

The Impact of Local Labour Market Factors on the Organisation and Delivery of Health Services

***Report to the National Co-ordinating Centre
for NHS Service Delivery and Organisation
R & D (NCCSDO)***

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prepared by

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Executive Summary

Key themes and findings

Workforce issues are a key aspect of policy and service delivery in the National Health Service (NHS). Understanding the nature of the local labour markets in which NHS organisations operate and the competitiveness of the NHS within these