible (no unmet expectation) or were uncertain. Later codings: 0 = no unmet expectation/uncertain; 1 = unmet expectation			Based on Kravitz <i>et al.</i> ⁴⁷

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Coulter A. Examining health expectations. Editorial. <i>Health Expect</i> 2006;9:1–2 ¹⁶	PsycINFO	Editorial	N/A	None	Discusses two papers by Janzen <i>et al.</i> 2006 ¹⁹ and Crow <i>et al.</i> 1999 ⁵⁸	<p>Questions posed:</p> <p>Does the Janzen model have validity in a variety of settings or does it require further adaptation?</p> <p>What data are there on the impact of experience, knowledge and beliefs on the development of expectations?</p> <p>What level of understanding do we have for patient and public expectations? How often are they unrealistic? If unrealistic expectations are a real problem, how can they be modified?</p> <p>What is the relationship between expectations and preferences?</p> <p>Could measurement of patient satisfaction be improved by paying greater attention to prior expectations?</p> <p>To what extent is there concordance or dissonance between patients' expectations and those of health professionals?</p> <p>Do health professionals understand patients' expectations and in what ways do their perceptions of these influence their behaviour?</p> <p>Are public expectations really rising and, if so, what problems does this cause?</p>	Editorial with reference to Crow <i>et al.</i> 1999 ⁵⁸

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Davis MJ, Addis ME. Treatment expectations, health functioning and mental health in behavioural medicine groups. <i>Ir J Psychol</i> 2002;23:1-2, 37-51 ⁹⁹	PsycINFO	Can pretreatment expectations (self-efficacy, treatment outcome and acceptance of the treatment rationale) predict early and late dropouts and treatment completers? Participants were recruited from stress ($n=94$), insomnia ($n=5$) and pain management ($n=19$) programmes over a 7-month period	MA, USA Outpatient behavioural medicine programmes conducted over 8 weeks, designed to provide education about mind-body connection (how thoughts, emotions and behaviours can impact symptoms) Participants invited to participate at the beginning of the first session; 118/120 agreed (98% response rate) Mean age 48 years; 68% female Three groups of participants: early dropouts attending 1-3 sessions ($n=37$), late dropouts attending 4-6 sessions ($n=22$) and treatment completers attending 6-8 sessions ($n=59$)	The Behavioural Medicine Expectations Questionnaire (BMEQ) 12-item questionnaire to assess pretreatment self-efficacy and outcome expectations as well as behavioural medicine treatment rational expectations	Bandura ⁸⁶ perceived that self-efficacy is a major determinant of whether or not an individual will attempt to initiate a new behaviour, or persist in performing a behaviour in any given situation Correlation data have suggested that assessments of self-efficacy expectancy, outcome expectancy and value of treatment outcome were all significant and roughly equivalent predictors of behavioural intentions Refers to Kleinman's model of treatment expectations ⁸⁷	Could high expectations act as a catalyst for quality improvement? If so, should we be encouraging patients to have even higher expectations and to express these more forcefully? Pretreatment expectations (rejection of the treatment rationale of behavioural medicine programmes) and low mental health functioning were predictive of early programme attrition	No details of method of recruitment of sample or response rate BMEQ developed by first author; no references reported nor psychometric properties

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Dowswell G, Dowswell T, Lawler J, Green J, Young J. Patients' and caregivers' expectations and experiences of a physiotherapy intervention 1 year following stroke: a qualitative study. <i>J Eval Clin Pract</i> 2002; 8 : 361–5 ²⁰⁰	PsycINFO	To explore in-depth patients' and caregivers' understanding of the purpose, expectations and perceived value of late community physiotherapy and their own role in the treatment programme Qualitative study at the end of a randomised controlled trial Trial: 170 patients at least 1-year post stroke were randomly assigned to intervention (physiotherapy for up to 3 months designed to improve mobility) and control groups (no active intervention). In addition, 10 patients (meeting all inclusion criteria) and their carers ($n=7$) were recruited. These patients received the same intervention as those in the randomised trial but were interviewed approximately 1 month before and after the intervention	Bradford, UK 10 stroke patients and their carers (aged 51–81 years; five were male)	Interviews included a range of open-ended questions Before interview, patients and carers were asked what they expected the intervention to involve, what they hoped they would achieve and what they saw as the best and worse things that were likely to arise from the sessions In the interviews following the intervention the topics were similar but were couched retrospectively	The formation of realistic expectations is likely to depend on previous experience or knowledge about established norms Some patients may feel disappointed with the extent of their recovery following stroke. This disappointment has been partly attributed to unrealistic expectations. A recent study reported that the provision of appropriate and timely information on stroke forms the basis for 'realistic expectations', which leads to greater satisfaction with the extent of recovery	Pre-physiotherapy, responders were likely to refer to their experiences immediately after stroke as the basis for their expectations. Patients had modest expectations and referred to specific body parts or movements Expectations of what physiotherapy would involve were largely borne out. Patients and caregivers expected and received benefit from the intervention in terms of improvements in physical function and these were sometimes translated into activities that formed part of everyday life When asked about hopes, the emphasis shifted towards a more holistic view of their recovery. Hopes included adoption of previous roles and a return to normal Hopes were not fulfilled. This may not be because patients have poor knowledge of stroke or inflated expectations of services but because coming to terms with a devastating illness is a long process Expectations and objectives are precise; hopes and goals are more personally defined and elusive	Small sample: 17 respondents in pre-intervention interviews and 16 in follow-up Single geographical area

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Engel C, Hamilton NA, Potter PT, Zautra AJ. Impact of two types of expectancy on recovery from total knee replacement surgery (TKR) in adults with osteoarthritis. <i>Behav Med</i> 2004; 30 : 113–23 ²⁰¹	PsycINFO	To examine how generalised and highly specific expectations may shape total knee replacement (TKR) outcomes Prospective study Patients recruited from rheumatologist referrals for TKR: 78 patients elected to have surgery and 29 patients chose to postpone surgery (control group). A further 16 participants were recruited from the Arthritis Foundation (also comprised the control group) Each TKR participant completed three written questionnaires and three physical assessments of global illness severity at 2 weeks before surgery, 4–6 weeks post surgery and 6 months post surgery	USA 74 valid surgical (complete cases) patients (mean age 67.08 years; 49.3% female) and 43 control patients (mean age 66.82 years; 55% female)	Specific expectations for the outcome of TKR were measured with five single-item questions. Included in this analysis are two items: expected probability of recovery ('How would you rate your chances of significant improvement in your condition following surgery?', measured with a visual analogue scale with percentages) and expected change in quality of life as a result of surgery ('What change do you expect in your overall quality of life as a result of the surgery?', with four response choices: 'no change', 'small change', 'moderate increase' and 'significant increase')	Two types of measures for expectancies for improvement: generalised expectancies about the outcome itself and dispositional expectancies about outcomes across a broad range of situations; the second type focuses on individual differences in perceptions about one's own ability to bring about a specific outcome Most well-known example of generalised expectancies is the placebo effect Expectancies about the success of an intervention and patients' expectancies about distress following a surgical procedure have each been found to predict recovery from surgery Patients' expectancies about pain following a surgical intervention may also play an important role in their response to surgery	Two psychosocial factors – generalised expectancies for surgery and personal efficacy beliefs – were significant predictors of who benefited most from TKR. Collectively, they accounted for more than 10% of the variance in physical health improvements from knee surgery	Small sample size Select sample of patients seeking surgery and patients electing not to have surgery. Individuals were not randomly assigned to surgery

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
		Each TKR control subject was given a non-surgery date and completed questionnaires and received physical assessments 2 weeks before their non-surgery date, 4–6 weeks post non-surgery and 6 months post non-surgery			Whereas global expectancies about surgical outcomes reflect appraisals of the prospective benefit of the surgical procedure, individual differences in optimism and pessimism reflect a dispositional tendency to expect positive vs negative outcomes across a wide range of situations In contrast, self-efficacy refers to individuals' beliefs that they have the ability and requisite skills to favourably influence the outcome of a particular event. Efficacy beliefs have been linked to a wide range of positive health behaviours and outcomes		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mangione-Smith R, Elliott MN, Stivers T, McDonald L, Heritage J, McGlynn EA. Racial/ethnic variation in parent expectations for antibiotics: implications for public health campaigns. <i>Pediatrics</i> 2004;113:e385–94 ²⁰²	PsycINFO	To examine racial/ethnic differences in parent expectations about the need for antibiotics and physician perceptions of those expectations of those expectations. Nested, cross-sectional survey of parents attending their child's paediatrician because of cold symptoms between October 2000 and June 2001. Parents completed a pre-visit survey; physicians completed a post-visit survey	Los Angeles, CA, USA 27 community paediatric practices Volunteer sample of 38 paediatricians (59 eligible paediatricians; participation rate 64%) and a consecutive sample of 543 parents (678 parents invited to participate; 570 agreed of whom 27 were deemed ineligible; participation rate 83%) seeking care for their children's respiratory illnesses Parents mean age 34 years; 83% female 42% of participating paediatrician were between 40 and 65 years of age; 71% were male	Parents pre-visit survey included a 15-item pre-visit expectations inventory Parent expectations for antibiotics were assessed by asking the parents to respond to the following question: 'How necessary do you think it is for the doctor to prescribe an antibiotic for your child?' 5-point Likert scale (1 = 'definitely necessary', 2 = 'probably necessary', 3 = 'uncertain', 4 = 'probably unnecessary', 5 = 'definitely unnecessary') Physicians post-visit survey included whether the physician expected that the parent perceived that the parent expected an antibiotic: 'At the beginning of this visit, this parent expected me to prescribe an antibiotic'. 5-point Likert scale (1 = 'strongly agree', 2 = 'somewhat agree', 3 = 'uncertain', 4 = 'somewhat disagree', 5 = 'strongly disagree')	None	43% of parents believed that antibiotics were definitely necessary and 27% believed that they were probably necessary for their child's illness. Latino and Asian parents were both 17% more likely to report that antibiotics were definitely or probably necessary than non-Hispanic white parents Physicians correctly perceived that Asian parents expected antibiotics more often than non-Hispanic white parents, but underestimated the greater expectations of Latino parents for antibiotics Physicians also correctly perceived that parents of children with ear pain or who were very worried about their child's condition were significantly more likely to expect antibiotics Physicians were 7% more likely to make a bacterial diagnosis and 21% more likely to prescribe antibiotics when they perceived that antibiotics were expected	One geographic location; small physician population (n=38), under-representing female paediatricians (29%) Unknown Hawthorne effect, which may represent a lower bound estimate of the impact of parental pressure on prescribing

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Montgomery GH, Bovbjerg DH. Presurgery distress and specific response expectancies predict postsurgery outcomes in surgery patients confronting breast cancer. <i>Health Psychol</i> 2004;23:381–7 ²⁰³	PsycINFO	To examine the contribution of pre-surgery response expectancies and distress to surgical breast cancer patients' post-surgery pain, nausea, fatigue and general discomfort Prospective study Two breast surgeons referred all surgical patients meeting study criteria; 86% of those contacted agreed participation	New York, NY, USA 63 female patients (mean age 48.71 years) scheduled for breast cancer surgery participated in the study	Before surgery, patients completed visual analogue scale measures of acute distress and expectations of post-surgery pain, nausea, fatigue and discomfort. A visual analogue scale item for expectations for post-surgery hearing loss was also administered as a foil to confirm the specificity of response expectancy effects Each expectancy item followed the same format, e.g. 'After surgery, how much pain do you think you will feel? Please put a slash through this line to indicate how much pain you expect to feel'. The line is anchored by 'no pain at all' and 'as much pain as there could be'	Kirsch ^{376,379} theory on the relationship between what individuals expect and their experiences of seemingly automatic responses (response expectancies) Response expectancy theory focuses on direct associations between specific expectancies and the experiences of specific outcomes	Specific pre-surgery expectancies were significant predictors of pain intensity, pain unpleasantness and fatigue ($p < 0.05$), but not nausea or discomfort Consistent with expectancy theory, association between response expectancies and post-surgery outcomes was not due to pre-surgery distress	Visual analogue scale measures of post-surgery side effects were used and it is possible that more comprehensive measures would better capture the complexity and richness of some of these constructs The relationships described, although prospective, are correlational and therefore causal links cannot be made Caution before generalising the results of the present study to other surgery populations as this small study comprised only women with breast cancer

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Vardaki MA, Philalithis AE, Vlachonikolis I. Factors associated with the attitudes and expectations of adult patients suffering from β -thalassaemia: a cross-sectional study. <i>Scand J Caring Sci</i> 2004;18:177–87 ²⁰⁴	PsycINFO	To ascertain the factors that are associated with attitudes and expectations of adult patients suffering from β -thalassaemia major Cross-sectional questionnaire survey	Crete, Greece 67/72 patients Mean age 23.78 years; 34 men, 33 women	'What are your expectations from the future? Please rank the choices in the following list (as many as you want) according to their importance for you in descending order: 1. To be healthy 2. To create a family and have children 3. To have a partner/spouse 4. To do well at school/at work 5. To be cured (to recover) 6. To have friends' Previous studies were used in the questionnaire preparation as well as a local health interview survey. Questionnaire was piloted for content and construct validity	None	PCA was used to extract two component indicators (healing and therapy indicators) that reflected patients' expectations from life Healing indicator comprised items 1, 3 and 5; therapy indicator comprised items 2 and 4 The expectations indicators showed an interaction with sex and other parameters such as admission to hospital Lower values of the healing indicator are associated with dissatisfaction with the information given by doctors. Men who had been admitted to hospital were found to have higher values than women The therapy indicator was associated with sex and comparative assessment of health status (how patients rate their own health compared with health of others)	Not specifically concerned with health expectations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Vogel DL, Wester SR, Wei M, Boyesen GA. The role of outcome expectations and attitudes on decisions to seek professional help. <i>J Couns Psychol</i> 2005; 52 :459–70 ²⁰⁵	PsycINFO	To directly examine the relations among the different psychological factors and help-seeking decisions through attitudes towards seeking professional help Study 1: To examine the roles of psychological and demographic factors in predicting one's attitude towards seeking professional help. College students recruited from psychology classes completed a series of questionnaires Study 2: To examine the role of positive and negative outcome expectations regarding emotional self-disclosure to a counsellor in predicting whether participants used counselling services over the course of a semester. College students completed a questionnaire packet and were then recontacted 2–3 months later and asked whether they had sought therapy or counselling services since the last survey	Midwest USA Study 1: 354 college psychology students (236 women and 118 men) Study 2: a new sample of 1128 college psychology students (622 women and 506 men); 617/1128 (54.7%) provided both sets of data	Study 1 included the Disclosure Expectations Scale (DES). ³⁸⁰ The DES is an eight-item questionnaire designed to assess participants' expectations about the utility and risks associated with talking about an emotional problem with a counsellor. The two identified subscales each consist of four items rated on a 5-point Likert-type scale ranging from 1 ('not at all') to 5 ('very'). Responses are summed for each subscale such that lower scores reflect less anticipated utility and less anticipated risk Study 1: Internal consistency for the subscales was found to be 0.81 for anticipated utility and 0.80 for anticipated risk Study 2: Internal consistency for the subscales was found to be 0.83 for anticipated utility and 0.78 for anticipated risk	Attitudes are predicted by a person's outcome expectations ³⁸¹ Psychological factors may be considered as part of a person's outcome expectations and, as a result, they may play a role in a person's help-seeking intentions through their effect on attitudes	Study 1: Most of the psychological factors about whether therapy would be a helpful or harmful experience were associated with attitudes towards help-seeking, which in turn contributed to the participants' intent to seek help for interpersonal and drug issues. There was strong support for the model of attitudes as mediators between psychological factors and help-seeking intentions Study 2: Positive and negative outcome expectations, and in particular the anticipated outcomes of expressing emotion to a counsellor, seem to be salient in one's decision to seek professional help. Anticipated risks were more directly predictive of behaviour than anticipated utility or comfort talking about distress It is suggested that the interaction between the anticipated outcomes (i.e. the risk of talking about an emotional issue) and the experience of a specific distressing event predicts help-seeking behaviour	Limitations of study 1: Results based solely on self-report measures. The procedures did not allow for causal relationships to be identified. Actual help-seeking behaviour was not measured Limitations of study 2: 54.7% return rate. Assessment of a distressing experience was gathered by only one question. Direct causal relationships could not be identified Also, results reliant on college students, which may limit the generalisability of the findings

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Frank R. Homeopath & patient – a dyad of harmony? <i>Soc Sci Med</i> 2002;55:1285–96 ²⁰⁶	Sociological Abstracts	To find out whether there are conflicting expectations potentially leading to conflicts between physician and patient	Germany 42/105 homeopathic physicians in Berlin listed in the yellow pages were randomly selected for participation 20/42 semi-structured interviews were conducted over a 3-month period in 1999 70% female	The following question was asked and responses probed: 'What kind of expectations do you experience from your patients?'	None	Patients usually start homeopathy with fragmented knowledge and so are provided with homeopathic literature and an introductory talk. This can serve as a selective function. Potential patients are informed about homeopathic treatment, which leads to the selection of suitable patients. Those who would have difficulties complying with the requirements of homeopathic therapy are discouraged at an early stage Shortened consultations for those physicians working within the system of public health insurance can clash with patients' expectations of extensive care There was a range of patient expectations that the respondents deemed unrealistic for homeopathic treatment. They trace those expectations to the patients' biomedical socialisation and find them hard to fulfil: speed of recovery or alleviation of symptoms, position of the patient in the recovery process (e.g. assuming a passive role), unrealistic therapeutic expectations	Focus of paper is the relationship between physician and patient No background information regarding expectations question

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mangione-Smith R, Stivers T, Elliott M, McDonald L, Heritage J. Online commentary during the physical examination: a communication tool for avoiding inappropriate antibiotic prescribing? <i>Soc Sci Med</i> 2003;56:313–20 ²⁰⁰⁷	Sociological Abstracts	To gain a better understanding of how physicians use online commentary in response to actual and perceived parental expectations for antibiotics and to learn whether online commentary has potential as a communication technique that physicians could use to resist pressure for inappropriate antibiotic prescriptions	Los Angeles, CA, USA Two private paediatric practices Parents attending visits for their children with upper respiratory tract infections (October 1996 to March 1997) 10 physicians (77% response rate) 306 eligible parents participated (86% response rate). Parents who participated were older (mean age 38 years) Data analysed for 284 consultations (93%) Of these cases, 12 were assigned diagnoses that were neither viral nor bacterial and so were excluded from further analyses. Of the remaining 272 consultations, 54% (n=154) of the children had presumed viral illnesses and 41% (n=118) had presumed bacterial illnesses	Parents completed a 15-item pre-visit expectations inventory that included one item about whether they thought that it was necessary for the physician to prescribe antibiotics. Each item on the expectations inventory was scored on a 5-point Likert scale (1 = 'definitely necessary', 2 = 'probably necessary', 3 = 'uncertain', 4 = 'probably unnecessary', 5 = 'definitely unnecessary') Scores dichotomised to a positive expectations (1, 2) or negative expectations (3–5) score	None	Physicians were generally not good predictors of parental expectations. 50% of parents reported that they expected to receive antibiotics. Physicians perceived that antibiotics were desired in 34% of consultations overall. They were correct about parental expectations 73% of the time when parents did not expect antibiotics and 41% of the time when parents expected antibiotics. Degree of agreement was only slightly better than chance ($p < 0.05$; kappa = 0.14) (see Mangione-Smith <i>et al.</i> ³⁸²) 'No problem' online commentary is a communication technique that may provide an efficient and effective method for resisting perceived expectations to prescribe antibiotics	Online commentary is physician talk that describes what he or she is seeing, feeling or hearing during the physical examination of the patient. Two primary types: 'problem' online commentary (e.g. 'that cough sounds very chesty') and 'no problem' online commentary (e.g. 'her throat is only slightly red') Only one item listed from pre-visit expectations inventory – has been described elsewhere ³⁸² Small study, one area No conclusions about causation Possibility of measurement error because of self-reports for some of the independent variables

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Arthur V, Clifford C. Rheumatology: the expectations and preferences of patients for their follow-up monitoring care: a qualitative study to determine the dimensions of patient satisfaction. <i>J Clin Nurs</i> 2004;13:234–42 ²⁰⁸	Web of Science as part of Web of Knowledge	To determine the expectations and preferences of rheumatology patients for their follow-up monitoring care Qualitative study Semi-structured interviews with a convenience sample of 10 rheumatology patients (five attending nurse-led clinics and five attending their GP surgery for follow-up care)	Birmingham, UK Seven female and three male participants Mean age 48 years	Two main questions asked of each participant: What do you expect when you attend the nurse-led clinic (or the GP's surgery) for your drug monitoring? (predicted expectations) What would you like to happen at your monitoring visit in an ideal world? (preferences) No further details regarding questions	Expectations and preferences relate to patient satisfaction and vary with experience of health care, the chronicity of disease and individual beliefs and values No agreement about the constituents of the concept and theories need to be developed to understand the relationship between expectations and satisfaction	Empathy, specialism, information provision, technical aspects, time and continuity of care were identified as being important in the provision of care for this group of patients	Purposeful convenience sample of 10 Some participants knew the researcher in a professional capacity, which may have influenced their responses

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Beattie A, Shaw A, Kaur S, Kessler D. Primary-care patients' expectations of online cognitive behavioural therapy for depression: a qualitative study. <i>Health Expect</i> 2009; 12 :45–59 ²⁰⁹	Web of Science as part of Web of Knowledge	To explore expectations and experiences of online cognitive behavioural therapy (CBT) among primary care patients with depression, focusing on how this mode of delivery impacts on the therapeutic experience	South-west England, UK Patients recruited from five purposefully selected GP practices (according to location and deprivation/affluence) and offered up to 10 sessions of CBT, delivered through the internet by a psychologist	Pre-therapy interviews explored patients' expectations of online CBT and post-therapy interviews examined their actual experiences. Origin of interview schedules not discussed	None	Two key themes regarding expectations and experiences of online CBT were developing a virtual relationship with a therapist and the process of communicating thoughts and emotions via an online medium No strongly discernable patterns within the data regarding a relationship between participants' sociodemographic background and their expectations and experiences of online CBT	Majority of respondents female No detail of interview schedule
Beck SL. An ethnographic study of factors influencing cancer pain management in South Africa. <i>Cancer Nurse</i> 2000; 23 :91–9 ¹⁰	Web of Science as part of Web of Knowledge	To evaluate cultural and other factors influencing cancer pain management Interviews	South Africa In-depth interviews with 33 informants representing clinical and non-clinical disciplines/organisations; telephone interviews with 29 representatives of governmental and non-governmental organisations	N/A	None given	Cultural variability exists regarding cancer as a disease, pain expectations, pain tolerance and expression, and health-care practices	Ethnography. No interviews with patients

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Bellini D, Dos Santos MBF, de Paula Prisco da Cunha V, Marchini L. Patients' expectations and satisfaction of complete denture therapy and correlation with locus of control. <i>J Oral Rehabil</i> 2009; 36 :682–6 ²¹	Web of Science as part of Web of Knowledge	To test for a correlation between locus of control profiles and expectations before and satisfaction after complete denture therapy 64 volunteer patients selected from a sample of 84 Pre- and post-treatment ratings were collected. A locus of control profile was determined using a questionnaire	Brazil Dental clinics of two universities Average age 60 years; 59% women (<i>n</i> = 64)	Patients rated their expectations for aesthetic and functional results of complete denture therapy on a 10-cm visual analogue scale, using scores from 0 (worst results) to 10 (best results) For aesthetics, patients were asked to rate their expectations considering potential improvements in facial harmony and smile appearance For function, patients were asked to rate their expectations considering potential improvements in comfort during use, masticatory ability and phonetics The specific questions asked before treatment were: On this scale of 0–10, how would you score the functional benefits you expect from the treatment (mastication, comfort, phonetics, etc.)? On this scale of 0–10, how would you score the aesthetic benefits you expect from the treatment?	None stated	Expectation ratings before treatment were significantly lower than the post-treatment completion ratings, both for aesthetics ($p < 0.001$) and function ($p = 0.004$) No correlation was found between locus of control profiles and scores for expectations before and satisfaction after complete dentures	No information regarding origin or testing of expectation ratings scale

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Bostan S, Acuner T, Yilmaz G. Patient (customer) expectations in hospitals. <i>Health Policy</i> 2007; 82 : 62–70 ^{21,2}	Web of Science as part of Web of Knowledge	To measure patient expectation levels by taking patient rights into account, to develop a scale that measures patient expectations and to assess the results in terms of patient rights, patient satisfaction and quality Questionnaire survey	Trabzon city population, Turkey 396 people aged ≥ 20 years who attended hospital once or more in December 2004 50.5% male and 49.5% female	Questionnaire including expressions concerning patients' expectations While forming the expressions about the patients' expectations, a connection was established between patients' expectations and patients' rights There were 33 items (listed in the paper) concerning the patients' expectations gathered under four factors: right to receive information, joining the decisions concerning oneself and using choice right, medical services, management services Five reply options: 'I never agree' – 1 point; 'I do not agree' – 2 points; 'I am indecisive' – 3 points; 'I agree' – 4 points; 'I entirely agree' – 5 points Using Rust's hierarchy of expectation, ^{38,2} expectation levels were sequenced in five levels: possible lowest expectation level – 1–1.4 points; low expectation level – 1.5–2.4 points; minimum acceptable expectation level – 2.5–3.4 points; high expectation level – 3.5–4.4 points; and required expectation level – 4.5–5 points	Discussed the role of patient expectations in determining quality and patient satisfaction Expectations described as subjective, may change and sometimes hard to determine Adapted Rust's hierarchy of customer expectations ^{38,3} to patient expectations: (6) ideal expectation level, (5) required expectation level, (4) high expectation level, (3) minimum expectation level, (2) low expectation level, and (1) possible lowest expectation level	The level of patient expectation was high for the factor of receiving information Age, sex, education, health insurance and family income were statistically related ($p < 0.05$) to patient expectations. Women had higher expectations of receiving information. As age decreased, the expectation level increased. As education level increased, so did the expectation level. As income increased, so did the expectation level of receiving information especially and management services Current legal regulations have higher standards than the patient expectations It was interpreted that patient satisfaction was high because the level of expectation with respect to patients' rights was low	Sampling method unclear Unsure of origin of 33 items for patient expectations One city in Turkey

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Bower Baca C, Cheng EM, Spencer SS, Vassar S, Vickrey BG, for the multicentre Study of Epilepsy Surgery. Racial differences in patient expectations prior to resective epilepsy surgery. <i>Epilepsy Behav</i> 2009;15:452–5 ²¹³	Web of Science as part of Web of Knowledge	To assess the nature, range and frequency of preoperative expectations for resective epilepsy surgery, and to explore whether expectations vary across patient sociodemographic and clinical characteristics, with a particular focus on racial/ethnic differences, among a large cohort of surgical candidates across multiple US epilepsy centres	USA 396 adults and adolescents with refractory epilepsy were enrolled during a presurgical evaluation period in an observational cohort study at seven participating centres and subsequently underwent resective epilepsy surgery Mean age 37.1 years; 47.8% male ($n=391$)	At enrolment, patients responded to open-ended questions about expectations for surgical outcome. Using an iterative cutting-and-sorting technique, expectation themes were identified and ranked	None stated	Among 391 respondents, the two most frequently endorsed expectations (any rank order) were driving (62%) and job/school (43%) When only the most important (first-ranked) expectation was analysed, driving (53%) and cognition (17%) were most frequently offered Non-white patients endorsed job/school and cognition more frequently and driving less frequently than white patients (all $p \leq 0.05$), whether expectations of any order or only first-ranked expectations were included	Number in non-white subgroup was insufficient to make definite conclusions as to whether all non-white patients are homogeneous in their endorsement of specific preoperative expectations
		Seven-centre observational study of epilepsy surgery outcomes		In what ways do you feel limited by your epilepsies? What do you most hope to change as a result of this surgery? All participants ($n=565$) were asked these questions at the time of enrolment, but the analyses focused on those subjects who subsequently did undergo resective epilepsy surgery ($n=396$)			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Bramesfeld A, Klippel U, Seidel G, Schwartz FW, Dierks ML. How do patients expect the mental health service system to act? Testing the WHO responsiveness concept for its appropriateness in mental health care. <i>Soc Sci Med</i> 2007; 65 :880–9 ²¹⁴	Web of Science as part of Web of Knowledge	To test applicability of the World Health Organization's concept of responsiveness (dignity, prompt attention, autonomy, choice of health-care provider, clear communication, confidentiality, quality of basic amenities and access to social support networks) to mental health care ³⁸⁴ Focus group interviews	Hanover, Germany Five focus groups of mental health-care users Group sizes 8–14 Age range 20–78 years; 50% females	N/A	None given	Most themes concerned attention, dignity and autonomy. Results differed slightly from those of the World Health Organization Concepts of continuity and attention need widening	Exploratory study See also Bramesfeld <i>et al.</i> ²¹⁵

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Bramesfield A, Wedegärtner F, Elgei H, Bisson S. How does mental health care perform in respect to service users' expectations? Evaluating inpatient and outpatient care in Germany with the WHO responsiveness concept. <i>BMC Health Serv Res</i> 2007;7:99 ²¹⁵	Web of Science as part of Web of Knowledge	Key questions: Which aspects of responsiveness work well and which less well? Are there any differences between the responsiveness of inpatient and ambulatory health care services? What are the perceptions of responsiveness among different sociodemographic groups, in particular vulnerable groups, within a country? Which responsiveness domains are most important to people? Are these ones with good or poor performance? What is the performance of ambulatory and inpatient mental health care in the context of responsiveness? What are the main reported financial barriers and discrimination to access mental health care?	Service users in the mental health-care system in Hanover, Germany 312 people recruited (91 in inpatient care and 221 in outpatient facilities) Ratings of responsiveness in mental health care were compared with data on general health-care responsiveness in order to answer the questions posed	The World Health Organization developed and validated a questionnaire to measure responsiveness in eight domains (see next column) Responsiveness is measured on a scale ranging from 'very good' (1) to 'very poor' (5) Instrument has been detailed elsewhere, including the quality criteria in psychometric testing German version was tailored to suit mental health care by adapting its terminology, adding questions on the additional domain of continuity and attaching a section evaluating experiences with day and hostel care	The World Health Organization developed the concept of health system responsiveness as a parameter for a health-care system's ability to respond to service users' legitimate expectations of non-medical issues in mental health care Responsiveness has eight domains: dignity, autonomy, confidentiality, communication, prompt attention, social support, quality of basic amenities and choice The application of this concept to mental health care has been evaluated and proved to suit mental health service users' expectations. However, service users had additional expectations that were subsumed under a ninth category, namely continuity ^{214,385}	Confidentiality best-performing domain in inpatient and outpatient care Dignity and access to social support in inpatient care perform well However, choice of health-care provider and quality of basic amenities were the worst-performing domains in inpatient care Autonomy does not perform well in mental health care Only in the domains of dignity and clear communication do statistics differ significantly between inpatient and outpatient care Outpatient care was perceived differently depending on education and income, but not in respect to state of health Other than education, responsiveness did not differ for sociodemographic characteristics in inpatient care A cluster of three domains was rated by the majority as most important: attention, autonomy and communication	See Bramesfield <i>et al.</i> ²¹⁴ In this study the World Health Organization concept of responsiveness was applied to a mental health-care system for the first time in a standardised way Instrument would be too complicated and in-depth for routine use. It is planned that the instrument is revised and shortened for self-administration, for routine evaluation in a clinical setting

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Cash TF. Attitudes, behaviors and expectations of men seeking medical treatment for male pattern hair loss: results of a multinational survey. <i>Curr Med Res Opin</i> 2009; 25 : 1811–20 ²¹⁶	Web of Science Web of Knowledge	To characterise the concerns and self-treating efforts of men seeking medical treatment for male-pattern hair loss (MPHL) and to describe their expectations and actual experiences of a physician consultation Online survey in six countries Response rate 8.9% – 21,051/236,531 agreed to participate and be screened for eligibility Country quotas were imposed on participants, so the first 604 of the 21,051 men who agreed to participate and who were eligible completed the main part of the survey	USA, France, Germany, Spain, Japan and Republic of Korea 604 men self-identifying with MPHL (age range 25–49 years, mean age 37.1 years) 100–102 participants per country	The MPHL Patient Survey Questionnaire comprised 42 predominantly closed-ended, post-screening questions, initially developed and written in English Questionnaire was translated into the native language of each country. Professional translators were used. Questionnaires were retranslated back. Internal and external piloting was undertaken to ensure conceptual equivalence; a total of 20 pre-tests were conducted across countries Questions included expectations and experiences of men seeing a doctor about MPHL, including expected treatment outcome, degree of satisfaction with their consultative visit and reasons for dissatisfaction	None given	On a 5-point disagree–agree scale, 84% of respondents agreed that prevention of additional hair loss was important to them, and 81% agreed that although they would like to regrow their hair they would be happy to prevent further loss 78% reported that they were either likely, very likely or extremely likely to consider a treatment that stops their hair loss 46% expected a prescription for a specific medication and 41% desired a recommendation for an alternative remedy; 71% expected that a physician-prescribed treatment would surpass other treatments in effectiveness Expectations for the physician's treatment actions were met less often than was desired, resulting in dissatisfaction among a quarter of the men Dissatisfaction stemmed from lack of specific treatment recommendations (66%), unanswered questions (54%) and a perception that the doctor was uncomfortable or not interested in discussing their hair loss (52%)	Study limitations: self-identification of MPHL, reliance on respondents' recall and a lack of verification of professed future physician consultations

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Clark L, Redman PW. Mexican immigrant mothers' expectations for children's health services. <i>Western J Nurs Res</i> 2007;29:670–90 ²¹⁷	Web of Science as part of Web of Knowledge	To describe Mexican immigrant mothers' expectations and experiences with children's health-care services in the USA Ethnographic study, 5-year period Repeated semi-structured interviews with Mexican immigrant mothers of varying acculturation levels Convenience sample	CO, USA 28 women (mean age 26 years) Total of 188 interviews were conducted with the 28 participants (an average of 6.7 interviews per woman) Interviews were first conducted shortly after birth and then at various times between 1 and 19 months of age	Mother's expectations in seeking and receiving children's health-care services were topics in the semi-structured interview	Need to customise care based on patient values and expectations Theory depicts the affective evaluation process resulting from either confirmation or disconfirmation of expectations after experiencing a service. ^{3,86} In this process, an individual becomes satisfied or dissatisfied as he/she cognitively compares pre-service expectations with actual experiences The relationship between expectations and patient satisfaction with health-care services is discussed	Maternal expectations for children's health services were access and financial elements, time, cultural and linguistic expectations, provider characteristics, individualised care, understanding the health-care system, expectations for information and health education, relationship-centred health care and convenient user-friendly health care There was a shared core of expectations for both Mexican immigrant and Mexican American mothers (six out of nine categories) The three categories of expectation emphasised by the Mexican immigrant mothers and associated with lower acculturation were access and financial elements, time and cultural and linguistic aspects of care	Convenience sample

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Davidge K, Bell R, Ferguson P, Turcotte R, Wunder J, Davis AM. Patient expectations for surgical outcome in extremity soft tissue sarcoma. <i>J Surg Oncol</i> 2009; 100 :375–81 ²¹⁸	Web of Science as part of Web of Knowledge	To examine the relationship between pretreatment outcome expectations and postoperative function and health-related quality of life in patients with extremity soft-tissue sarcoma (ESTS) Retrospective cohort study	ON, Canada 157 ESTS patients (mean age 56 years; 62% male) 138 patients (88%) completed the expectations questionnaire preoperatively	Outcome expectations regarding length of recovery, complications and difficulty performing daily activities were evaluated using a self-report questionnaire prior to treatment onset Cronbach's alpha = 0.60 Therefore, outcome expectations were treated as a multidimensional construct, with each expectation being examined individually in subsequent analyses	Patients' expectations for their postoperative recovery can significantly influence health outcomes	Patients expecting a difficult recovery and patients with uncertain expectations had worse functional outcomes than patients anticipating an easy recovery Education, dispositional optimism, tumour location, American Joint Committee on Cancer (AJCC) stage and baseline function/health-related quality of life were significant predictors of patient expectations No significant relationship between patient expectations and post-operative health-related quality of life	Outcome expectations questionnaire has not been previously validated in ESTS Sample size limitations for subgroup analyses

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Dawn AG, Freedman SF, Lee PP, Emyedi LB. Parents' expectations regarding their children's eye care: interview results. <i>Am J Ophthalmol</i> 2003; 136 :797–804 ²¹⁹	Web of Science as part of Web of Knowledge	To determine a relevant set of concerns that parents express as expectations regarding their children's eye care Qualitative, cross-sectional pilot study 48/51 (94%) eligible parents agreed to participate	Duke University, NC, USA 48 interviews with parents of paediatric ophthalmology patients	From a review of the literature on patient expectations between 1966 and 2002, the 10 most commonly addressed areas of patient expectations and requests were medical information, medication/prescription, counselling/psychosocial support, diagnostic testing, referral, physical examination, health advice, outcome of surgery or treatment, therapeutic listening, waiting time These areas were the basis of the script for interviews with parents Parents were asked the following questions regarding their expectations: 1. What are the most important things you look for when choosing an eye doctor for your child? 2. Of the expectations you mentioned, which one would you say is the most important? 3. What are the main things you expect the eye doctor to do during your child's eye appointment?	None stated	35 different expectations for eye care were identified, which were further classified into six groups: communication, interpersonal manner, doctor's skill, examination and testing, logistics, other Six expectation areas most frequently identified by parents as the single 'most important' expectation: clinical competence, interaction with child, education/training, explanation in clear language, information about diagnosis and personal connection	Pilot study – small numbers Study located in tertiary, university-based care

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>4. What kinds of information do you expect to receive during your child's eye appointment?</p> <p>5. What kind of things might make you want to change the eye doctor that your child sees?</p> <p>In addition, parents were asked if they had any additional expectations regarding their child's eye care that had not been addressed by the questions</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Deisgnore A, Schmyder U. Control expectancies as predictors of psychotherapy outcome: a systematic review. <i>Br. J Clin Psychol</i> 2007; 46 :467–83 ²²⁰	Web of Science as part of Web of Knowledge	To summarise available findings from the expectancies and locus of control literature and describe some continuing methodological problems; to distinguish between specific and global therapy expectancies and focus on direct and indirect relationships between control expectancies and outcome Systematic review	Zurich, Switzerland PsyolINFO and PubMed databases were searched using keywords: 'expectancies', 'expectations', 'locus of control' and 'role expectancies'. These terms were cross-referenced with 'patient', 'client', 'psychotherapy', 'treatment' and 'outcome' 35 sources published in previous 25 years met inclusion criteria	N/A	Three main types of therapy expectancies have been linked to outcome or process variables: outcome expectancies, role expectancies and control expectancies Outcome expectancies are expectancies of improvement or expectancies of usefulness/helpfulness and describe how strongly patients believe that therapy will help them get better Role expectancies, in the psychotherapy context, correspond to patient expectancies concerning their own or their therapist's role Control expectancies are conceptually related to the locus of control concept	A modest but significant direct relationship between outcome expectancies and therapeutic improvement Studies focusing on the association between global expectancies and outcome led to rather inconsistent findings	Study is psychotherapy focused

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Egbunike JM, Shaw C, Bale S, Elwyn G, Edwards A. Understanding patient experience of out-of-hours general practitioner services in South Wales: a qualitative study. <i>Emerg Med J</i> 2008; 25 : 649–54 ²²¹	Web of Science as part of Web of Knowledge	To explore patient expectations and help-seeking behaviour in order to understand their relationship with satisfaction and experience of out-of-hours care Semi-structured in-depth telephone interviews Users of GP out-of-hours service	Gwent, South Wales, UK Six treatment centres 221 users of GP out-of-hours service invited to participate: response rate 26% (n = 58) Of the 58 responders, 35 consented to be interviewed; 30 interviews conducted before data saturation reached	Not stated	None given	Patients generally had specific expectations of their consultation and there was a mismatch between patients' expectations of the service and what the service actually provides in some specific user groups, including patients without previous experience of their illness, mothers with children < 5 years, individuals who live alone and those requiring a specialised level of care through a referral network Unmet expectations resulted in subsequent, and in some cases, multiple consultations	Sampling occurred during the summer when service use is relatively low Response rate and sample size low
Eisler T, Svensson O, Tengström A, Elmstedt E. Patient expectation and satisfaction in revision total hip arthroplasty. <i>J Arthroplasty</i> 2002; 17 :457–62 ²²²	Web of Science as part of Web of Knowledge	To examine patients' expectations before surgery and assess expectation fulfilment and relationship to satisfaction Self-administered questionnaire study; 12-month follow-up Consecutive surgery patients	No information about area of study; assume single hospital site in Stockholm, Sweden 99 surgical patients, 66 of whom were asked about their expectations; no information on reasons for loss of the 33 Mean age 70 years; 58/99 women	Item on expectations of future pain – 'none at all'/'much less'/'slightly less'/'not altered'; and walking ability – 'same as after primary hip arthroplasty'/'very much improved'/'slightly improved'/'not altered'	None given	Absence of complications predicted fulfilled expectations	No information on expectations item development or selection

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Escudero-Carretero M, Prieto-Rodríguez MA, Fernández-Fernández I, March-Cerdá JC. Expectations held by type 1 and 2 diabetes mellitus patients and their relatives: the importance of facilitating the health-care process. <i>Health Expect</i> 2007; 10 : 337–49 ²²³	Web of Science as part of Web of Knowledge	To understand the expectations held by type 1 and 2 diabetes mellitus patients and their relatives regarding the health care provided to them Qualitative, focus groups	Andalusia, Spain 31 people with diabetes recruited by health-care professionals at reference care centres Systematic non-probabilistic sampling employed	None	None	Patients and relatives voiced expectations that would improve their health and life standards. Expectations were classified, fundamentally, along two lines: health-care professionals and the health-care system and its management Regarding the health-care professionals, patients overtly demanded an understanding of their situation and flexibility or customised treatment; good manners; communication skills and abilities; sufficient, clear and meaningful information, expressed in a clear way; and acknowledgement of their know-how in treating their own diabetes Regarding the health-care system, patients' expectations focused on the system's ability to respond when required to do so, through a relevant professional, along with readily available equipment for treatment Regarding both professional health-care workers and health centres, one key expectation is receiving support	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
						<p>The expectations of people affected by type 1 diabetes focus on leading a normal life and not having their educational, labour, social and family opportunities limited by the disease</p> <p>Expectations in people with type 2 diabetes tend towards avoiding what they know has happened to other patients</p>	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Gandhi R, Davey R, Mahomed N. Patient expectations predict greater pain relief with joint arthroplasty. <i>J Arthroplasty</i> 2009; 24 :716–21 ²⁴	Web of Science as part of Web of Knowledge	To examine the relationship between patients' expectations of total joint arthroplasty and their preoperative functional status	ON, Canada Complete data on 1799/2350 (76.6%) patients undergoing primary hip or knee arthroplasty Recruitment through a single academic institution	<p>Patient expectations were determined with three survey questions under the domains of time to fully recover from surgery, level of pain expected after surgery and ability to perform usual activities</p> <p>Responses were collapsed into those with high, moderate and low expectations</p> <p>For the question of time to fully recover from surgery, high expectations was defined as ≤ 3 months; moderate expectations as 4–12 months; and low expectations as ≥ 12 months</p> <p>For the question of level of pain expected after surgery, high expectations was defined as no pain; moderate expectations as slightly to moderately painful; and low expectations as extremely painful</p> <p>For the question of ability to perform usual activities, high expectations was defined as no limitations (able to perform high-impact activities such as running, doubles, tennis or hiking); moderate expectations as slightly to moderately limited (walking a distance of 1 hour or playing golf); and low expectations as totally limited (walking a maximum of 20 minutes)</p>	<p>Studies evaluating preoperative patient expectations have shown that those with the greatest expectations of surgery demonstrate the best outcomes when undergoing heart surgery, abdominal hysterectomy and lumbar spine surgery</p> <p>Patients should have realistic expectations of surgery because fulfillment of these expectations may lead to greater patient satisfaction</p>	<p>The patients with the greatest expectations of surgery were younger, were male and had a lower body mass index</p> <p>A greater expectation of pain relief with surgery independently predicted greater reported pain relief at 1 year of follow-up, adjusted for all relevant covariates ($p < 0.05$)</p> <p>Patients with a higher body mass index have lower expectations of surgery</p>	<p>No detail regarding the origin or testing of expectation questions</p>

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Gibbons MBC, Crits-Christoph P, de la Cruz C, Barber JP, Squelard L, Gladis M. Pretreatment expectations, interpersonal functioning and symptoms in the prediction of the therapeutic alliance across supportive-expressive psychotherapy and cognitive therapy. <i>Psychother Res</i> 2003;13:59–76 ²²⁵	Web of Science as part of Web of Knowledge	To conduct a comprehensive analysis of the relationship between pretreatment characteristics and the therapeutic alliance in order to confirm previous findings; to sort out the overlap between different predictors in order to rule out alternative explanations for previous findings	Pooled database collected at a psychotherapy research centre at a US university 201 patients, of whom 141 completed an alliance inventory at session 2 and were included in the current study Of the 141, 29% participated in a protocol evaluating cognitive therapy; the rest participated in an open trial of supportive-expressive psychotherapy (patients were not randomly assigned) Mean age 37.27 years; 50% male, 49% female, 1% incomplete data	Treatment expectations form was an adaptation of a form used in the National Institute of Mental Health Treatment of Depression Collaborative Research Program ³⁶⁷ The item, 'How much improvement do you expect to experience as a result of treatment?', rated on a scale from -3 ('I expect to feel much worse') to +3 ('I expect to feel much better'), was used	Expectations about therapy and therapy outcomes may influence the therapeutic alliance	Consistent with the literature, patients who have greater expectations of improvement before therapy form stronger alliances with their therapists during treatment Greater expectations of improvement predicted a stronger alliance at session 2 only for patients treated undergoing supportive-expressive psychotherapy Expectations were associated with growth in the alliance across treatment for psychotherapy patients For patients treated with cognitive therapy, expectations of improvement predicted alliance only later in treatment at session 10 Patients who do not expect to improve from treatment form poorer alliances with their therapists, and these patients may subsequently have poorer treatment outcomes	43 patients did not complete the measure of treatment expectations because this measure was added to the assessment battery after these trials were under way Treatment expectations were rated using a single item
Glass CR, Arnkoff DB, Shapiro SJ. Expectations and preferences. <i>Psychotherapy</i> 2001;38:455–61 ²²⁷	Web of Science as part of Web of Knowledge	Review of 76 psychotherapy studies on expectations and preferences No information on process of review given	Review paper	N/A	Outcome expectations as a treatment factor: mobilisation of hope plays an important role in healing Role expectations of therapist may adversely affect therapeutic relationship	Clients' expectations for therapeutic gain were related to outcome in most studies The literature on role expectations was equivocal	Non-systematic review

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Goldschmidt D, Schmidt L, Krasnik A, Christensen U, Groenvold M. Expectations to and evaluation of a palliative home-care team as seen by patients and carers. <i>Support Cancer Care</i> 2006; 14 : 1232–40 ^{26b}	Web of Science as part of Web of Knowledge	To investigate expectations and evaluation of a palliative home-care team Prospective longitudinal study Semi-structured interviews before receiving home care and 2–4 weeks after	Copenhagen, Denmark 16/33 patients met inclusion criteria Nine patients (four men and five women; median age 69 years) and six principal informal carers (three wives, one husband and two daughters) participated in the first interviews before home conference in the participants' homes Six patients and five carers participated in the second interviews, 2–4 weeks after home conference 26 interviews conducted Interviews with two patients and one carer were conducted as pilot interview and a second interview was not planned, but data were included in the final analysis	Interview guides were based on the World Health Organization's definition of palliative care In the first interview, patients were asked to express their expectations to the home-care team The second interview was based on the participants' answers in the first interviews, i.e. questions focused on expectations described in the first interview	Researchers stated that they were not aware of any specific theories concerning patients' and carers' expectations and evaluation of palliative care; study was explorative	Patients and carers expected the team members to have specialised knowledge in palliative care and to improve their sense of security being at home. They also expected respite for carers and activities for patients The effect of expectations on satisfaction as an element of evaluation: no participants expected the home-care team to cure them from their disease, nor did any participants express discontent because the home-care team did not offer respite for carers or activities for patients	Convenience sample Interviews conducted in Danish were translated into English by a professional language consultant. Emphasis was on semantic equivalence rather than direct translation

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
González M, Escobar A, Herrera C, Garcia L, Sarasqueta C, Quintana JM, <i>et al.</i> Patient expectations in health related quality of life outcomes in total joint replacement. <i>Value Health</i> 2008; 11 : A551–2 ²²⁶	Web of Science as part of Web of Knowledge	To evaluate the relationship among patient expectations and outcomes measured by health-related quality-of-life questionnaires at 12 months after surgery in patients undergoing total joint replacement Prospective study Questionnaires while waiting for surgery and 12 months post surgery	Spain, 15 hospitals 884 patients (360 hips and 524 knees) completed both surveys	Eight questions about patients' expectations: physical–functional (5), emotional (2) and psychological expectations (1) Responses graded on a 5-point Likert scale ranging from 'no expectations' to 'a lot of expectations'. Given the skewed distribution of the response patterns these were categorised from 1 to 3 as 'no', 'quite' and 'a lot of expectations'	Abstract-only published	In all of the physical–functional expectations items patients showed statistically significant improvements in all health-related quality-of-life dimensions except for the mental component summary of the SF-12, observing an ascending gradient, so the higher the expectations before surgery the greater the improvement at 12 months post surgery Regarding the two questions about social expectations, in both the results were equal to the physical–functional expectations in all dimensions The question about psychological expectations also showed this significant improvement in all dimensions with the same ascending gradient Patient expectations before surgery were important predictors of improvement outcomes in health-related quality of life at 12 months after total hip replacement and total knee replacement	Response rates not reported

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Greenberg RP, Constatino MJ, Bruce N. Are patient expectations still relevant for psychotherapy process and outcome? <i>Clin Psychol Rev</i> 2006; 26 :657–78 ²³	Web of Science as part of Web of Knowledge	To place the expectancy issue in a historical context, to discuss the varied definitions of expectancy and to review the extant expectancy literature Review of empirical literature	No methodology stated	N/A	Expectations frequently shape our experiences and perceptions Expectations of patients about whether they are likely to benefit from psychotherapy have been shown to influence how successful the treatment will be More recent research has begun to examine the impact of expectancies on the process of therapy, such as the development of the therapeutic alliance	Patient expectations continue to be relevant and may be even more vital to the psychotherapy process than is often acknowledged Various forms of patient expectations reviewed: patient outcome expectations, patient treatment expectations, expectancy as a central factor in the psychotherapy process and outcome, clinical strategies	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Heikkinen K, Leino-Kilpi H, Hiltunen A, Johansson K, Kallonen A, Rankinen S, <i>et al.</i> Ambulatory orthopaedic surgery patients' knowledge expectations and perceptions of received knowledge. <i>J Adv Nurs</i> 2007; 60 :270–8 ²³⁰	Web of Science as part of Web of Knowledge	To compare orthopaedic ambulatory surgery patients' knowledge expectations before admission and their perceptions of received knowledge 2 weeks after discharge	Finland Population: all ambulatory surgery patients in one university hospital 200 eligible; 50 declined participation; five questionnaires had missing data Response rate 73% (145/200) From these patients, only orthopaedic patients were selected, which resulted in 120 consecutive patients who had received a preoperative education session given by a nurse Average age 45.85 years; 54% female	Hospital Patients' Knowledge Expectations scale 32-item (plus 13 subitems – total 45) instrument measuring empowering knowledge and including six knowledge subscales: biophysiological (seven items + 13 subitems), functional (seven items), experiential (three items), ethical (nine items), social (two items) and financial (four items) Content validity based on the theoretical literature as well as on statements by an expert panel	Earlier studies provide only a limited view on orthopaedic patients' knowledge expectations, and the emphasis has been on the biophysiological and functional dimensions Previous research has evaluated the amount and adequacy of functional, social, biophysiological and experiential dimensions of knowledge received by ambulatory orthopaedic patients	Patients expected more knowledge than they actually perceived that they received on all dimensions except the biophysiological They perceived that they received the least knowledge about experiential, ethical, social and financial dimensions of knowledge Knowledge expectations correlated with age and professional education; older and less educated patients expected more knowledge than younger and more educated patients Perceptions of received knowledge correlated with earlier ambulatory surgery, and both expected knowledge and perceptions of received knowledge were related to the level of basic education	Power analysis conducted to check for adequate sample size First time that this questionnaire used with this group of patients. Possible that some of the concepts might have been difficult for patients to understand. Also possible that patients were not aware of their expectations; they did not know what they could expect. Always more than 65% of patients (78/120) who answered the questions about knowledge expectations Sample drawn from only one of five hospitals in Finland
				The reliability (internal consistency) using Cronbach's alpha was 0.93 for the total 32-item scale and 0.771 (experiential)–0.953 (financial) for its subscales The expectations scale was completed before the preoperative education session, 2 weeks before ambulatory surgery It was assessed on a four-point scale (1 = 'strongly disagree' to 4 = 'strongly agree') with higher scores indicating higher levels of knowledge expectations ^{164, 388}			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Hickok JT, Roscoe JA, Morrow GR. The role of patients' expectations in the development of anticipatory nausea related to chemotherapy for cancer. <i>J Pain Symptom Manage</i> 2001; 22 : 843–50 ²³²	Web of Science as part of Web of Knowledge	To examine the role of patients' expectations of nausea in the development of anticipatory nausea in cancer patients Descriptive, self-completed questionnaire study	Patients attending University of Rochester Cancer Centre, NY, USA, two affiliated local hospitals and a private oncology clinic 70 patients provided complete data; response rate not reported As only seven participants were male the results were reported only for the 63 women; mean age 52.5 years	Questionnaire adapted by researchers, asking patients whether they expected to experience adverse effects of chemotherapy (including nausea) on a rating scale anchored by 1 = 'I am certain I will not have this' to 5 = 'I am certain I will have this'	Hypothesis that greater pretreatment expectations influence actual experience of anticipatory nausea	Expectations of nausea significantly predicted experience of anticipatory nausea	Small sample; unrepresentative Response rates not given
Jackson JL, Kiroenke K. The effect of unmet expectations among adults presenting with physical symptoms. <i>Ann Intern Med</i> 2001; 134 :889–97 ²³³	Web of Science as part of Web of Knowledge	To assess the prevalence and effect of unmet expectations in patients presenting with physical symptoms Prospective primary care patient and physician survey Self-administered questionnaires Data collection nested within two clinical trials in the same clinic	Medical Centre, Washington, DC 750 adults consulting for physical symptoms and their physicians Patients consulting completed a pre-visit questionnaire immediately before, a post-visit questionnaire immediately afterwards and a 2-week follow-up questionnaire. Physicians also completed questionnaires Numbers and response of doctors not given Patient response rates at pre and immediate post visit not given; 84% response at 2 weeks Mean age 55 years, 52% female	'Additional questions' to health status and satisfaction assessed expectations/post expectations – about diagnosis, prognosis, prescription, test, referral, other clinical action	Brief reference to broad categories of expectations – information, support, medical diagnosis or treatment	Met expectations associated with more satisfied patients in relation to patient care and less worry about serious illness	Nested study within two trials in single clinic Inadequate information on response No details given of process of question development or testing

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Janssen C, Ommen O, Pfaff H. Combining patient satisfaction, fulfilment of expectations and importance – an integrative approach in quality assurance. <i>Eur J Public Health</i> 2005;15(Suppl. 1):139–40 ²³¹	Web of Science as part of Web of Knowledge	To introduce an integrative concept of measuring patient satisfaction with hospital care Written questionnaire	Cologne, Germany 4649 patients who had been treated in five hospitals Response rate 63% (n=2539)	Questionnaire had questions about the importance (I) of fulfilment of expectations (E) of and satisfaction (S) with non-medical performance, organisation of station, physicians, nurses, visit, medical treatment, information, involvement in treatment Importance, fulfilment of expectations and satisfaction (IES) was computed as: $IES = \text{Sum of } [I/(E+S)]$ where n is a certain performance, computed on an individual level	Satisfaction is a result of the combination of expectations and the subjective evaluation of a certain performance	IES seemed a theoretical and empirical way to measure patient satisfaction with hospital stay More research to analyse validity and reliability of IES	European Public Health Association conference abstract The response rate quoted in the abstract is incorrect according to the number of patients sent the questionnaire (n=4649) and the return rate (n=2539), which would give a response rate of 55%

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Jones F, Harris P, Waller H, Coggins A. Adherence to an exercise prescription scheme: the role of expectations, stage self-efficacy, stage of change and psychological well-being. <i>Br J Health Psych</i> 2005; 10 : 359–78 ²³⁴	Web of Science as part of Knowledge	To investigate the role of patient expectations, self-efficacy, stage of change and psychological well-being in adherence to a 12-week course of gym-based exercise. Questionnaires completed pre-exercise programme and at completion at 12 weeks	Seven different sport centres, Hertfordshire, England, UK 152 participants (64 men and 88 women) referred to the exercise programme over a 2-year period 119/152 participants attended their local gym for an initial assessment and completed a first questionnaire (six sets of data were removed from analysis as responses suggested a misunderstanding of the scheme's goals); 77 completed a second questionnaire	At both time 1 and time 2, participants were asked to rate on 7-point scales how they 'currently feel' on 12 dimensions (e.g. healthy/unhealthy, stressed/not stressed, lacking in confidence/confident). These measures were based on previous research At time 1 only, respondents were asked to rate how they 'expected to feel at the end of 12 weeks of exercise' according to the above dimensions Using principal component analysis (PCA), four scales were formed: (1) health and fitness now scales, (2) personal development now scales, (3) health and fitness in 12 weeks scale, and (4) personal development in 12 weeks scale Time 1 and time 2 scores were used to give a measure of expectations of change for (1) health and fitness and (2) personal development	Bandura's ³⁰ (1986) theory of self-efficacy and its role in predicting health behaviour Potential negative impact of high expectations 'False hope syndrome' is a phenomenon described by Polivy and Herman; ³⁸⁹ people attach themselves to unrealistic goals that inevitably fail Stress can also be an important predictor of exercise behaviour	Participants typically had high expectations of the benefits that they would gain from the scheme There was a non-significant tendency for dropouts to have higher expectations and poorer psychological well-being Self-efficacy did not differentiate completers from dropouts Those who completed the course had more modest expectations of change and came closer to achieving these expected changes than those who dropped out	Intervention was spread across a number of locations and included a large number of staff based at different health centres Large amount of missing data on some variables Difficulty in receiving completed questionnaires at second time point when participants had dropped out of the scheme and had ceased attending sports centres. Therefore, findings at time 2 for dropouts may not be applicable to all who failed to complete the scheme

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Joyce AS, Ogrodniczuk JS, Piper WE, McCallum M. The alliance as mediator of expectancy effects in short-term individual therapy. <i>J Consult Clin Psychol</i> 2003;7:672-9 ²⁵	Web of Science as part of Web of Knowledge	To investigate the hypothesis that the therapeutic alliance mediates the relationship between pre-therapy expectancy of improvement and psychotherapy outcome Data drawn from a comparative trial of two forms of short-term, time-limited individual psychotherapy	Psychiatric Treatment Clinic, University of Alberta Hospital, AB, Canada 258 patients referred to the study Consenting patients were matched in pairs on a range of variables. Matched pairs were randomly assigned to an interpretive or a supportive approach to individual therapy and to one of eight therapists 69 patients (26.7%) did not proceed to therapy; 27 dropped out prematurely; 72 matched pairs completed each form of therapy; 144 therapy completers comprised the study sample (77 matched pairs) Average age 34 years; 61% female	Measure of expectancy was based on an individualised assessment of target objectives The patient provided three ratings for each target objective at pre-therapy: 1. The severity of disturbance associated with the complaint (a 5-point Likert scale ranging from 1 = 'slight severity' to 5 = 'extreme severity') 2. The relative importance of each target objective (a 5-point Likert scale ranging from 1 = 'slight importance' to 5 = 'extreme importance') 3. The expected improvement for each objective as a function of treatment (an 11-point Likert scale ranging from 1 = 'extreme worsening' to 11 = 'extreme improvement') The pre-therapy rating of expected improvement, averaged across objectives, served as a measure of patient outcome expectancy	The simple act of deciding to seek treatment implies concomitant expectations for improvement and is associated with significant symptom relief An extreme view has been argued that gain from therapy is principally contingent on the patient's expectancy of benefit. A more moderate view regards expectancies as one of the common factors associated with therapy outcome Expectancy factors include hope and placebo effects It is an established fact that expectancies influence therapy outcome, but how this occurs has not been empirically specified	Patient outcome expectancy was directly associated with the therapeutic alliance as rated by the patient or the therapist and was also directly associated with treatment outcome assessed by three different sources The therapeutic alliance served to mediate the effect of patient outcome expectancy on therapy benefit Convergent results supported the validity of the observed relationships between outcome expectancy, alliance and therapy benefit When rated from the perspective of either the patient or the therapist, alliance accounted for one-third of the direct impact of expectancy on outcome Although important, expectancies are only one of many variables implicated in the psychotherapy change process	Details of the comparative trial published elsewhere Assessment of patient outcome expectancies occurred before the first meeting with the therapist. This did not allow for modification as a function of their initial experience with the therapist Expectancy measure was an aggregate of single-item ratings for each target objective. Authors believed this to have better reliability than single items. However, a standardised, multidimensional measure of expectancy with strong psychometric properties may have produced more substantial effects

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kadzielski J, Malhotra LR, Zurakowski D, Lee S-GP, Jupiter JB, Ring D. Evaluation of preoperative expectations and patient satisfaction after carpal tunnel release. <i>J Hand Surg</i> 2008; 33A :1783–8 ²⁶	Web of Science as part of Web of Knowledge	To test the hypothesis that preoperative expectations affect postoperative satisfaction and arm-specific, self-reported health status after elective carpal tunnel release Prospective study Questionnaires completed before surgery and 6 months after surgery	Boston, MA, USA 74 enrolled patients; 49/74 patients completed the study; authors accounted for the 25 non-responders Average age 59 years; 23 men, 26 women	The DASH (Disability of the Arm, Shoulder and Hand) questionnaire was modified to assess expectations regarding how much patients expected surgery to help with each symptom or dysfunction (the Preop Expectations Score) and to assess the degree to which surgery met expectations regarding each symptom and dysfunction (the Postop Met Expectations Score) and the degree to which surgery helped relieve each symptom or dysfunction (the Postop Help Score) Scores were scaled using the same algorithm as in the DASH questionnaire: scores ranged from 0 to 100, with 0 being the lowest and 100 being the highest level	High but realistic expectations are associated with greater patient satisfaction and improved outcomes after surgery High expectations may reflect a general optimism that might enhance both recovery and the perception of the final result	Preoperative expectations did not correlate with patient satisfaction or postoperative DASH scores Multivariable analyses determined that patient satisfaction was best predicted by fulfillment of expectations (Postop Help Score alone, accounting for 41% of the variance in scores) and postoperative DASH scores were predicted by a combination of Postop Met Expectations Score and the LOT (Life Orientation Test) score (accounting for 31% of the variance in scores)	New instruments for measurement of expectations and achievement of treatment goals were devised and these have not been validated Small sample size; high attrition rate
Kalaokatlani D, Cherkin DC, Sherman KJ, Koepsell TD, Deyo RA. Lessons from a trial of acupuncture and massage for low back pain. Patient expectations and treatment effects. <i>Spine</i> 2001; 26 :1418–24 ²⁷	Web of Science as part of Web of Knowledge	To evaluate the association between a patient's expectation for benefit from a specific treatment and improved functional outcome Randomised controlled trial of patients with chronic low back pain who received acupuncture or massage; 10-week follow-up Telephone interviews	Group Health Cooperative of Puget Sound (Health Maintenance Organisation), Seattle, WA, USA Patients invited to participate if had back pain 6 weeks after first consultation 262 people enrolled; 249 completed follow-up telephone interview Baseline response rates not given Mean age 44 years; 63% female	Four measures of expectations defined for the study – treatment benefit, relative expectation, average expectation for treatment benefit, general expectation regarding prognosis	Brief reference to expectations of treatment influencing outcomes and the potential role of patient expectations in the placebo effect	Improved function was observed for significantly more of the patients with higher than with lower expectations for their treatment	Baseline response rates not given No references for or details of how questions constructed or tested

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kapoor S, Shaw WS, Pransky G, Patterson W. Initial patient and clinician expectations of return to work after acute onset of work-related low back pain. <i>J Occup Environ Med</i> 2006; 48 :1173–80 ²³⁸	Web of Science as part of Web of Knowledge	To compare patient and provider expectations of return to work (RTW) after acute onset of low back pain Prospective cohort study of acute low back pain Patient self-report questionnaire completed before clinician evaluation Clinicians completed a questionnaire detailing initial impressions and RTW prognosis after evaluation	New England, USA Subsample of 300 drawn from a prospective cohort of 568 patients (183 female and 385 male) who filed workers' compensation claims and sought treatment for acute, work-related low back pain at one of eight community-based occupational health clinics The subsample of 300 workers (91 female and 209 male) was identified as those unable to resume full-duty work Median age 35 years	Patient questionnaire: Expectation for RTW was the response to a single item assessing the likelihood of returning to normal work within 4 weeks, measured on a 5-point scale from 'definitely' to 'definitely not': 'Do you think that you will be able to do your regular job, without any restrictions, 4 weeks from now?' Clinician questionnaire: Expectation for RTW was the estimated number of days before a return to regular work without restrictions	Expectations have been shown to independently predict recovery	Clinician and patient expectations were weakly correlated and both were predictive of actual RTW outcomes Patient expectations were associated with differences in pain, mood, previous back pain, job demands, functional limitation and marital status Even before treatment, patients may form a negative expectation for RTW that is associated with a longer duration of work absence	One-centre study Patients' expectation for RTW was analysed as a single dichotomous variable

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Kumar RN, Kirking DM, Hass SL, Vinokur AD, Taylor SD, Atkinson MJ, McKercher PL. The association of consumer expectations, experiences and satisfaction with newly prescribed medications. <i>Qual Life Res</i> 2007;16:1127–36 ²³⁹	Web of Science as part of Web of Knowledge	To examine the association between medication expectations and subsequent experience and treatment satisfaction and intention to continue using the medication Short-term longitudinal study with two surveys administered to each patient a month apart	MI, USA Patients prescribed a new medication were recruited in pharmacies First survey was completed before starting new drug therapy; 450/616 (73% response rate); 420 initial usable surveys; 344 usable follow-up responses Mean age 50 years; 65% female	Medication-related expectations were evaluated at baseline according to four domains: effectiveness, side effects, convenience of use and overall expectations of the medication The second questionnaire captured information regarding experience and satisfaction with the new medication using items measuring the same four domains and their intention to continue therapy The expectations and experience scales used the same general items as the previously developed Treatment Satisfaction Questionnaire for Medications (TSQM), with the wording modified as appropriate for each of the two new constructs, i.e. expectations and experiences The expectations and experiences scales were created using a Delphi technique with five social scientists (four of whom were also pharmacists) and one research psychologist. All item changes were unanimously approved. Final modifications to the instrument were made based on pilot tests conducted with a convenience sample of 20 individuals	Patients' satisfaction with their medication experience is thought to be heavily influenced by initial consumer expectations regarding the medication. Expectations are based on patients' beliefs about the anticipated effects of a prescribed medication. The medication experience is the consumer's assessment of the medication effects The discrepancy between initial expectations and later experience produces disconfirmation. The probability of encountering disconfirmation is greatest with new medications, before the patient has an opportunity to adjust expectations based on experience	Analysis of variance results showed that, although expectations and experience with a new medication both impact satisfaction significantly, there was no interaction effect The highest satisfaction score was observed in consumers with positive expectations and experiences, followed by those with positive experiences and negative expectations. Consumers with positive expectations but negative experiences ranked third. The lowest satisfaction score was found in consumers with negative expectations and experiences Experiences were more strongly correlated with satisfaction scores than with expectations In the structural equation modelling (SEM) model, expectation scores were not associated with experience (path coefficient = 0.10) and satisfaction (path coefficient = 0.02, not statistically significant, NS)	Non-random sample \$25 incentive used in pharmacies may have biased participants Non-response bias not detected using demographic characteristics and expectation scores

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Raw domain scores were calculated using a composite score (summing the obtained scores of each item within the domain). The raw domain scores were transformed so that their possible scores ranged from 0 to 100, with higher scores indicating more positive perceptions</p> <p>Psychometric properties of the scales were tested through a confirmatory factor analysis. Results showed that the psychometric performance of the three scales (expectations, experience and satisfaction) demonstrated acceptable reliability. Internal consistency (Cronbach's alpha) results were high</p>	<p>Oliver's expectancy disconfirmation model¹⁶ has been widely used to explain the association of expectations and experience with product/service-related satisfaction. Some studies have concluded that satisfaction is highly and positively impacted by expectations being met and positive disconfirmation (more positive experience relative to expectations). However, other studies have shown that positive disconfirmation has not always generated increased satisfaction levels. Furthermore, it has also been shown that the construct of expectations being met is not always important in determining satisfaction</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lee SJ, Loberiza FR, Rizzo JD, Soiffer RJ, Antin JH, Weeks JC. Optimistic expectations and survival after hematopoietic stem cell transplantation. <i>Biol Blood Marrow Transplant</i> 2003;9:389–96 ²⁴⁰	Web of Science as part of Web of Knowledge	To determine if optimistic pre-transplantation expectations are associated with improved outcomes after haematopoietic stem cell transplantation (HSCCT) after controlling for known predictors of survival	Boston, MA, USA 313/458 (68%) baseline surveys were returned and evaluable; 186 responders had both baseline and 6-month data available Responders differed from non-responders as they were more likely to be Caucasian and older Median age 47 years (optimistic group) and 46 years (less optimistic group); 52% male	Pre-transplantation expectations for treatment success were classified a priori according to the response to two questions: 'I am optimistic that my transplant will go well' and 'If anything can go wrong with my transplant, it will' Patients responded using a 5-point Likert scale: 'strongly disagree', 'somewhat disagree', 'neutral', 'somewhat agree' or 'strongly agree' Patients who agreed strongly with the first statement and disagreed strongly with the second statement were considered to have high or more optimistic expectations than all other combinations of responses Before transplantation, expectations for several measures of recovery were collected from patients Follow-up questionnaires did not readdress expectations for transplantation outcomes	The relationship between expectations and subsequent health outcomes is controversial	217 (69%) patients strongly agreed with the positive statement, 'I am optimistic that my transplant will go well', whereas 154 (49%) strongly disagreed with the negative statement, 'If anything can go wrong with my transplant it will' 138 (44%) patients were classified as having more optimistic expectations whereas 175 (56%) were considered to have less optimistic expectations Patients with higher expectations were more likely to strongly agree that they felt well informed about the risks and benefits of transplantation (69% vs 50%; $p = 0.008$) Patients with higher expectations were more likely to be married or living with a partner Before transplantation, patients with higher expectations that the transplant procedure would go well had better mental and emotional functioning but a similar physical status and medical condition to those of patients with less optimistic expectations	Limitation is that standardised measures of dispositional optimism not used Given that 44% of the study population provided the most optimistic responses for both questions, the measure suffers from a ceiling effect

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lindsay GM, Smith N, Hanlon P, Wheatley DJ. Coronary artery disease patients' perception of their health and expectations of benefit following coronary artery bypass grafting. <i>J Adv Nurs</i> 2000; 32 :1412–21 ²⁴¹	Web of Science as part of Web of Knowledge	Exploration of impact of coronary disease on health and expectations of benefit Qualitative patient interview study	Glasgow, Scotland, UK 214 patients interviewed pre and 1 year post surgery Mean age 58.19 years; 79% male Recruitment process and response rate not described		Refers to diverse literature differentiating between patients' wants and predictions of outcome; anticipations and hopes. The authors comment that such distinctions hinders understanding of the concept	In the first 2 months after transplantation, optimistic expectations were associated with better survival (92% vs 84%); relative risk for mortality 0.45, 95% CI 0.22 to 0.92; $p=0.03$, controlling for other physical and mental characteristics. However, by 6 months post transplantation, survival and quality of life were indistinguishable between patients with initially higher and lower expectations Data suggest an association between more optimistic expectations and early survival following HSCT, but this association is not present by 6 months post transplantation	Exploratory study only; no details of sample selection and response given Little conceptual underpinning

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lurie JD, Berven SH, Gibson-Chambers J, Tosteson T, Tosteson A, Hu SS, <i>et al.</i> Patient preferences and expectations for care. Determinants in patients with lumbar intervertebral disc herniation. <i>Spine</i> 2008; 33 :2663–8 ²⁴²	Web of Science as part of Web of Knowledge	To describe the baseline characteristics of patients with a diagnosis of intervertebral disc herniation who had different treatment preferences and the relationship of specific expectations to those preferences Prospective observational cohort study	USA Adult patients with radicular pain for at least 6 weeks with a positive nerve root tension sign and/or neurological deficit and a confirmatory cross-section imaging study demonstrating intervertebral disc herniation at a level and side corresponding to their symptoms. All participants were deemed surgical candidates by the enrolling surgeon	Specific questions used to measure patient preferences and expectations are available online through Articles Plus Patient expectations were assessed using measures of expected benefit from surgery for symptoms and function, expected benefit from non-surgery for symptoms and function, expected benefit from non-surgery for symptoms and function, expected harm from surgery and expected harm from non-surgery These expectations were quantified on a 5-point scale as 'no chance', 'small chance', 'moderate chance', 'big chance' or 'certain' (100%) Symptoms are defined as pain, stiffness, swelling, numbness and weakness Function is defined as work at usual job and pursuit of usual activities Expected net benefit from surgery and non-surgery is a composite measure of expectations, which added the expected benefit for symptoms and function and subtracted the expected harm Net expected advantage from surgery was an additional composite measure defined as the expected net benefit from surgery minus the expected net benefit from non-operative treatment	Patient expectations about treatment effectiveness have been shown to have an important – though complex – relationship with their clinical outcomes and satisfaction with treatment Unrealistically high expectations have been thought to be responsible for unmet expectations and decreased patient satisfaction Alternatively, the expectation of benefit is felt to result in improvement in symptoms and function through placebo effects, increased motivation for improvement and increased compliance with treatment plans	Patients with a preference for non-operative care had about equal expectations for the benefit of operative and non-operative care but anticipated higher risk from surgery The group unsure of their preferences had similar expectations for harm from surgery and non-operative care but expected greater benefit from surgery The group preferring surgery not only had high expectations of benefit from surgery but actually considered harm from non-operative treatment to be more likely than benefit Each of the four dimensions of expectation was a significant independent predictor of treatment preference, with the best predictor being the expected benefit of non-operative treatment. The variable net expected advantage from surgery, which is a composite of all four of the expectation parameters, is a very strong predictor of preference Patients' expectations, particularly regarding the benefit of non-operative treatment, are the primary determinant of surgery preference among patients with lumbar intervertebral disc herniation	SPORT – large multicentre clinical trial described in detail elsewhere Some aspects of the patients' risk/benefit analysis remained uncaptured by the expectations questions asked

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				Expectations optimism is a composite measure of the total benefit expected from operative and non-operative care minus the total harm expected from operative and non-operative care		Demographics, functional status and previous treatment experience had significant associations with patients' expectations and preferences. In general, less educated patients with greater disability, with a longer duration of symptoms and who reported that previous non-operative treatments had been ineffective had lower overall expectations optimism but higher relative expectations for surgery	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Lytsy P, Westerling R. Patient expectations on lipid-lowering drugs. <i>Patient Educ Couns</i> 2007; 67 :143–50 ²⁴³	Web of Science as part of Web of Knowledge	To assess expectations of effect when using statins in a treatment population; to examine factors, including history and concurrent risk of coronary heart disease, associated with a higher and lower treatment belief Cross-sectional study Postal questionnaire 1000 postal questionnaires distributed to every pharmacy ($n=59$) within two counties in central Sweden. All questionnaires returned within 1 month were analysed	Sweden 1195 patients were invited to participate; 214 patients declined; 979 questionnaires were handed out (one pharmacy failed to distribute their questionnaires) 829 patients returned questionnaires (response rate 829/1195 = 69.4%) Average age 64.9 years; 54% male	Expected treatment benefit was used as outcome measurement Key questions: 1. Imagine that 1000 individuals, with a similar health status as yours, receive the same lipid-lowering treatment as you for 5 years. How many of these patients do you believe would not suffer a heart attack compared with if they did not receive treatment? Replies were given as a number between 0 and 1000 This question aimed to investigate the expected effect in general, based on each individual's medical circumstances 2. What is the chance that your treatment will be 'beneficial' in terms of preventing heart attack or angina (i) within a year, (ii) within 5 years, or (iii) within 10 years? This question aimed to explore beliefs in the individual treatment. Patients were asked to assess their expectations on a 7-point Likert scale in which the lowest number represented 'not likely' and the highest number a 'very likely' of beneficial effect	Published data are limited on what patients expect from their treatment in terms of benefit and what influences belief in preventive pharmacological treatment despite its hypothesised essential impact on adherence	The average number of patients expected to benefit from the treatment during a 5-year treatment period was believed to be 531/1000 (53.1%) This overestimation of effect is likely to be a reflection of the patients' wish for an effective treatment. In this case the exaggerated expectations are a form of bounded rationality, i.e. a condition closely related to decision-making in which emotions tend to over-rule rationality Patients with a university-level education had a significantly lower expectation than patients with other education ($p<0.01$) In general, patients had a positive expectation of their own treatment Medical history of coronary heart disease did not affect treatment expectations Patients with a high risk of cardiovascular disease reported a slightly lower expectation of the treatment effect at a 10-year perspective ($p<0.01$), but not at shorter time perspectives	Patients with poor compliance are likely to be under-represented in this study Results based on self-reported data Survey outcome questions had not been used in previous research. No discussion of origin of questions

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
McCarthy SC, Lyons AC, Weinman J, Talbot R, Purnell D. Do expectations influence recovery from oral surgery? An illness representation approach. <i>Psychol Health</i> 2003;18: 109–26 ²⁴	Web of Science as part of Web of Knowledge	To illustrate that Leventhal <i>et al.</i> 's self-regulatory model ³⁰ is a useful theoretical framework to test the predictive value of preoperative expectations in recovery from oral surgery Prospective questionnaire study 101 participants undergoing oral surgery Data collected at three time points: immediately before and after surgery and 7 days later	Warwick, UK Patients selected from surgical waiting list for third molar extractions, conducted under general anaesthetic at a day surgery centre based at a general hospital 104 patients met inclusion criteria; three declined; 86 (85.1%) completed the questionnaire immediately after surgery; 98 (97.0%) completed the follow-up questionnaire (telephone) Mean age 27.3 years; 69 (68.3%) women, 32 (31.7%) men	Preoperative expectations: a modified version of the Illness Perception Questionnaire (IPQ) ³⁰ was used Subscales: Symptom identity: 26 symptoms based on qualitative research on third molar extractions but also more general symptoms of malaise. Participants endorsed whether or not they expected to experience each symptom, and rated the anticipated severity of each symptom on a 7-point Likert scale ranging from mild to severe Timeline: Four items assessed the anticipated length of recovery. Five response choices from strongly agree to strongly disagree Consequences: Seven statements assessed patients' expectations that undergoing this operation would affect their daily activities, social life, mood, finances, the way they see themselves and they way others see them and their views on the seriousness of the operation. Five response choices from 'strongly agree' to 'strongly disagree'	Several studies have shown that specific preoperative expectations can predict psychological and functional recovery in major and minor surgery, typically predicting 25–35% of the variance in surgical outcomes ³² A number of narrow categories of preoperative expectations have been used in previous studies: expected pain intensity after surgery; expected time taken to return to normal functioning; self-efficacy expectations such as expected confidence in attempting mobility after surgery or expectations of treatment efficacy, future survival and likely health outcomes This study applies Leventhal <i>et al.</i> 's self-regulatory model ³⁰ to inform the collection of preoperative expectations	Preoperative expectations of treatment predicted symptom severity after surgery; timeline expectations predicted return to work and expectations that recovery could be controlled predicted quality of healing Preoperative expectations were in general unrelated to measures of preoperative state and trait anxiety, suggesting that expectations may be a separate construct to anxiety Overall, participants' expectations were more predictive of recovery measures than medical factors	Statistical power considered

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Cure/control: Eight items assessed a range of preoperative expectations, including control of symptoms and speed of recovery. Five response choices from 'strongly agree' to 'strongly disagree'.</p> <p>As the IPQ was modified, preliminary analyses were undertaken to examine the reliability of the subscales. Correlations confirmed that the various subscales of the expectation questionnaire correlated with each other in line with the IPQ, with the consequence subscale correlating with the symptom severity and timeline subscales, and the cure/control subscale remaining independent of the other subscales.</p> <p>The cure/control subscale did not reach an acceptable level of internal reliability (Cronbach's alpha = 0.57)</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mancuso CA, Rincon M, McCulloch CE, Charlson ME. Self-efficacy, depressive symptoms, and patients' expectations predict outcomes in asthma. <i>Med Care</i> 2001; 39 :1326–38 ²⁴⁶	Web of Science as part of Web of Knowledge	To determine if asthma self-efficacy, depressive symptoms and unrealistic expectations predict urgent-care use and change in health-related quality of life Prospective cohort study	Adult attenders in primary care internal medicine practice in New York City, NY, USA 224 patients followed up out of 588 eligible; 23.8-month follow-up Mean age 41 years; 83% female	Open-ended question embedded within structured questionnaire: 'What do you expect from your asthma treatment?'	None given	Lower asthma self-efficacy, more depressive symptoms and unrealistic expectations predicted worse asthma outcomes	Unrepresentative sample Open-ended expectations question used

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Mancuso CA, Jout J, Salvati EA, Sculco TP. Fulfilment of patients' expectations for total hip arthroplasty. <i>J Bone Joint Surg Am</i> 2009; 91 :2073–8 ²⁴⁵	Web of Science Web of Knowledge	To determine the proportion of expectations that were fulfilled following total hip arthroplasty as well as how the fulfilment of expectations relates to patient and clinical characteristics Longitudinal follow-up survey Telephone follow-up interview approximately 4 years after surgery; five attempts were made to contact patients for the telephone follow-up at different times of the day 885 patients from the preoperative study had a total hip arthroplasty; 487 were contacted for the present longitudinal follow-up. Compared with those contacted, those who were not contacted were most likely to be men (49% compared with 42%; $p=0.03$) and to have been younger at the time of surgery (mean age 63 years compared with 67 years; $p<0.0001$)	Six orthopaedic surgery practices, New York, NY, USA 405/487 contacted patients were included in this analysis; the excluded patients were older (mean age 73 years compared with 66 years; $p<0.0001$) Mean age 66 years; 58% female	Hospital for Special Surgery Hip Replacement Expectations Survey was completed in the primary research, a validated questionnaire measuring 18 expectations for symptom relief and improvement in physical function and psychological well-being In this study, 4 years later, patients were told what expectations they had cited preoperatively and were asked to what extent each expectation was now fulfilled (completely, somewhat or not at all)	Preoperative expectations motivate patients to undergo arthroplasty, and postoperative fulfilment of expectations is one indicator of whether or not the goals of surgery have been achieved	Patients had a spectrum of expectations related to physical and psychological health. The most common expectation was to improve walking (99%) and the least common was to be employed for monetary reimbursement (42%) 43% patients reported that all of their expectations had been fulfilled completely; 32% reported that all of their expectations had been fulfilled somewhat For the entire sample, the mean proportion of expectations that had been fulfilled completely was 87% Patients who were younger, who were employed, who had a body mass index $<35\text{kg/m}^2$, who did not have complications, who did not have a postoperative limp and who had better preoperative and postoperative Lower Limb Core scores had a greater proportion of expectations fulfilled ($p\leq0.05$) A better postoperative Lower Limb Core score was most closely associated with the fulfilment of expectations following total hip arthroplasty	Not all eligible patients were contacted for follow-up

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Manthorpe J, Clough R, Cornes M, Bright L, Moriarty J, Iliffe S, OPRI (Older People Researching Social Issues). Four years on: the impact of the National Service Framework for Older People on the experiences, expectations and views of older people. <i>Age Ageing</i> 2007; 36 : 501–7 ²⁴⁷	Web of Science as part of Web of Knowledge	To evaluate the impact of the National Service Framework for Older People on the experiences and expectations of older people, 4 years into its 10-year programme	England, UK 10 purposively selected locations: urban and rural areas with diverse populations, covering 40 NHS trusts and 10 local authorities	None stated	None	<p>Not having a postoperative limp was independent of the postoperative Lower Limb Core score, indicating that the impact of a limp is greater than its manifestation as a physical disability</p> <p>Better preoperative status was also an independent predictor, indicating that patient expectations are more likely to be fulfilled if the patient is not the most severely impaired at the time of surgery</p>	<p>Qualitative data produced that represented older people's experiences of health and social services in relation to knowledge, identity and personalisation</p> <p>Expectations mentioned briefly</p>

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Meijerink HJ, Brokelman RBG, van Loon CJ, van Kampen A, de Waal Malefijt MC. Surgeon's expectations do not predict the outcome of a total knee arthroplasty. <i>Arch Orthop Trauma Surg</i> 2009; 129 :1361–5 ²⁴⁸	Web of Science as part of Web of Knowledge	To investigate if the perioperative expectations of the surgeon predicted the outcome of a total knee arthroplasty Prospective study Preoperatively, the difficulty of the procedure was assessed by the surgeon; immediately postoperatively, the surgeon rated his satisfaction with the procedure; after a mean of 1 year, the surgeon rated his satisfaction with the result of the total knee arthroplasty in the outpatient department Knee Society Clinical Rating System (KSCRS) was determined by an independent observer	Netherlands 53 primary total knee arthroplasties implanted in 51 patients, undertaken by two surgeons Mean age 67 years; 15 men, 36 women No patient lost to follow-up	Preoperatively, assessment of the difficulty of the total knee arthroplasty procedure was described by the surgeon on a 100-mm visual analogue scale, with 0 mm indicating a very easy procedure to 100 mm indicating a very difficult procedure	None	The Spearman's correlation coefficients between the preoperative difficulty assessment, the immediate postoperative satisfaction assessment and the outcome measurement after 1 year were all very poor (–0.01 to 0.23)	Recruitment and sampling procedures not detailed Small patient numbers Interobserver variability between the surgeons' assessments was not determined

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Meyer-Read EJ, Reeve KR, Wadman MC, Mullenman RL, Tran TP. Patient expectation in a freestanding emergency department. <i>Ann Emerg Med</i> 2008; 52 : S112–3 ²⁴⁹	Web of Science as part of Web of Knowledge	To conduct one of the first comprehensive patient expectation surveys at a suburban freestanding emergency department (FSED)	University of Nebraska Medical Center, Omaha, NE, USA Outpatient adults, 19+ years 299 patients approached; 237 eligible; 227/237 accepted surveys; 162 surveys returned (68.4% capture rate) Median age 40 years; 31.9% male	43-question survey of patient expectations concerning staff-related attributes, nursing attributes, throughput variables Responses using a 5-point Likert scale (1 = 'not at all important', 2 = 'somewhat unimportant', 3 = 'no opinion', 4 = 'somewhat important', 5 = 'extremely important')	None	73/162 no preference for a particular type of health provider; of those who did express a preference, 93.3% preferred to be seen by a staff physician Expectations for various wait times were consistently short: 13.8 min (9.0–15.4) for wait in the waiting room, 23.4 min (22.7–25.9) for laboratory testing, 31.3 min (29.7–33.0) for special imaging studies, and 64.0 min (59.2–65.6) for the total visit A higher proportion of patients rated seeing a competent physician as 'extremely important' than rated seeing a caring physician ($p < 0.001$) Other top attributes that received the 'extremely important' rating were having a clear explanation of the condition, treatment facility cleanliness and having a say in the care	Convenience sample Conference abstract

Reference	Source	Main study aim and design	Measure of expectations used any evidence of validity, reliability				
			Setting and participants	Theoretical underpinning	Key findings	Comments	
Mondloch MV, Cole DC, Frank JW. Does how you do depend on how you think you'll do? A systematic review of the evidence for a relation between patients' recovery expectations and health outcomes. <i>Can Med Assoc J</i> 2001; 165 :174–9 ²⁵⁰	Web of Science as part of Web of Knowledge	To undertake a systematic review of the evidence for a relation between patients' recovery expectations and health outcomes	1243 titles or abstracts identified from MEDLINE; 93 full-text articles retrieved; 41 met the relevance criteria, plus four papers identified from other sources; all assessed for quality (case definition; patient selection; follow-up extent and length; cross-sectional or follow-up study; outcome criteria used; clear description of instrument used to measure recovery and expectations; and type of analysis)	N/A	Two short paragraphs referred to the placebo effect and potential influence of patient expectations; the mechanisms by which expectancy can affect outcomes; patient recovery expectations and health outcomes were not clarified	15/41 papers provided moderate-quality evidence that positive expectations were associated with better health outcomes. The strength of the association depended on the clinical condition and measures used	Search limited to MEDLINE Few papers met relevance or quality criteria Quality criteria limited to quantitative studies

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Ogden J, Jain A. Patients' experiences and expectations of general practice: a questionnaire study of differences by ethnic group. <i>Br J Gen Pract</i> 2005; 55 :351–6 ²⁵²	Web of Science as part of Web of Knowledge	To explore the impact of ethnic group on patients' experiences and expectations of their GP consultation Cross-sectional survey Two measures applied: one for experiences and one for expectations of the GP consultation in terms of treatment, communication, patient's agenda, patient's choice and doctor consistency	One GP surgery in a multicultural area of London, UK 604/1000 consecutive patients attending their GP surgery (response rate 60.4%) who described their ethnic group as white British (31%), black African (11.3%), black African Caribbean (8.8%) or Vietnamese (34.6%) completed questionnaires Mean age 42.43 years; 37.9% male, 56.6% female	New questionnaire created based on existing literature; practice interpreter translated the questionnaire into Vietnamese English and Vietnamese versions were piloted with small sample for face validity and language used Reliability assessed by summing the items. All Cronbach's alpha results were > 0.7 What patients expect from a consultation. Using a 5-point Likert scale ranging from 'not at all' (1) to 'totally' (5), patients rated a series of 16 matched statements relating to five aspects of care following the statement, 'To what extent do you want your GP to do the following': Treatment – three items, e.g. 'felt that the doctor prevented you from having the medicines when you wanted them' Communication – three items, e.g. 'search for the real reason you have come'	None	There were comparable expectations across the different ethnic groups for aspects of treatment and patient choice; however, significant differences between ethnic groups were found for what was expected from a GP consultation in terms of communication, consistency and a focus on the patient's agenda Black African, black African Caribbean and white British patients, more than Vietnamese patients, reported wanting good communication and the GP to focus on their own agenda. Furthermore, the white British patients, more than the Vietnamese patients, reported wanting consistency between how different GPs practice Vietnamese patients stated that they were receiving better standards of care than other ethnic groups; however, they also stated that they expected less	Sample size calculated to allow for subgroup analyses

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Consistency – three items, e.g. 'prescribe the same medicines for your symptoms as other doctors you have seen'</p> <p>Patient agenda – three items, e.g. 'take all of your symptoms equally seriously'</p> <p>Patient choice – four items, e.g. 'allow you to chose the medicine you want'</p> <p>Higher scores reflected an expectation of greater control over treatment options, clearer communication, more consistent medical practice, a focus on the patient's own perspective and respect for the patient's choices</p>			

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Oliver IN, Taylor AE, Whitford HS. Relationships between patients' pre-treatment expectations of toxicities and post chemotherapy experiences. <i>Psychooncology</i> 2005;14:25–33 ²⁵³	Web of Science as part of Web of Knowledge	To determine if patients' expectations were associated with perceived toxicities for a wider range of chemotherapy toxicities than previously researched, including subjective and objective side effects	Adelaide, SA, Australia 102 consecutive cancer patients preparing for their first ever chemotherapy treatments were accrued from inpatient or outpatient attendances Response rate 87/102 (85%) Median age 54 years; 63% female	The study included two self-report questionnaires: one to determine the patients' expectations of treatment toxicity and the second to determine their experiences of toxicity post treatment	None. Previous research studies discussed	On average, the expectation of side-effect intensity was similar for all 20 toxicities, with feeling tired being the most highly expected and bleeding and chills/fever being the least expected In most cases, average expectations ratings were higher than average experience ratings recorded following chemotherapy dose one (with the exception of feeling tired and chills/fever, which were more frequent than expected) Expectations before treatment of the inability to concentrate, hair loss and diarrhoea had the strongest associations with the experience of symptoms Expectations of encountering problems with sleep and sex, changes in taste or appetite, weakness and nervousness all showed moderate associations with experience, and expectations of mood changes, feelings of tiredness and nausea all showed weak associations with experience	Limited information regarding the development and testing of expectations questionnaire. It extended an existing 16-item questionnaire used by Cassileth <i>et al.</i> ³⁰³

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
O'Malley K.J, Roddey TS, Gartsman GM, Cook KF. Outcome expectancies, functional outcomes and expectancy fulfilment for patients with shoulder problems. <i>Med Care</i> 2004; 42 :139–46 ²⁵¹	Web of Science as part of Web of Knowledge	To evaluate the relationship among patient outcome expectancies, perceived shoulder function changes and perceptions of expectancy fulfilment Baseline survey and 1-month, 2-month and 3-month postal follow-up surveys Recruitment was undertaken consecutively over 4 months at the office of an orthopaedic surgeon specialising in the treatment of shoulder problems	Houston, TX, USA 199 patients; 122/199 (61%) had complete data at the end of the study Mean age 51.6 years; 47% female Comparison of participants with complete and incomplete data did indicate differences in age, sex and outcome expectancies ($p < 0.20$ for all). Specifically, participants with complete data were more likely to be female, were 10 years younger on average and reported 1-point lower outcome expectancies (on a 0- to 18-point scale)	Baseline survey included measures of outcome expectancies regarding shoulder status in the coming month Patient Shoulder Outcome Expectancies (PSOE): 1. Compared with now, I think my shoulder problem overall next month will be ... 2. Compared with now, I expect my shoulder pain next month will be ... 3. Compared with now, I expect my ability to use and move my shoulder next month will be ... Response categories: 'much worse', 'worse', 'a little worse', 'the same', 'a little better', 'better', or 'much better' Follow-up surveys included a measure of outcome expectancies. However, at month 3, rather than reporting their expectancies for the coming month, patients rated the extent to which their expectancies were met regarding their shoulder outcomes	Social learning theory posits that outcome expectancy is a person's subjective probability that an outcome will occur ^{25,36} Patient outcome expectancies are defined as patients' perceptions that an outcome of medical care is likely to occur ^{40,1,25} Expectancies have been shown to be important predictors of patient satisfaction In some studies patient expectancies have been found to predict some symptoms (e.g. pain experiences), whereas other studies have failed to find such a relationship If expectancies predict symptom change then in order to understand the mechanism through which expectancies work it is important to understand determinants of expectancy fulfilment. Based on fulfilment theory, expectancy fulfilment is defined as the extent to which a patient's perceived occurrence agrees with their prior expectation about that occurrence	Outcome expectancies significantly predicted changes in shoulder function and accounted for 10% of the variance in functional improvement The improvement difference between patients with high expectancies and those with low expectancies was clinically relevant (4.57 points) as it was greater than the minimal clinically important difference (3.02 points) Outcome expectancies and shoulder function changes significantly predicted patients' perceptions of fulfilled expectancies, but their interaction was not statistically significant There was no evidence to support that an interaction between functional changes and outcome expectancies predicts expectancy fulfilment; this stands in contrast to what was expected from fulfilment theory	One physician's practice 61% response rate Participants reported poorer physical and mental health than the general population All measures, including shoulder function, were self-reported New measures developed in this study; not widely tested

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>No measure existed to assess expectancy fulfilment; therefore, researchers created the Patient Shoulder Expectancy Fulfilment (PSEF) measure:</p> <ol style="list-style-type: none"> 1. My expectations for my shoulder problem overall were perfectly met 2. My expectations for my shoulder pain were perfectly met 3. My expectations for my ability to move and use my shoulder were perfectly met <p>Response categories: 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree', or 'strongly disagree'</p> <p>PSEF scores range from 0 to 18, with higher scores indicating greater expectancy fulfilment</p> <p>Evidence for the unidimensionality of this measure was obtained from confirmatory factor analysis using data from the current study in which one factor accounted for 93% of the item variance, and the internal consistency using Cronbach's alpha = 0.96</p>	<p>Research has consistently shown that patients' perceptions of expectancy fulfilment relate to their satisfaction; however, what is unclear is how patients come to perceive their expectancies as being fulfilled. Understanding the predictors of expectation fulfilment is a necessary precursor for designing interventions that lead to expectancy fulfilment and subsequently satisfaction</p>		

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Özsoy SA, Özçür, Durmaz Akyol A. Patient expectation and satisfaction with nursing care in Turkey: a literature review. <i>Int Nurs Rev</i> 2007; 54 :249–55 ^{26,4}	Web of Science as part of Web of Knowledge	To review the Turkish national literature published in the last 50 years on patient expectations and satisfaction with nursing care Inclusion criteria: study conducted between 1955 and 2005; study published in Turkish; study conducted with inpatients/outpatients; study focused on patient expectations and satisfaction with nursing care; study published in a national nursing journal or in full-text proceedings of a congress or symposium Excluded: abstracts or unpublished theses; studies involving hospitalised children and their parents	Turkey 3089 articles, 1812 from all issues of 14 Turkish nursing journals and 1277 from 24 nursing congress and symposium books Keywords: 'satisfaction with nursing care', 'assessment of care', 'expectation', 'feeling', 'views and opinions'	N/A	Definitions focused on patient satisfaction Patient satisfaction is defined as the combination of experiences, expectations and needs perceived Patient satisfaction has also been defined as the patient's subjective evaluation of their cognitive and emotional reactions as a result of the interaction between their expectations regarding ideal nursing care and their perceptions of actual nursing care	27 articles discussed in detail as they were related to nursing satisfaction and met the criteria detailed Quantitative studies only were identified Resulting studies were sorted under two categories: expectations concerning nursing care and satisfaction with nursing care Patients' expectations of nursing care were cheerfulness, concern, understanding, courtesy and benevolence. In addition, patients expected to be informed about their medication and treatment Patients expected to receive greetings from the nurses. Most of the patients (90%) stated that nurses offered treatment and care within an appropriate timescale At the same time, patients expected that their nurses would pay attention to them and relieve their pain There was a lack of conceptual and philosophical depth in determining patient satisfaction	The main focus of the paper was on patient satisfaction Research conducted by hand searches as there were insufficient computerised databases in the Turkish literature

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Paifreyman SJ, DREWERY-Carter K, Rigby K, Michaels JA, Tod AM. Varicose veins: a qualitative study to explore expectations and reasons for seeking treatment. <i>J Clin Nurs</i> 2004; 13 :332–40 ²⁵⁵	Web of Science as part of Web of Knowledge	To explore patients' expectations and reasons for seeking treatment for varicose veins Qualitative study: semi-structured interviews Purposive sampling used to obtain a sample that included men and women and a range of ages	Sheffield, UK 16/22 patients referred to vascular surgeons from GPs agreed to participate Age range 20–76 years; 13 women, 3 men	Semi-structured interviews were conducted to explore symptoms associated with varicose veins, reasons for seeking treatment and treatment expectations	None	Three main themes from the analysis: symptoms, impact of treatment and expectations and reasons for seeking treatment Patients had visited their GP for a referral to a surgeon with the expectation that something could be done Patients often revealed an unrealistic expectation of treatment for varicose veins, i.e. that symptoms would not recur	Focus of paper was reasons for seeking treatment
Paulson-Karlsson G, Nevoonen L, Engström I. Anorexia nervosa: treatment satisfaction. <i>J Fam Ther</i> 2006; 28 :293–306 ²⁵⁶	Web of Science as part of Web of Knowledge	To examine adolescent anorexia nervosa patients' and their parents' expectations and satisfaction with a family-based treatment approach All patients aged 13–18 years with an eating disorder and their parents who were on a waiting list at an eating disorder outpatient unit were asked to participate Patients and parents were interviewed and answered self-report questionnaires	Queen Silvia Children's Hospital, Göteborg, Sweden 64 patients and their families were invited; 54 patients were included in the study together with their parents; 34 patients had a diagnosis of anorexia nervosa and were focused on for this study; two dropped out early from treatment and did not complete the follow-up Participants: 32 patients and 41 parents At the 18-month follow-up participants were assessed by an independent psychiatric nurse using a treatment satisfaction self-report questionnaire Average age (patient) 15 years	The Treatment Satisfaction Scale (TSS) contains 11 open-ended questions and 38 questions with multiple-choice answers. The questions describe expectations and experiences of treatment and the therapists and aims of treatment and how they were accomplished This study presents the results of an open-ended question in which patients and parents were asked to describe their expectations of treatment	Patient satisfaction is the relationship between expectations and treatment received; patient satisfaction can play a central role in treatment compliance	Content analysis of the responses to the open-ended question, 'When you started treatment, what did you expect to be helped with?' resulted in the following general categories: increase in weight; depression; self-esteem; cognitive distortions; eating behaviours; a normal, healthy life; help and support; and do not want any help Patients and parents were also asked, 'Did you get any help according to what you expected?' Response choices were 'yes' (73% patients, 83% parents), 'to a certain degree' (17%, 17%) and 'no' (10%, 0%)	Small, homogeneous sample and the follow-up was not anonymous Retrospective data collected

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Parsons S, Harding G, Breen A, Foster N, Pincus T, Vogel S, <i>et al</i> . The influence of patients' and primary care practitioners' beliefs and expectations about chronic musculoskeletal pain on the process of care. <i>Clin J Pain</i> 2007; 23 :91–8 ²⁷	Web of Science as part of Web of Knowledge	To review qualitative, empirical studies exploring the influence of patients' and primary care practitioners' beliefs and expectations on the process of care for chronic musculoskeletal pain Multidisciplinary review group searched nine bibliographic databases	UK MEDLINE, CINAHL, AMED, CSP (Chartered Society of Physiotherapy) Library, MANTIS (Manual, Alternative and Natural Therapy Index System), PsycINFO, PEDro (Physiotherapy Evidence Database), Science Citation Index and the Index to Chiropractic Literature were searched Search strategy had three components which were combined: conditions, therapies and patient-practitioner interaction 12,994 abstracts were identified and screened; 113 full-text articles were obtained as abstracts had insufficient information to decide on eligibility 22 relevant articles; of these, 15 articles reporting on 13 studies were included in the final analysis	N/A	None	Themes identified included: beliefs about pain, expectations of treatment, trust and patient education Both GPs and patients expected straightforward communication to be taken seriously and to have an equal relationship. Patients also wanted a physical examination and continuity of care One study reported patients' low expectations of their GP and of medicine in general, but another reported that GPs experienced difficulties in managing what they felt were great demands and expectations from patients Patients' and practitioners' expectations of the consultation seemed to be influenced by age and social class. (e.g. older patients were more accepting of experiencing pain). In another study, GPs seemed to provide working-class patients with less detailed explanations of their problems than middle-class patients	A systematic review of qualitative studies

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Peck BM, Asch DA, Goid SD, Roter DL, Ubel PA, McIntyre LM, <i>et al.</i> Measuring patient expectations. Does the instrument affect satisfaction or expectations? <i>Med Care</i> 2001; 39 :100–8 ²⁵⁸	Web of Science as part of Web of Knowledge	To determine whether different measures elicit different expectations and levels of patient satisfaction Randomised controlled trial; face-to-face interviews	Veterans Affairs clinic, assume in PA, USA Random assignment of patients waiting to see the doctor in a general medicine clinic to one of two different questionnaires or to a control group not asked about expectations 490 patients invited; 290 completed pre and post interviews All were male; mean age 60 years	Instrument 1: Three expectations for care questions; wording used: 'Do you want ... tests, referrals, new medications? Abbreviated version of existing questionnaire, Request for Services Schedule Plus, 'a version' of this was also used to measure expectation fulfilment Instrument 2: Additional nested questions in the above on specific expectations; wording used: 'Do you think it is necessary for the doctor to ...?'	Fulfillment of expectations may influence satisfaction with visit, health-care utilisation and costs	Patients receiving the long instrument were more likely to express expectations for tests, referrals and new medications. There were more unmet expectations elicited with the long questionnaire than with the short version. There was no difference in satisfaction between groups	All male sample Existing questionnaire amended; no details how

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Perimenis P, Roumequere T, Heidler H, Roos E, Belger M, Schmitt H. Evaluation of patient expectations and treatment satisfaction after 1-year tadalafil therapy for erectile dysfunction: the DETECT study. <i>J Sex Med</i> 2009; 6 :257–67 ^{25,9}	Web of Science as part of Web of Knowledge	To investigate patients' erectile dysfunction treatment expectations at baseline; patient satisfaction with tadalafil treatment after 12 months; factors associated with satisfaction; and effect of early tadalafil treatment satisfaction on tadalafil continuation at 12 months	236 study sites in eight European countries 1900 patients with erectile dysfunction who wished to initiate or change their treatment to tadalafil were enrolled; 81% of patients returned complete data at 12 months Analysis based on 1567 patients (1528 patients with 12-month data plus 39 patients who reported at 6 months that they were no longer using tadalafil, did not report usage at 12 months and were assumed to have stopped treatment) Mean age 56.7 years	Patient's Expectations Questionnaire (PEQ) completed at baseline Seven questions derived from specific items from the validated International Index of Erectile Function-erectile function domain (IIEF-EF) and Erectile Dysfunction Inventory of Treatment Satisfaction (EDITS) questionnaires: 1. How important is it for you that your treatment works quickly? 2. How important is it for you that your treatment works for a long period of time? 3. How important is it for you that your treatment improves your confidence to engage in sexual activity? 4. How important is it for you that your partner is satisfied with the effects of your treatment? 5. How important is it for you that the process of achieving your erection feels natural when using treatment? 6. How important is it for you that your erection is hard when using treatment? 7. How important is it for you that you are able to maintain your erection long enough to complete intercourse when using treatment?	None	Several factors are important to patients when defining treatment success Hardness of erection and ability to maintain an erection through intercourse completion were high expectations in >92% of patients; other high expectations were also indicated, including confidence, partner satisfaction and naturalness (>84% of patients) and rapid effect and long duration of treatment (>75% of patients) Patients who did not have 12-month follow-up data generally had the same distribution of baseline expectation responses; however, for the rapid treatment effect (question 1), those without 12-month follow-up data were less likely to have responded that this was a high expectation (66%) than those with 12-month follow-up data (76%) ($p < 0.0001$) Age and frequency of sexual desire were significantly associated with patients having high expectations of their treatment across all seven questions. The younger the patient, the higher his expectation; frequency of sexual desire was directly proportional to expectations	Methods of recruitment not discussed PEQ not a validated tool

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
				<p>Expectations were rated on a 5-point scale, from 5 ('very important') to 0 ('not at all important'). Degree of importance was summarised by adding percentages of 'quite' and 'very' important, these patients being rated as having 'high' expectations, and those reporting 'not at all', 'slightly' and 'fairly' important rated as having 'low' expectations</p>		<p>High expectations were not linked to baseline erectile dysfunction severity except for questions 1 and 3 for which expectations were higher with greater severity. Absence of relationship problems was important for higher expectations for questions 2–4 and 7</p>	

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Razmjou H, Finkelstein JA, Yee A, Holtby R, Vidmar M, Ford M. Relationship between preoperative patient characteristics and expectations in candidates for total knee arthroplasty. <i>Physiother Can</i> 2009; 61 :38–45 ²⁶⁰	Web of Science as part of Web of Knowledge	To determine the relationship between patient expectations for improvement following primary total knee arthroplasty and patient preoperative characteristics Cross-sectional analysis of preoperative measures obtained from participants in a prospective, longitudinal study Consecutive candidates for primary total knee arthroplasty attending a centre dedicated to lower-extremity joint replacement 331 candidates recruited	Toronto, ON, Canada 236/331 candidates for total knee arthroplasty completed the 1-year follow-up (71% response rate) Mean age 67 years; 154 women and 82 men	Self-administered questionnaire 2–3 weeks before surgery. Developed based on literature review and expert opinions To avoid bias relating to overlap of hope, which reflects wishes that a given event will occur, and anticipation that a given event is likely to occur a written explanation of the difference between these two concepts was provided on the first page of the questionnaire Expectations for improvement were evaluated in six distinct domains: pain, range of motion, ability to perform activities of daily living, ability to interact with and provide care for others, ability to return to previous leisure, recreational or sports activities, and achieving full recovery Responses were quantified using a 3-point scale or a 4-point scale with an additional 'not applicable' response option Test-retest chance-corrected agreement was estimated on 25 candidates for shoulder surgery. Weighted kappa statistics were calculated and showed moderate to substantial results (weighted kappa values ranging from 0.42 to 0.78)	Associations between patient expectations and baseline characteristics remain inconclusive. Expectations for recovery are important in influencing patient satisfaction	24/236 had incomplete expectations questionnaires Expectations were high on average Presence of comorbidity was associated with expectations of pain relief Preoperative mental health was related to expectations for a return to activities of daily living; age, sex, physical health and mental health were related to expectations for improved leisure, recreational and sports activities Preoperative physical health was related to expectations for potential return to full recovery No baseline factors were associated with expectations for improved range of motion or for providing care to and interacting with others	Sample size required calculated Patients with missing data were not included in the data analysis; however, there were no significant differences in preoperative characteristics between the initial sample and the sample of patients with complete data. Proportion of missing values was 10% but as the sample was deemed homogeneous the authors claimed that excluding patients with incomplete data was not expected to have a significant adverse effect Patients who had no expectations of improvement were also excluded and so results pertain only to patients with a certain level of expectation for improvement

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Roscoe JA, Hickok JT, Morrow GR. Patient expectations as predictor of chemotherapy-induced nausea. <i>Ann Behav Med</i> 2000; 22 :121–6 ²⁶¹	Web of Science as part of Web of Knowledge	Two studies that examined the relationship between chemotherapy pretreatment patients' expectations for nausea and vomiting and subsequent symptoms Prospective study	University of Rochester Cancer Center, NY, USA Study 1: Homogeneous sample of 36 women with ovarian cancer treated as inpatients; 29 patients provided complete data for at least one treatment. Average age 60.5 years Study 2: Heterogeneous patient group (n=86) treated largely in an ambulatory setting; 81 patients provided complete data for at least one treatment. Average age 54.1 years; 88% female	Before beginning treatment, patients' expectations of developing nausea and vomiting were assessed on separate 5-point Likert scales, developed by Cassileth <i>et al.</i> ³⁹³ The scales are anchored at one end by 1 ('I am certain I will <i>not</i> have this') and at the other end by 5 ('I am certain I <i>will</i> have this'). Patients who responded with a 4 or 5 were scored as expecting the symptom	Understanding patients' beliefs and expectations, termed 'response expectancies', concerning nausea and vomiting development may help us predict and explain the great variation in the frequency and severity of chemotherapy-induced nausea and vomiting, which cannot be accounted for by pharmacological properties of the chemotherapeutic agents	Each study found a significant relationship between patients' expectations for nausea development measured before their first treatment and their mean post-chemotherapy nausea severity (both $p < 0.05$) Patients' expectations accounted for unique variance in nausea severity in each study after controlling for known pharmacological and physiological predictors of nausea ($p < 0.04$; $p < 0.03$) In contrast, no significant relationships were found between expectations for vomiting and subsequent vomiting Patients' expectations for nausea affect its subsequent development, indicating the presence of a significant psychological component in treatment-related nausea	Cross-reference with Oliver Taylor and Whitford ²⁵³ The correlational nature of the data did not allow authors to rule out possible 'third' variables that could account for the relationship found

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Rosenberger PH, Joki P, Cameron A, Ickovics JR. Shared decision making, preoperative expectations and postoperative reality: differences in physician and patient predictions and ratings of knee surgery outcomes. <i>Arthroscopy</i> 2005;21:562–9 ²⁶²	Web of Science as part of Web of Knowledge	To determine the extent to which physicians and patients rate preoperative and postoperative knee pain and function differently, and to determine whether physicians or patients more accurately predict postoperative knee pain and function	Yale, CT, USA 98 patients referred to the Yale Sports Medicine Center for elective anterior cruciate ligament (ACL) reconstruction or arthroscopic meniscectomy and related surgery; 46 underwent ACL reconstruction (mean age 31.9 years; 45.7% male) and 52 underwent meniscectomy or related surgery (mean age 44.8 years; 57.7% male) ACL surgical patients were significantly younger than the meniscectomy patients Six physicians participated	Physicians and patients predicted patient knee pain at week 3 postoperatively and percentage of knee function at weeks 3 and 24 postoperatively using a 100-mm visual analogue scale	Patient satisfaction with orthopaedic surgery outcomes could be based on patient judgements about whether surgical outcomes were consistent with preoperative expectations In part, patient expectations regarding surgical outcomes are influenced by physician communications during the preoperative visit. However, little is actually known about patients' interpretations of these communications and their impact on patient expectations of postoperative outcome	Physicians rated patients as having less pain and greater knee function preoperatively and at 24 weeks postoperatively. Patients had more significant differences between predicted and actual ratings Physicians tended to underestimate knee pain and overestimate knee function compared with patients; however, physicians better predicted postoperative knee pain and function ratings than did patients	Power analyses conducted Small sample size Reduced number of postoperative ratings because of missed appointments

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Schneider U, Kroemer-Olbrisch T, Wedegärtner F, Cimander KF, Wetterling T. Wishes and expectations of alcoholic patients concerning their therapy. <i>Alcohol Alcohol</i> 2004; 39 :141–5 ²⁶³	Web of Science as part of Web of Knowledge	To assess the wishes and expectations of alcoholic patients concerning their therapy Questionnaire	Three sites, two cities, Germany 227/336 alcohol-dependent patients recruited from inpatient and outpatient facilities completed the questionnaire 47 women, 180 men	Questionnaire including 23 items about patients' expectations about the elements of treatment The items were rated according to importance on a scale consisting of 'not important' (0), 'important' (1) and 'very important' (2)	None	The most important expectations were individual sessions during therapy; duration of therapy until improvement; a therapist/doctor should be in charge of treatment; a distinct programme should exist The following expectations concerning the therapy procedure were more often rated as important by women than by men: the treatment programme should be discussed with me first; want to be able to determine the individual steps of treatment myself; therapy should consist of outpatient treatment; therapy should be provided near patient's place of residence; outpatient treatment should be made available after completion of inpatient therapy	Representativeness of sample should be considered: large proportion were inpatients; 20.7% women; almost all participants acknowledged their drinking habit to be harmful and regarded their consumption of alcohol an addiction

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Shapiro J, Mosqueda L, Botros D. A caring partnership. Expectations of ageing persons with disabilities for their primary care doctors. <i>Fam Pract</i> 2003;20:635–41 ²⁶⁴	Web of Science as part of Web of Knowledge	To investigate the views of older people with disabilities concerning primary care and family physicians Qualitative study Open-ended questions based on the concept of life history narrative Recruitment from a larger ongoing study on natural course of ageing with disabilities. A snowball technique was also used for further participants	CA, USA 30 people participated (two later eliminated from final analysis as did not meet inclusion criteria of > 50 years) Data collection terminated when theoretical saturation had been reached Mean age 63.43 years; 22 women, 6 men	None	Patients regularly report that their visit-related expectations are disappointed, and unmet expectations have been shown to contribute significantly to patient dissatisfaction	The primary theme of these interviews was the importance of establishing a caring partnership between patient and physician Important subthemes: physician avoidance of assumptions and stereotypes about those with disabilities; physician commitment to patient well-being balanced by a capacity for keeping the disability in perspective; the relationship between the need for specialised knowledge and the necessity of acknowledging patient expertise	Purposive sampling strategy; self-selecting sample Lack of ethnic diversity in sample and small number of men

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Symon Z, Daignaut S, Symon R, Dunn RL, Sanda MG, Sandler HM. Measuring patients' expectations regarding health-related quality-of-life outcomes associated with prostate cancer surgery or radiotherapy. <i>Urology</i> 2006; 68 :1224–9 ²⁶⁵	Web of Science as part of Web of Knowledge	To determine the pretreatment expectations of prostate cancer-specific health-related quality of life with an adapted Expanded Prostate Cancer Index Composite (EPIC) instrument Prospective study Consecutive patients visiting the multidisciplinary urological oncology clinic during their initial consultation at a tertiary referral centre were solicited	MI, USA 50/100 eligible patients undergoing radical prostatectomy ($n=24$) or external beam radiotherapy ($n=26$) returned the 1-year post-treatment health-related quality-of-life survey Baseline pretreatment health-related quality-of-life scores, pretreatment expectation scores and 1-year post-treatment scores were collected	The Expectation Questionnaire was a novel instrument that asks patients to predict the anticipated outcome for items that are, in effect, identical to those on the SF-12 and EPIC (a comprehensive disease-specific health-related quality-of-life instrument) Items were perfected until 10 consecutive volunteers could complete the survey without difficulty Response options used a Likert scale, and multi-item scale scores were transformed linearly to a 0–100 scale, with greater scores representing better health-related quality of life. The disparity between pretreatment expectations and observed outcomes at 1 year (expectations vs 1-year outcomes) was determined	Health-related quality of life for an individual has been defined as the difference between the expectations of the individual and that individual's present experience Modifying a patient's expectations to meet realistic goals (e.g. by providing patients with accurate information concerning the benefits, risks, alternatives and outcomes of treatment) may narrow the disparity between an individual's expectations and what actually occurs, thereby enhancing quality of life	Expectation scores did not differ from the health-related quality-of-life scores at 1 year for urinary irritation, bowel function and the hormonal domain; however, the sexual domain expectations were 22.5% greater than observed sexual domain scores 1 year after treatment ($p<0.0001$) for both surgery and radiotherapy subjects Anxiety, depression, education level and income did not correlate with the expectations for health-related quality-of-life outcomes A modest correlation was found between optimism and greater expectations for the sexual domain	Limited sample size Study did not address change in expectations that could evolve over time

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Szeinbach SL, Barnes JH, Summers KH, Lenox SM. Development of an instrument to assess expectations of and preference for an insulin injection pen compared with the vial and syringe. <i>Clin Ther</i> 2004; 26 :590–7 ²⁶⁶	Web of Science as part of Web of Knowledge	To produce a valid and reliable data collection instrument [the Insulin Injection Preference questionnaire (IIP-q)] to measure expectations of and preference for the insulin injection pen compared with the vial and syringe Cross-sectional study	University of Mississippi, MS, USA 1200 US residents were randomly selected from a national mailing address database containing respondents known to have either type 1 or type 2 diabetes mellitus Of the 1200 questionnaires sent, 17 were undeliverable Questionnaires were received from 302 individuals, 55 of whom failed to complete $\geq 85\%$ of the items and thus were not included in the final analysis Final sample included 247 respondents (mean age 52.4 years; 135 women, 112 men); 99 were current insulin users and 143 were not using insulin	The IIP-q was developed to determine the extent to which respondents' purchase expectations of a product's attributes relate to preference for an insulin injection pen compared with the vial and syringe Instrument development began with item generation related to product attributes important to patients who inject insulin. Items originated from an extensive search of the peer-reviewed internet-based literature, marketing reports, clinical studies and existing instruments Content validity was assessed using expert panel and focus group review The resulting instrument was mailed to 1200 patients known to have type 1 or type 2 diabetes who either did or did not use insulin Subscales were identified through exploratory factor analysis. Reliability and validity were assessed using Cronbach's alpha for subscale items Product-moment correlations between subscale dimensions and two global measures of preference were used to test the relationship between attribute expectations and preference	Expectations resemble beliefs in that they are formed before experience with a product, are modified by the experience and then are referenced after the experience as the basis for forming an overall judgement about the product or service (i.e. satisfaction) Product expectations form the basis for anticipating potential satisfaction but are not sufficient to predict it because other factors may influence satisfaction judgements after product use	Exploratory factor analysis resulted in a 13-item solution (Cronbach's alpha = 0.92) accounting for 73.6% of the total variance Ease of use, activity interference and social acceptability emerged as expectation subscales from exploratory factor analysis Cronbach's alpha for items comprising the subscales ranged from 0.82 to 0.92. The three subscales were significantly correlated with patient preference (ease of use, $r=0.520$, $p<0.001$; activity interference, $r=0.570$, $p<0.001$; social acceptability, $r=0.602$, $p<0.001$) IIP-q is a reliable and valid tool to assess patient expectations of product attributes and preference	Cross-sectional design and so responsiveness not determined Response rate was low

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Venkataramanan V, Gignac MA, Mahomed NN, Davis AM. Expectations of recovery from revision knee replacement. <i>Arthritis Rheum</i> 2006; 55 :314–21 ²⁶⁷	Web of Science as part of Web of Knowledge	To evaluate outcome expectations of patients undergoing revision total knee replacement and to examine personal factors, patient functioning, previous experiences with knee replacement surgery, concerns about surgery and general health as predictors of expectations Cross-sectional study Questionnaire 2 weeks before surgery in pre-admission clinic	Canada All patients undergoing revision total knee replacement surgery (in teaching hospitals in Halifax, London, Toronto, Winnipeg and Vancouver) who were invited to participate, gave their consent ($n = 184$) Mean age 69 years; 54% female	Outcome expectations were evaluated using five questions assessing global benefit, relief of pain; ease of disability; expectations of having complications; and whether the person expected to be fully recovered from surgery in <6 months, 6–12 months, >12 months or did not expect to recover The first three items were assessed on a 5-point scale (1 = 'extremely beneficial' and 5 = 'not at all beneficial') In question 4, respondents indicated if they expected to have complications ('no', 'yes' or 'not sure') Predictors of each of the five outcome expectations were evaluated using univariable and multivariable regression analyses	Patients' expectations that a treatment or behaviour will achieve its desired effect as a key factor in understanding health treatments and outcomes Theories of social cognition have posited that factors such as perceived vulnerability, previous experience and individual differences may shape individuals' expectations	Expectations are a multidimensional construct (Cronbach's alpha = 0.63) Expectation of global benefit of surgery was high, but expectation was lower for benefits related to ease of pain and improved function Concerns about surgery were a consistent predictor of all expectation outcomes in multivariable modelling When concerns about surgery and general health were entered into the model as an interaction with expectation of recovery time as the outcome, past experience ($p = 0.05$), pain ($p = 0.03$), Life Orientation Test ($p = 0.03$) and interaction between concerns about surgery and general health were significant predictors In summary, most of the patients undergoing revision total knee replacement in this study expected their surgery to be extremely beneficial. Most expected to recover within a year of surgery and more than half expected not to experience complications after surgery but to have a somewhat painful and difficult recovery period with respect to performing everyday activities	The researchers' intent was to scale these five items into a summative score; however, Cronbach's alpha = 0.63. The inter-item correlations were low (ranging from 0.14 to 0.41) with item–total correlations ranging from 0.36 to 0.43, explaining the low Cronbach's alpha value. The low alpha value indicated that expectations are a multidimensional construct and therefore they evaluated each of the five expectation questions as separate outcomes

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Victorson DV, Peterman AH, Kammer LS. HRQL and patient expectations in a mixed diagnostic autologous stem cell transplant sample. <i>Psychoncology</i> 2004;13:S1–233 ²⁶⁸	Web of Science as part of Web of Knowledge	To examine patient health-related quality of life over time and seek to better understand the patient's experience of transplant preparation and expectations	IL, USA 28 stem cell transplant patients (46% male) completed quality-of-life instruments at baseline, 1 week, 1 month, 6 months and 1 year post transplantation	Patients also answered four open-ended questions dealing with preparation and expectations for stem cell transplantation Content analysis was used for these data	None	Between 1 week and 1 month post transplant health-related quality of life was most affected across the majority of end points. Content analysis identified several important themes dealing with expectations, especially the importance of mental, physical and spiritual preparation	Conference abstract No information regarding recruitment of sample
Wiles R, Ashburn A, Payne S, Murphy C. Patients' expectations of recovery following stroke: a qualitative study. <i>Disabil Rehabil</i> 2002;24:841–50 ²⁶⁹	Web of Science as part of Web of Knowledge	To examine the information exchange between physiotherapists and patients in relation to recovery following stroke In-depth, longitudinal case studies Qualitative interviews	England, UK Study participants were drawn from three acute NHS trusts in the south of England Physiotherapists identified those eligible for the study 16/27 patients with a first incident stroke; non-responders: four died, three were participating in other research studies and four refused 10 women, 6 men	Qualitative interviews were conducted with patients and physiotherapists at three time points to explore their understandings and expectations of recovery and of physiotherapy Topics were identified from the literature and from a period of observation of physiotherapy/patient interactions	Disappointment with the extent of recovery reached at the point at which physiotherapy is withdrawn is likely to be linked to expectations of recovery The result of overoptimistic expectations about recovery is feelings of extreme distress and 'abandonment' when physiotherapy ends as patients come to realise that they are not going to make the degree of recovery that they expected	The qualitative data showed that physiotherapists did not encourage overoptimistic expectations of recovery through the verbal information that they provided to patients. Nevertheless, patients did maintain high expectations of recovery throughout the 3-month post-stroke period	Sample size was selected on the basis of the minimum necessary to achieve maximum variation in the characteristics likely to affect patients' experiences and expectations of recovery Physiotherapists were aware that their interactions with patients were being observed and this may have influenced their practice

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Wu S-FV, Courtney M, Edwards H, McDowell J, Shortridge-Baggett LM, Chan P.-J. Self-efficacy, outcome expectations and self-care behaviour in people with type 2 diabetes in Taiwan. <i>J Clin Nurs</i> 2007; 16 :250–7270	Web of Science as part of Web of Knowledge	To explore differences in self-care behaviour according to demographic and illness characteristics; and relationships among self-care behaviour and demographic and illness characteristics, efficacy expectations and outcome expectations of people with type 2 diabetes in Taiwan	Taiwan 145/153 patients with type 2 diabetes aged \geq 30 years from a diabetes outpatient clinic in Taipei Mean age 64.4 years, 64.1% female	The Perceived Therapy Efficacy Scale (PTES) was developed by Dunbar-Jacob ^{39a} and measures people's outcome expectations 10 items with responses ranging from 'no confidence' (0) to 'highest confidence' (10) Possible scores range from 0 to 100 points with higher scores indicating greater confidence Internal consistency of this tool is high (Cronbach's alpha = 0.94–0.96) and test-retest reliability is also high (0.64–0.8) The Chinese version was translated and tested for reliability and validity on a Taiwanese population Total average Content Validity Index (CVI) score for C-PTES was 0.83. Construct validity using factor analysis composed a single subscale. Internal consistency showed Cronbach's alpha was 0.95 and the test-retest reliability was 0.79 ($p > 0.01$)	Self-efficacy is considered to play an important role in the self-management of chronic disease as it determines whether or not individuals will initiate certain behaviour change Self-efficacy integrates the cognitive, social and skills capabilities that a person has to perform a course of action and is defined as people's judgement of their capabilities to organise and execute the course of action that requires designated types of performances (Bandura ⁴⁰ 1986) There are two cognitive components in self-efficacy theory: efficacy expectations (or just self-efficacy) and outcome expectations	Self-care behaviour was significantly and positively correlated with duration of diabetes ($r = 0.36$, $p < 0.01$), efficacy expectations ($r = 0.54$, $p < 0.01$) and outcome expectations ($r = 0.44$, $p < 0.01$) A total of 39.1% of the variance in self-care behaviour can be explained by duration of diabetes, efficacy expectations and outcome expectations	Small non-probability sample from one clinic

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Delgado A, López-Fernández LA, de Dios Luna J, Gil N, Jiménez M, Puga A. Patient expectations are not always the same. <i>J Epidemiol Community Health</i> 2008; 62 :427–34 ²⁷¹	Other citations ^a	To validate a scale that measures patients' expectations when seeking advice for different types of health problems Cross-sectional study at 14 health centres of adult patients who consulted GPs over the past 12 months. Random sample of 30 GPs and 12 patients per GP Home interviews	14 health centres, two Andalusian cities, Spain 360 patients; 151 patients substituted because of incorrect primary health data or not traced at address; response rate then 88.7% 357 patients finally included and responded Mean age 47.3 years; 51% female	Questions based on others used in several previous surveys 13-item expectations scale developed for five health problems (strong chest pain, genital discharge, common cold, depression/sadness and serious family problem) and a single decision preference item: 1. I want my doctor to explain everything about a 2. I would like my doctor to listen to everything I have to say about a 3. I wish my doctor to understand how a affects my life 4. I want my doctor to order an X-ray, analysis or other test for a 5. I want my doctor to spend more time with me during the consultation than usual for a 6. I want my doctor to understand my feelings about a 7. I wish my doctor to examine me during the consultation to find the reason for the a 8. I wish my doctor to refer me to a specialist for the a	Theoretical dimensions defined as communication and experience of disease, negotiation or decision-making, technical interventions and visit duration. Following Kravitz, ⁴⁷ the study used three expectancy criteria: expectancy values or wishes for the consultation; expectations of the health-care process; and specific expectations of the medical intervention	Expectations were high and varied by nature and severity of the condition Conclusion: expectations were not homogeneous in all clinical situations	Sampling involved substitution; unknown representativeness Questionnaires used different expectancy wording against different items (I would like, I wish, I want), which makes theory/wording impossible to test No details of questionnaire validation given

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Parente J, White P, Frackowiak RSJ, Lewith G. Expectancy and belief modulate the neuronal substrates of pain treated by acupuncture. <i>Neuroimage</i> 2005;25:1161–7 ²⁷²	Other citations ^a	To explore the cerebral consequences of needling and expectation with real acupuncture, placebo acupuncture and skin prick Single-blind, randomised cross-over design	Southampton General Hospital, UK 14 patients with painful arthritis Mean age 59.4 years; 14 women Study response rate not given	9. I wish my doctor to take account of my opinion on a 10. I wish my doctor to talk to me about a 11. I wish my doctor to show interest in what I tell him/her about a 12. I want my doctor to prescribe me a drug for a Measured using a 5-point Likert response scale: 'How important is it for you?': 'very' (5) to 'not at all important' (1) 13. I wish my doctor to advise me on a and the decisions on the diagnosis and treatment to be made by the doctor alone/the doctor, taking my opinions into account/me, taking the doctor's opinions into account/me alone	None	Real acupuncture, and placebo with the same expectation of effect as real acupuncture, caused greater activation than skin prick (no expectation of a therapeutic effect) in the right dorsolateral prefrontal cortex, anterior cingulate cortex and mid-brain	Small sample Response rate to not stated Expectations were not measured No details of reliability and validity of confidence item used were given

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
Crow R, Gage H, Hampson S, Hart J, Kimber A, Storey L, <i>et al.</i> The measurement of satisfaction with healthcare: implications for practice from a systematic review of the literature. <i>Health Technol Assess</i> 2002; 6 (32) ⁸³	HTA report	To summarise the results of satisfaction studies that investigated methodological issues; to identify determinants of satisfaction with health care in different settings; to explore gaps in existing knowledge so that they can be addressed by future research; and to consider the implications of the findings for the NHS	The review was conducted in two phases: an initial search resulted in the analysis of 128 articles and a further 48 articles were added as a result of exploring reference lists and updating the electronic search Over 3000 abstracts were screened for relevance by three team members. Articles were excluded if the evidence they contained was not generalisable. In particular, evaluations that were specific to disease groups or service delivery locations were rejected The articles retained were categorised as background (<i>n</i> = 190, including reviews and conceptual and policy articles), empirical (<i>n</i> = 223, providing primary research evidence for analysis in the review); and instrument related (<i>n</i> = 92)	N/A	Conceptual models of satisfaction with health care are discussed: expectancy disconfirmation paradigm; expectation fulfilment The expectations approach embraces an examination of how broader social psychological variables, such as beliefs, affect attitudes to and evaluations of health care. However, measuring satisfaction as the difference between expectations and perceptions of care experiences is complicated by the dynamic two-way nature of the relationship between them Alternatively, an empirical approach to measuring satisfaction de-emphasises the link between expectation fulfilment and satisfaction. It can explain how respondents report satisfaction when their expectations are not fulfilled. Moreover, it enables the measurement of satisfaction in the face of ill-defined or unstable expectations	The review identified 139 articles (127 data sets) that provided evidence about the determinants of satisfaction The review showed that, despite the potential importance of expectations in the measurement of satisfaction, only 20% of studies considered this factor, with varied results, such that many questions remain unanswered in this area The authors conclude that, with respect to the role of expectations, research is needed to classify different types of expectations and explore how consumers operationalise these in evaluations (identify influences on expectations) and to examine the relationship between sociodemographic factors and expectations	Foreign-language articles were not excluded

Reference	Source	Main study aim and design	Setting and participants	Measure of expectations used any evidence of validity, reliability	Theoretical underpinning	Key findings	Comments
			Data were extracted from empirical articles by one reader and checked by a second. To assess the methodological quality of studies, both readers independently completed quality assessment forms based on agreed criteria. Articles deemed as poor by both assessors were subsequently excluded ($n=47$)		Although important attributes of care may vary with the context of the investigation, in general they relate to three main issues: the characteristics of the provider, the features of the patient-practitioner relationship and factors related to the structure and setting of health-care delivery	Researchers seeking to collect high-quality information about consumers' views should pay particular attention to the effect of respondents' expectations, previous experiences and desires and to establishing the strength of relative preferences between attributes because this has advantages in a policy-making context, particularly with cost-effectiveness considerations in mind	

AIDS, acquired immunodeficiency syndrome; HIV, human immunodeficiency virus; N/A, not applicable.

a Other citations includes searched literature and references found by independent searches.

Appendix 4

Questionnaire for patients' expectations of health care – pre-visit questionnaire

Confidential Serial ID no.

Questionnaire for Patients' Expectations of Health Care

Pre-visit questionnaire

Thank you for taking part in our study of patients' expectations for health care. All the information you provide is COMPLETELY CONFIDENTIAL.

Please answer the following questions **before** your consultation. Please circle the numbers or tick the boxes that apply to you or write in your answer, and be sure to answer all questions. Thank you again for your help.

The Questionnaire is on BOTH Sides of Each Page and Starts on the Underside of This Page

These questions are about your expectations of your health care:

Please answer parts a and b and tick a box in each row to show the strength of your agreement with each sentence about:

a) Your hopes: In an ideal world, if the health service was provided exactly as you want it to be, how much would you like the following to happen in this visit

b) Your realistic expectations: What you actually expect to happen in real life as a result of this visit

STRUCTURE OF HEALTH CARE:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
<u>It will be:</u>	(1)	(2)	(3)	(4)	(5)
1. Easy to find where to go when I get there					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Easy to get around inside the building (access)					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>The building will:</u>					
3. Be clean inside					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have enough space in the waiting room/area					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PROCESS OF HEALTH CARE:**I will:**

5. Be given clear information about where to go					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
<u>I will:</u>	(1)	(2)	(3)	(4)	(5)
6. Be given an appointment for a convenient date/time					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Be seen on time					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Be given a choice of hospitals to go to (for hospital patients/if referred by doctor)					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Be given a choice of doctors to consult					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>The reception staff will be:</u>					
10. Helpful					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>The doctor I see will be:</u>					
11. Helpful					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Respectful and treat me with dignity					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Knowledgeable about/understand my health condition/problem					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	(1)	(2)	(3)	(4)	(5)
<u>The doctor I see will:</u>					
14. Be clear and easy to understand					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Involve me in decisions about my treatment					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>CONSULTATION AND TREATMENT</u>					
<u>I will be given:</u>					
16. A physical examination					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Tests/investigations					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. A diagnosis or to have a previous diagnosis confirmed					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. A new, changed or repeat prescription					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. A referral to another doctor/specialist/therapist					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Reassurance about my condition					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	(1)	(2)	(3)	(4)	(5)
<u>I will be given:</u>					
22. Advice about my health/condition					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>I will be given a full explanation, in clear language about:</u>					
23. What caused my condition/problem					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. How to manage the condition/symptoms/ pain					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. The benefits/side effects or complications/ risks of treatment					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>I will be given the opportunity to:</u>					
26. Discuss the problems in my life					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>TREATMENT OUTCOMES</u>					
<u>I will have:</u>					
27. An improved quality of life					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. A reduction in symptoms/problems					
a) I hope for this ideally.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I expect this to happen in reality.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
<u>I will have:</u>	(1)	(2)	(3)	(4)	(5)

29. Increased chances of improvements to my health/staying healthy

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) I hope for this ideally..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) I expect this to happen in reality..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Considering all the things that you said you hope for ideally

30. Overall, how important are they to you:
(please circle the number that applies)

- | | |
|--|---|
| Very important..... | 1 |
| Fairly important..... | 2 |
| Neither important nor unimportant..... | 3 |
| Fairly unimportant..... | 4 |
| Very unimportant..... | 5 |

31. Overall, how much do you feel that you deserve these to happen in reality
(please circle the number that applies)

- | | |
|--------------------------------------|---------|
| A lot..... | 1 |
| A fair amount..... | 2 |
| A little..... | 3 |
| Not at all..... | 4 |
| Other comments (please specify)..... | 5 |

32. Overall, to what extent are your expectations about what will happen during this visit influenced by:
(please circle one number on each row that applies)

	A lot	A moderate amount	A little/ Not at all
Previous consultations/experiences of health services	1	2	3
Talking with family/relatives	1	2	3
Talking with friends/neighbours	1	2	3
Experiences of other people	1	2	3
TV, radio, magazines, newspapers	1	2	3
Other literature	1	2	3
Health care staff/ professionals	1	2	3
Other, please specify:			

Section II

These questions are about any experience of health services:

33. During the past 12 calendar months have you attended:

a) Hospital *casualty* (Accident and Emergency) department?

Yes 1 please write in number of times:

No 0

b) As a *day patient* (admitted to a bed or day ward for treatment or tests but not over night)?

Yes 1 please write in number of times:

No 0

c) As an *in-patient*, overnight or longer?

Yes 1 please write in number of times:

No 0

d) As an *out-patient* in a clinic:

Yes 1 please write in number of times:

No 0

34. Consulted your family doctor, or a partner, or locum (include any urgent or emergency visits they have made to you at home): Please write in number of times (excluding this visit):
(write 0 if none)

35. What is the reason for your current consultation?

(please circle all the numbers that apply)

To find out what is wrong/to get a diagnosis.....	1
For reassurance.....	2
To get the results of test/investigations.....	3
Treatment (prescription, procedure or surgery).....	4
For a health check-up or health screening.....	5
Seeing the doctor on behalf of someone else.....	6
Form or letter to be signed.....	7
To find out other information.....	8
For review.....	9
To ask for a referral.....	10

Other, please specify:..... 11

36. Is this the first time you have consulted a doctor for this?
(please circle the number that applies)

Yes, this is my first consultation for this..... 1

No, this is a follow-up consultation for this..... 0

37. How long have you had the health condition/symptom/problem that you are consulting about?
(please circle the number that applies)

One week or less..... 1

More than one week - less than one month..... 2

One month - less than six months..... 3

Six months – less than one year..... 4

One year or more..... 5 please specify no. of years:

Not applicable - has no health condition/symptom/problem.... 8

38. About how long after first noticing this/these symptom(s)/condition(s) did you seek help from your doctor:
(please circle the number that applies)

Less than a week..... 1

One week but less than two weeks..... 2

Two weeks but less than one month..... 3

One month but less than two months..... 4

Two months or more..... 5

Uncertain/cannot remember..... 6

Not applicable - has no health condition/symptom/problem.... 8

39. Has a doctor ever given you a diagnosis for this:
(please circle the number that applies)

No 0

Yes 1 Would you mind stating what this is?

Not applicable - has no health condition/symptom/problem.... 8

Section III: Attitudes and characteristics

DEGNER SCALE:

40. How do you feel about making decisions about your medical care?

(please circle only one of these numbers to indicate the statement that applies best to you)

- I prefer to make the final decision about which treatment I will receive..... 1
- I prefer to make the final selection of my treatment after seriously
considering my doctor's opinion 2
- I prefer that my doctor and I share responsibility for deciding which
treatment is best for me..... 3
- I prefer that my doctor makes the final decision about which treatment
will be used, but seriously considers my opinion..... 4
- I prefer to leave all decisions regarding my treatment to my doctor..... 5

41. In general, to what extent do you feel that you can influence the consultation in order to achieve the outcome you want:

(please circle the number that applies)

- A lot..... 1
- A moderate amount..... 2
- A little..... 3
- Not at all..... 4

42. To what extent do you feel that you can manage your condition yourself?

(please circle the number that applies)

- A lot..... 1
- A moderate amount..... 2
- A little..... 3
- Not at all..... 4

Not applicable as I have no health condition/problem.... 8

43. How much control do you feel you have over the important things in your life:

(please circle the number that applies)

- A lot of control..... 1
- Some control..... 2
- A little control..... 3
- No control..... 4

44. To what extent do you agree or disagree that you take a positive attitude toward yourself:*(please circle the number that applies)*

- Strongly agree..... 1
Agree..... 2
Neither agree nor disagree... 3
Disagree..... 4
Strongly disagree..... 5

45. To what extent do you agree or disagree that you certainly feel useless at times:*(please circle the number that applies)*

- Strongly agree..... 1
Agree..... 2
Neither agree nor disagree.... 3
Disagree..... 4
Strongly disagree..... 5

46. How much control do you feel over your health?*(please circle the number that applies)*

- A lot of control..... 1
Some control..... 2
A little control..... 3
No control..... 4

47. In general, to what extent do you feel that you can solve most difficulties in your life caused by your health condition/problem if you invest the necessary effort:*(please circle the number that applies)*

- A lot..... 1
To some extent..... 2
A little..... 3
Not at all..... 4

Tick if not applicable (i.e. no health condition/problem).... 8

Now some general questions about your health:

48. In general, compared with other people your age, would you say that your current health is:
(please circle the number that applies)

- Excellent..... 1
 Very good..... 2
 Good..... 3
 Fair..... 4
 Poor..... 5
 Very poor..... 6

49. Do you have any longstanding illness, disability or infirmity?
(please circle the number that applies)

- Yes..... 1
 No..... 0

IF YES: What is this/these condition/s:

50. Overall, how would you rate your quality of life:
(please circle the number that applies)

- So good, it could not be better..... 1
 Very good..... 2
 Good..... 3
 Alright..... 4
 Bad..... 5
 Very bad..... 6
 So bad, it could not be worse..... 7

51. Overall, how much does your health adversely affect your quality of life:
(please circle the number that applies)

- A lot..... 1
 Moderately..... 2
 A little..... 3
 Not at all..... 4

52. How much of the time in the past four weeks:*(please circle one number on each row that applies)*

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
Have you felt calm and peaceful.....	1	2	3	4	5	6
Did you have a lot of Energy.....	1	2	3	4	5	6
Have you felt downhearted and blue.....	1	2	3	4	5	6
Have you been a happy person.....	1	2	3	4	5	6

And now we would like to ask some questions about you:**53. Have you ever regularly smoked cigarettes?***(please circle one number)*

No, never smoked.... 1 Yes, ex-smoker.... 2 Yes, current smoker.... 3

54. Which of the following describes your leisure time activities during the past 4 weeks?*(please circle as many as apply)*

Hard training and competitive sport more than once a week.....	1
Jogging and other recreational sports, or heavy gardening, at least 4 hours a week.....	2
Walking, cycling, or other light activities at least 4 hours a week.....	3
Reading, watching TV, or other sedentary activities.....	4

55. What is your height without shoes: feet
 inches
 or centimetres:

56. What is your weight without clothes and shoes: stones
 pounds
 or kilograms

Finally, a few questions about yourself:**57. What is your date of birth:** Day _ _ Month _ _ Year _ _ _ _*(please write in the spaces above)***58. Are you:***(please circle the number that applies)*

Male..... 1 or Female..... 0

(Interviews: interviewer to record)

59. Do you:

(please circle the number that applies)

- | | |
|---|---|
| Own your own home or own your home on a mortgage..... | 1 |
| Rent your home from the local authority or voluntary body or charity..... | 2 |
| Rent your home privately..... | 3 |
| Other, please specify: | 4 |

60. How old were you when you left school?

(please circle the number that applies)

- | | |
|--------------------------------|---|
| Less than 14 years..... | 1 |
| 14 but less than 16 years..... | 2 |
| 16 but less than 18 years..... | 3 |
| 18 years or more..... | 4 |

61. Are you currently:

(please circle the number that applies)

- | | |
|---------------------------------------|---|
| Married or cohabiting with partner... | 1 |
| Divorced or separated..... | 2 |
| Widowed..... | 3 |
| Single, never married..... | 4 |

62. Do you live:

(please circle as many numbers as apply)

- | | |
|----------------------------------|---|
| Alone..... | 1 |
| With your spouse or partner..... | 2 |
| With children..... | 3 |
| With family members..... | 4 |
| Other, please specify: | |

63. Are you currently in paid work?*(please circle the number that applies)*

- Employed /self-employed full-time..... 1
 Employed /self-employed part-time..... 2
 Unable to work due to illness/medical condition..... 3
 Unemployed..... 4
 Homemaker..... 5
 Retired..... 6
 Other, please specify:

64. What is (or was) your main occupation:

Full job title:

What did/do you actually do in this job?

What does/did your employer make/do?

Or I do not work outside the home**65. To which ethnic group do you belong?***(please circle the number that applies)*

- | | |
|------------------------------|--|
| White English..... 1 | Indian or British Indian..... 9 |
| White Scottish..... 2 | Pakistani or British Pakistani..... 10 |
| White Irish..... 3 | Bangladeshi or British Bangladeshi..... 11 |
| White Welsh..... 4 | Black Caribbean..... 12 |
| White Northern Irish..... 5 | Black African..... 13 |
| White British Mixed..... 6 | Black British..... 14 |
| White Eastern European.... 7 | Black Other..... 15 |
| White other..... 8 | Any other group, <i>please specify</i> : |

66. Do you have any other comments you would like to make?

67. How long did this questionnaire take you to complete? minutes

Thank you for your valuable help with this part of the study.

Self-administration questionnaire only:

When you have completed this questionnaire please return it to us in the reply-paid, *freepost* envelope provided. You do not need to put a stamp on the envelope.

Professor A. Bowling, Department of Primary Care and Population Health, University College London, Royal Free Campus, Rowland Hill Street, London NW3 2PF. 0207 830 2234; a.bowling@ucl.ac.uk.

Appendix 5

Questionnaire for patients' expectations of health care – post-visit questionnaire

Confidential

Serial ID no.

Questionnaire for Patients' Expectations of Health Care

Post-visit questionnaire

Thank you for taking part in the second part of our study of patients' expectations for health care. All the information you provide is COMPLETELY CONFIDENTIAL.

Please answer the following questions **after** your consultation. Please circle the numbers or tick the boxes that apply to you or write in your answer, and be sure to answer all questions. Thank you again for your help.

The Questionnaire is on BOTH Sides of Each Page and Starts on the Underside of This Page

We would like to ask you about the extent to which your expectations of the visit and consultation were met.

To what extent do you agree with the following in relation to your visit and consultation:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	(1)	(2)	(3)	(4)	(5)
<u>STRUCTURE OF HEALTHCARE</u>					
<u>It was:</u>					
1. Easy to find where to go when I got to there.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Easy to get around inside the building (access).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>The building:</u>					
3. Was clean inside.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Had enough space in the waiting room/ area.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>PROCESS OF HEALTHCARE</u>					
5. I was given clear information about where to go.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I was given an appointment for a convenient date/time.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I was seen on time.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I was given a choice of hospitals to go to (if referred to hospital).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I was given a choice of doctors to consult.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>I found that the reception staff were:</u>					
10. Helpful.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>The doctor I saw:</u>					
11. Was helpful.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Was respectful and treated me with dignity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Strongly Agree Neither Disagree Strongly

	agree		agree nor disagree		disagree
<u>The doctor I saw:</u>	(1)	(2)	(3)	(4)	(5)
13. Was knowledgeable about/understood my health condition/problem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Was clear and easy to understand.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Involved me in decisions about my treatment.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>CONSULTATION AND TREATMENT</u>					
<u>I was given a full explanation, in clear language about:</u>					
16. What caused my condition/problem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. How to manage the condition/symptoms/pain.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. The benefits/side effects or complications/risks of treatment.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>I was given the opportunity to:</u>					
19. Discuss problems in my life.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>I was given:</u>					
20. Reassurance about my condition.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Advice about my health/condition.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Yes (1)		No (0)	
<u>I was given:</u>					
22. A physical examination.....		<input type="checkbox"/>		<input type="checkbox"/>	
23. Tests/investigations.....		<input type="checkbox"/>		<input type="checkbox"/>	
24. A diagnosis or had a previous diagnosis confirmed.....		<input type="checkbox"/>		<input type="checkbox"/>	
25. A new, changed or repeat prescription.....		<input type="checkbox"/>		<input type="checkbox"/>	
26. A referral to another doctor/specialist/therapist.....		<input type="checkbox"/>		<input type="checkbox"/>	

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	(1)	(2)	(3)	(4)	(5)

TREATMENT OUTCOMES

I expect my treatment to result in:

- 27. An improvement in my quality of life..... (1) (2) (3) (4) (5)
- 28. A reduction in symptoms/problems..... (1) (2) (3) (4) (5)
- 29. Increased chances of improvements to my health/staying healthy..... (1) (2) (3) (4) (5)

The visit overall

30. Overall, how much were your expectations of the visit met in relation to your ideals or hopes of what would happen:

(Please circle one number only)

- Not at all..... 1
- A little..... 2
- A fair amount..... 3
- A lot..... 4
- Completely..... 5

If 'Not at all' or 'A little': Please specify why this was:

31. To what extent were you able to influence the consultation in order to get the outcome you wanted:

(Please circle one number only)

- A lot..... 1
- A moderate amount..... 2
- A little..... 3
- Not at all..... 4

32. Were there any things that needed to be done at this consultation that were not done, or things that disappointed you?

(Please circle one number only)

- No..... 0
- Yes..... 1 If Yes; what were these:

33. To sum up, do you think that the consultation (with the journey, wait, any treatment and everything) was worth it or not?

(Please circle one number only)

Worth it..... 1

Too early to say..... 2

Not worth it..... 3

Other, *please specify*:

34. Overall, how satisfied are you with your visit this time:

(Please circle one number only)

Very satisfied..... 1

Satisfied..... 2

Neither satisfied nor dissatisfied..... 3

Dissatisfied..... 4

Very dissatisfied..... 5

35. Is there anything else you would like to mention:

(Please circle one number only)

No..... 0

Yes..... 1 Please describe what:

36. If the doctor gave you any prescribed medication on this visit how likely are you to take the medication prescribed?

(Please circle one number only)

Very likely..... 1

Likely..... 2

Not very likely..... 3

Uncertain/don't know.... 4

Not applicable: not given prescription for medication.... 8

Thank you for your valuable help with this study.

Self-administration questionnaire only:

When you have completed this questionnaire please return it to us in the reply-paid, *freepost* envelope provided. You do not need to put a stamp on the envelope.

Professor A. Bowling, Department of Primary Care and Population Health, University College London, Royal Free Campus, Rowland Hill Street, London NW3 2PF. 0207 830 2234; a.bowling@ucl.ac.uk.

Health Technology Assessment programme

Director,
Professor Tom Walley, CBE,
 Director, NIHR HTA programme,
 Professor of Clinical Pharmacology,
 Department of Pharmacology and Therapeutics,
 University of Liverpool

Deputy Director,
Professor Hywel Williams,
 Professor of Dermato-Epidemiology,
 Centre of Evidence-Based Dermatology,
 University of Nottingham

Prioritisation Group

Members

Chair,
Professor Tom Walley, CBE,
 Director, NIHR HTA
 programme, Professor of Clinical
 Pharmacology, Department of
 Pharmacology and Therapeutics,
 University of Liverpool

Professor Imti Choonara,
 Professor in Child Health,
 Academic Division of Child
 Health, University of Nottingham
 Chair – Pharmaceuticals Panel

Dr Bob Coates,
 Consultant Advisor – Disease
 Prevention Panel

Dr Andrew Cook,
 Consultant Advisor – Intervention
 Procedures Panel

Dr Peter Davidson,
 Director of NETSCC, Health
 Technology Assessment

Dr Nick Hicks,
 Consultant Adviser – Diagnostic
 Technologies and Screening Panel,
 Consultant Advisor–Psychological
 and Community Therapies Panel

Ms Susan Hird,
 Consultant Advisor, External
 Devices and Physical Therapies
 Panel

Professor Sallie Lamb,
 Director, Warwick Clinical Trials
 Unit, Warwick Medical School,
 University of Warwick
 Chair – HTA Clinical Evaluation
 and Trials Board

Professor Jonathan Michaels,
 Professor of Vascular Surgery,
 Sheffield Vascular Institute,
 University of Sheffield
 Chair – Interventional Procedures
 Panel

Professor Ruairidh Milne,
 Director – External Relations

Dr John Pounsford,
 Consultant Physician, Directorate
 of Medical Services, North Bristol
 NHS Trust
 Chair – External Devices and
 Physical Therapies Panel

Dr Vaughan Thomas,
 Consultant Advisor –
 Pharmaceuticals Panel, Clinical
 Lead – Clinical Evaluation Trials
 Prioritisation Group

Professor Margaret Thorogood,
 Professor of Epidemiology, Health
 Sciences Research Institute,
 University of Warwick
 Chair – Disease Prevention Panel

Professor Lindsay Turnbull,
 Professor of Radiology, Centre for
 the MR Investigations, University
 of Hull
 Chair – Diagnostic Technologies
 and Screening Panel

Professor Scott Weich,
 Professor of Psychiatry, Health
 Sciences Research Institute,
 University of Warwick
 Chair – Psychological and
 Community Therapies Panel

Professor Hywel Williams,
 Director of Nottingham Clinical
 Trials Unit, Centre of Evidence-
 Based Dermatology, University of
 Nottingham
 Chair – HTA Commissioning
 Board
 Deputy HTA Programme Director

HTA Commissioning Board

Chair,
Professor Hywel Williams,
 Professor of Dermato-Epidemiology,
 Centre of Evidence-Based Dermatology,
 University of Nottingham

Deputy Chair,
Professor Jon Deeks,
 Department of Public Health and
 Epidemiology,
 University of Birmingham

Programme Director,
Professor Tom Walley, CBE,
 Professor of Clinical Pharmacology,
 Department of Pharmacology and Therapeutics,
 University of Liverpool

Members

Professor Judith Bliss,
 Director of ICR-Clinical Trials
 and Statistics Unit, The Institute of
 Cancer Research

Professor David Fitzmaurice,
 Professor of Primary Care
 Research, Department of Primary
 Care Clinical Sciences, University
 of Birmingham

Professor John W Gregory,
 Professor in Paediatric
 Endocrinology, Department of
 Child Health, Wales School of
 Medicine, Cardiff University

Professor Steve Halligan,
 Professor of Gastrointestinal
 Radiology, Department of
 Specialist Radiology, University
 College Hospital, London

Professor Angela Harden,
 Professor of Community and
 Family Health, Institute for
 Health and Human Development,
 University of East London

Dr Martin J Landray,
 Reader in Epidemiology, Honorary
 Consultant Physician, Clinical
 Trial Service Unit, University of
 Oxford

Dr Joanne Lord,
 Reader, Health Economics
 Research Group, Brunel University

Professor Stephen Morris,
 Professor of Health Economics,
 University College London,
 Research Department of
 Epidemiology and Public Health,
 University College London

Professor Dion Morton,
 Professor of Surgery, Academic
 Department of Surgery, University
 of Birmingham

Professor Gail Mountain,
 Professor of Health Services
 Research, Rehabilitation and
 Assistive Technologies Group,
 University of Sheffield

Professor Irwin Nazareth,
 Professor of Primary Care and
 Head of Department, Department
 of Primary Care and Population
 Sciences, University College
 London

Professor E Andrea Nelson,
 Professor of Wound Healing and
 Director of Research, School of
 Healthcare, University of Leeds

Professor John David Norrie,
 Director, Centre for Healthcare
 Randomised Trials, Health
 Services Research Unit, University
 of Aberdeen

Dr Rafael Perera,
 Lecturer in Medical Statistics,
 Department of Primary Health
 Care, University of Oxford

Professor Barney Reeves,
 Professorial Research Fellow
 in Health Services Research,
 Department of Clinical Science,
 University of Bristol

Professor Peter Tyrer,
 Professor of Community
 Psychiatry, Centre for Mental
 Health, Imperial College London

HTA Commissioning Board *(continued)*

Professor Martin Underwood,
Professor of Primary Care
Research, Warwick Medical
School, University of Warwick

Professor Caroline Watkins,
Professor of Stroke and Older
People's Care, Chair of UK
Forum for Stroke Training, Stroke
Practice Research Unit, University
of Central Lancashire

Dr Duncan Young,
Senior Clinical Lecturer and
Consultant, Nuffield Department
of Anaesthetics, University of
Oxford

Observers

Dr Tom Foulks,
Medical Research Council

Dr Kay Pattison,
Senior NIHR Programme
Manager, Department of Health

HTA Clinical Evaluation and Trials Board

Chair,

Professor Sallie Lamb,
Director,
Warwick Clinical Trials Unit,
Warwick Medical School,
University of Warwick and Professor of
Rehabilitation,
Nuffield Department of Orthopaedic,
Rheumatology and Musculoskeletal Sciences,
University of Oxford

Deputy Chair,

Professor Jenny Hewison,
Professor of the Psychology of Health Care,
Leeds Institute of Health Sciences,
University of Leeds

Programme Director,

Professor Tom Walley, CBE,
Director, NIHR HTA programme,
Professor of Clinical Pharmacology,
University of Liverpool

Members

Professor Keith Abrams,
Professor of Medical Statistics,
Department of Health Sciences,
University of Leicester

Professor Martin Bland,
Professor of Health Statistics,
Department of Health Sciences,
University of York

Professor Jane Blazeby,
Professor of Surgery and
Consultant Upper GI Surgeon,
Department of Social Medicine,
University of Bristol

Professor Julia M Brown,
Director, Clinical Trials Research
Unit, University of Leeds

Professor Alistair Burns,
Professor of Old Age Psychiatry,
Psychiatry Research Group, School
of Community-Based Medicine,
The University of Manchester &
National Clinical Director for
Dementia, Department of Health

Dr Jennifer Burr,
Director, Centre for Healthcare
Randomised trials (CHART),
University of Aberdeen

Professor Linda Davies,
Professor of Health Economics,
Health Sciences Research Group,
University of Manchester

Professor Simon Gilbody,
Prof of Psych Medicine and Health
Services Research, Department of
Health Sciences, University of York

Professor Steven Goodacre,
Professor and Consultant in
Emergency Medicine, School of
Health and Related Research,
University of Sheffield

Professor Dyfrig Hughes,
Professor of Pharmacoeconomics,
Centre for Economics and Policy
in Health, Institute of Medical
and Social Care Research, Bangor
University

Professor Paul Jones,
Professor of Respiratory Medicine,
Department of Cardiac and
Vascular Science, St George's
Hospital Medical School,
University of London

Professor Khalid Khan,
Professor of Women's Health and
Clinical Epidemiology, Barts and
the London School of Medicine,
Queen Mary, University of London

Professor Richard J McManus,
Professor of Primary Care
Cardiovascular Research, Primary
Care Clinical Sciences Building,
University of Birmingham

Professor Helen Rodgers,
Professor of Stroke Care, Institute
for Ageing and Health, Newcastle
University

Professor Ken Stein,
Professor of Public Health,
Peninsula Technology Assessment
Group, Peninsula College
of Medicine and Dentistry,
Universities of Exeter and
Plymouth

Professor Jonathan Sterne,
Professor of Medical Statistics
and Epidemiology, Department
of Social Medicine, University of
Bristol

Mr Andy Vail,
Senior Lecturer, Health Sciences
Research Group, University of
Manchester

Professor Clare Wilkinson,
Professor of General Practice and
Director of Research North Wales
Clinical School, Department of
Primary Care and Public Health,
Cardiff University

Dr Ian B Wilkinson,
Senior Lecturer and Honorary
Consultant, Clinical Pharmacology
Unit, Department of Medicine,
University of Cambridge

Observers

Ms Kate Law,
Director of Clinical Trials,
Cancer Research UK

Dr Morven Roberts,
Clinical Trials Manager, Health
Services and Public Health
Services Board, Medical Research
Council

Diagnostic Technologies and Screening Panel

Members

<p>Chair, Professor Lindsay Wilson Turnbull, Scientific Director of the Centre for Magnetic Resonance Investigations and YCR Professor of Radiology, Hull Royal Infirmary</p> <p>Professor Judith E Adams, Consultant Radiologist, Manchester Royal Infirmary, Central Manchester & Manchester Children's University Hospitals NHS Trust, and Professor of Diagnostic Radiology, University of Manchester</p> <p>Mr Angus S Arunkalaivanan, Honorary Senior Lecturer, University of Birmingham and Consultant Urogynaecologist and Obstetrician, City Hospital, Birmingham</p> <p>Dr Diana Baralle, Consultant and Senior Lecturer in Clinical Genetics, University of Southampton</p>	<p>Dr Stephanie Dancer, Consultant Microbiologist, Hairmyres Hospital, East Kilbride</p> <p>Dr Diane Eccles, Professor of Cancer Genetics, Wessex Clinical Genetics Service, Princess Anne Hospital</p> <p>Dr Trevor Friedman, Consultant Liaison Psychiatrist, Brandon Unit, Leicester General Hospital</p> <p>Dr Ron Gray, Consultant, National Perinatal Epidemiology Unit, Institute of Health Sciences, University of Oxford</p> <p>Professor Paul D Griffiths, Professor of Radiology, Academic Unit of Radiology, University of Sheffield</p> <p>Mr Martin Hooper, Public contributor</p>	<p>Professor Anthony Robert Kendrick, Associate Dean for Clinical Research and Professor of Primary Medical Care, University of Southampton</p> <p>Dr Nicola Lennard, Senior Medical Officer, MHRA</p> <p>Dr Anne Mackie, Director of Programmes, UK National Screening Committee, London</p> <p>Mr David Mathew, Public contributor</p> <p>Dr Michael Millar, Consultant Senior Lecturer in Microbiology, Department of Pathology & Microbiology, Barts and The London NHS Trust, Royal London Hospital</p> <p>Mrs Una Rennard, Public contributor</p>	<p>Dr Stuart Smellie, Consultant in Clinical Pathology, Bishop Auckland General Hospital</p> <p>Ms Jane Smith, Consultant Ultrasound Practitioner, Leeds Teaching Hospital NHS Trust, Leeds</p> <p>Dr Allison Streetly, Programme Director, NHS Sickle Cell and Thalassaemia Screening Programme, King's College School of Medicine</p> <p>Dr Matthew Thompson, Senior Clinical Scientist and GP, Department of Primary Health Care, University of Oxford</p> <p>Dr Alan J Williams, Consultant Physician, General and Respiratory Medicine, The Royal Bournemouth Hospital</p>
--	--	---	---

Observers

<p>Dr Tim Elliott, Team Leader, Cancer Screening, Department of Health</p> <p>Dr Joanna Jenkinson, Board Secretary, Neurosciences and Mental Health Board (NMHB), Medical Research Council</p>	<p>Professor Julietta Patnick, Director, NHS Cancer Screening Programme, Sheffield</p> <p>Dr Kay Pattison, Senior NIHR Programme Manager, Department of Health</p>	<p>Professor Tom Walley, CBE, Director, NIHR HTA programme, Professor of Clinical Pharmacology, University of Liverpool</p>	<p>Dr Ursula Wells, Principal Research Officer, Policy Research Programme, Department of Health</p>
--	--	---	---

Disease Prevention Panel

Members

<p>Chair, Professor Margaret Thorogood, Professor of Epidemiology, University of Warwick Medical School, Coventry</p> <p>Dr Robert Cook, Clinical Programmes Director, Bazian Ltd, London</p> <p>Dr Colin Greaves, Senior Research Fellow, Peninsula Medical School (Primary Care)</p> <p>Mr Michael Head, Public contributor</p>	<p>Professor Cathy Jackson, Professor of Primary Care Medicine, Bute Medical School, University of St Andrews</p> <p>Dr Russell Jago, Senior Lecturer in Exercise, Nutrition and Health, Centre for Sport, Exercise and Health, University of Bristol</p> <p>Dr Julie Mytton, Consultant in Child Public Health, NHS Bristol</p>	<p>Professor Irwin Nazareth, Professor of Primary Care and Director, Department of Primary Care and Population Sciences, University College London</p> <p>Dr Richard Richards, Assistant Director of Public Health, Derbyshire County Primary Care Trust</p> <p>Professor Ian Roberts, Professor of Epidemiology and Public Health, London School of Hygiene & Tropical Medicine</p>	<p>Dr Kenneth Robertson, Consultant Paediatrician, Royal Hospital for Sick Children, Glasgow</p> <p>Dr Catherine Swann, Associate Director, Centre for Public Health Excellence, NICE</p> <p>Mrs Jean Thurston, Public contributor</p> <p>Professor David Weller, Head, School of Clinical Science and Community Health, University of Edinburgh</p>
---	--	--	--

Observers

<p>Ms Christine McGuire, Research & Development, Department of Health</p>	<p>Dr Kay Pattison, Senior NIHR Programme Manager, Department of Health</p>	<p>Professor Tom Walley, CBE, Director, NIHR HTA programme, Professor of Clinical Pharmacology, University of Liverpool</p>
---	---	---

External Devices and Physical Therapies Panel

Members

<p>Chair, Dr John Pounsford, Consultant Physician North Bristol NHS Trust</p>	<p>Dr Dawn Carnes, Senior Research Fellow, Barts and the London School of Medicine and Dentistry</p>	<p>Dr Shaheen Hamdy, Clinical Senior Lecturer and Consultant Physician, University of Manchester</p>	<p>Mr Jim Reece, Public contributor</p>
<p>Deputy Chair, Professor E Andrea Nelson, Reader in Wound Healing and Director of Research, University of Leeds</p>	<p>Dr Emma Clark, Clinician Scientist Fellow & Cons. Rheumatologist, University of Bristol</p>	<p>Professor Christine Norton, Professor of Clinical Nursing Innovation, Bucks New University and Imperial College Healthcare NHS Trust</p>	<p>Professor Maria Stokes, Professor of Neuromusculoskeletal Rehabilitation, University of Southampton</p>
<p>Professor Bipin Bhakta, Charterhouse Professor in Rehabilitation Medicine, University of Leeds</p>	<p>Mrs Anthea De Barton-Watson, Public contributor</p>	<p>Dr Lorraine Pinnigton, Associate Professor in Rehabilitation, University of Nottingham</p>	<p>Dr Pippa Tyrrell, Senior Lecturer/Consultant, Salford Royal Foundation Hospitals' Trust and University of Manchester</p>
<p>Mrs Penny Calder, Public contributor</p>	<p>Professor Nadine Foster, Professor of Musculoskeletal Health in Primary Care Arthritis Research, Keele University</p>	<p>Dr Kate Radford, Senior Lecturer (Research), University of Central Lancashire</p>	<p>Dr Nefyn Williams, Clinical Senior Lecturer, Cardiff University</p>

Observers

<p>Dr Kay Pattison, Senior NIHR Programme Manager, Department of Health</p>	<p>Dr Morven Roberts, Clinical Trials Manager, Health Services and Public Health Services Board, Medical Research Council</p>	<p>Professor Tom Walley, CBE, Director, NIHR HTA programme, Professor of Clinical Pharmacology, University of Liverpool</p>	<p>Dr Ursula Wells, Principal Research Officer, Policy Research Programme, Department of Health</p>
---	---	---	---

Interventional Procedures Panel

Members

<p>Chair, Professor Jonathan Michaels, Professor of Vascular Surgery, University of Sheffield</p>	<p>Mr Seumas Eckford, Consultant in Obstetrics & Gynaecology, North Devon District Hospital</p>	<p>Dr Fiona Lecky, Senior Lecturer/Honorary Consultant in Emergency Medicine, University of Manchester/Salford Royal Hospitals NHS Foundation Trust</p>	<p>Professor Jon Moss, Consultant Interventional Radiologist, North Glasgow Hospitals University NHS Trust</p>
<p>Deputy Chair, Mr Michael Thomas, Consultant Colorectal Surgeon, Bristol Royal Infirmary</p>	<p>Professor Sam Eljamel, Consultant Neurosurgeon, Ninewells Hospital and Medical School, Dundee</p>	<p>Dr Nadim Malik, Consultant Cardiologist/Honorary Lecturer, University of Manchester</p>	<p>Dr Simon Padley, Consultant Radiologist, Chelsea & Westminster Hospital</p>
<p>Mrs Isabel Boyer, Public contributor</p>	<p>Dr Adele Fielding, Senior Lecturer and Honorary Consultant in Haematology, University College London Medical School</p>	<p>Mr Hisham Mehanna, Consultant & Honorary Associate Professor, University Hospitals Coventry & Warwickshire NHS Trust</p>	<p>Dr Ashish Paul, Medical Director, Bedfordshire PCT</p>
<p>Mr Sankaran Chandra Sekharan, Consultant Surgeon, Breast Surgery, Colchester Hospital University NHS Foundation Trust</p>	<p>Dr Matthew Hatton, Consultant in Clinical Oncology, Sheffield Teaching Hospital Foundation Trust</p>	<p>Dr Jane Montgomery, Consultant in Anaesthetics and Critical Care, South Devon Healthcare NHS Foundation Trust</p>	<p>Dr Sarah Purdy, Consultant Senior Lecturer, University of Bristol</p>
<p>Professor Nicholas Clarke, Consultant Orthopaedic Surgeon, Southampton University Hospitals NHS Trust</p>	<p>Dr John Holden, General Practitioner, Garswood Surgery, Wigan</p>		<p>Dr Matthew Wilson, Consultant Anaesthetist, Sheffield Teaching Hospitals NHS Foundation Trust</p>
<p>Ms Leonie Cooke, Public contributor</p>			<p>Professor Yit Chiun Yang, Consultant Ophthalmologist, Royal Wolverhampton Hospitals NHS Trust</p>

Observers

<p>Dr Kay Pattison, Senior NIHR Programme Manager, Department of Health</p>	<p>Dr Morven Roberts, Clinical Trials Manager, Health Services and Public Health Services Board, Medical Research Council</p>	<p>Professor Tom Walley, CBE, Director, NIHR HTA programme, Professor of Clinical Pharmacology, University of Liverpool</p>	<p>Dr Ursula Wells, Principal Research Officer, Policy Research Programme, Department of Health</p>
---	---	---	---

Pharmaceuticals Panel

Members

Chair, Professor Imti Choonara, Professor in Child Health, University of Nottingham	Dr James Gray, Consultant Microbiologist, Department of Microbiology, Birmingham Children's Hospital NHS Foundation Trust	Dr Maria Kouimtzi, Pharmacy and Informatics Director, Global Clinical Solutions, Wiley-Blackwell	Mrs Katrina Simister, Assistant Director New Medicines, National Prescribing Centre, Liverpool
Deputy Chair, Dr Yoon K Loke, Senior Lecturer in Clinical Pharmacology, University of East Anglia	Dr Jurjees Hasan, Consultant in Medical Oncology, The Christie, Manchester	Professor Femi Oyeboode, Consultant Psychiatrist and Head of Department, University of Birmingham	Professor Donald Singer, Professor of Clinical Pharmacology and Therapeutics, Clinical Sciences Research Institute, CSB, University of Warwick Medical School
Dr Martin Ashton-Key, Medical Advisor, National Commissioning Group, NHS London	Dr Carl Heneghan, Deputy Director Centre for Evidence-Based Medicine and Clinical Lecturer, Department of Primary Health Care, University of Oxford	Dr Andrew Prentice, Senior Lecturer and Consultant Obstetrician and Gynaecologist, The Rosie Hospital, University of Cambridge	Mr David Symes, Public contributor
Dr Peter Elton, Director of Public Health, Bury Primary Care Trust	Dr Dyfrig Hughes, Reader in Pharmacoeconomics and Deputy Director, Centre for Economics and Policy in Health, IMSCaR, Bangor University	Ms Amanda Roberts, Public contributor	Dr Arnold Zermansky, General Practitioner, Senior Research Fellow, Pharmacy Practice and Medicines Management Group, Leeds University
Dr Ben Goldacre, Research Fellow, Epidemiology London School of Hygiene and Tropical Medicine		Dr Gillian Shepherd, Director, Health and Clinical Excellence, Merck Serono Ltd	

Observers

Dr Kay Pattison, Senior NIHR Programme Manager, Department of Health	Dr Heike Weber, Programme Manager, Medical Research Council	Dr Ursula Wells, Principal Research Officer, Policy Research Programme, Department of Health
Mr Simon Reeve, Head of Clinical and Cost- Effectiveness, Medicines, Pharmacy and Industry Group, Department of Health	Professor Tom Walley, CBE, Director, NIHR HTA programme, Professor of Clinical Pharmacology, University of Liverpool	

Psychological and Community Therapies Panel

Members

Chair, Professor Scott Weich, Professor of Psychiatry, University of Warwick, Coventry	Mrs Val Carlill, Public contributor	Dr Jeremy J Murphy, Consultant Physician and Cardiologist, County Durham and Darlington Foundation Trust	Dr Paul Ramchandani, Senior Research Fellow/Cons. Child Psychiatrist, University of Oxford
Deputy Chair, Dr Howard Ring, Consultant & University Lecturer in Psychiatry, University of Cambridge	Dr Steve Cunningham, Consultant Respiratory Paediatrician, Lothian Health Board	Dr Richard Neal, Clinical Senior Lecturer in General Practice, Cardiff University	Dr Karen Roberts, Nurse/Consultant, Dunston Hill Hospital, Tyne and Wear
Professor Jane Barlow, Professor of Public Health in the Early Years, Health Sciences Research Institute, Warwick Medical School	Dr Anne Hesketh, Senior Clinical Lecturer in Speech and Language Therapy, University of Manchester	Mr John Needham, Public contributor	Dr Karim Saad, Consultant in Old Age Psychiatry, Coventry and Warwickshire Partnership Trust
Dr Sabyasachi Bhaumik, Consultant Psychiatrist, Leicestershire Partnership NHS Trust	Dr Peter Langdon, Senior Clinical Lecturer, School of Medicine, Health Policy and Practice, University of East Anglia	Ms Mary Nettle, Mental Health User Consultant	Dr Lesley Stockton, Lecturer, School of Health Sciences, University of Liverpool
	Dr Yann Lefeuvre, GP Partner, Burrage Road Surgery, London	Professor John Potter, Professor of Ageing and Stroke Medicine, University of East Anglia	Dr Simon Wright, GP Partner, Walkden Medical Centre, Manchester
		Dr Greta Rait, Senior Clinical Lecturer and General Practitioner, University College London	

Observers

Dr Kay Pattison, Senior NIHR Programme Manager, Department of Health	Dr Morven Roberts, Clinical Trials Manager, Health Services and Public Health Services Board, Medical Research Council	Professor Tom Walley, CBE, Director, NIHR HTA programme, Professor of Clinical Pharmacology, University of Liverpool	Dr Ursula Wells, Principal Research Officer, Policy Research Programme, Department of Health
--	--	--	---

Feedback

The HTA programme and the authors would like to know your views about this report.

The Correspondence Page on the HTA website (www.hta.ac.uk) is a convenient way to publish your comments. If you prefer, you can send your comments to the address below, telling us whether you would like us to transfer them to the website.

We look forward to hearing from you.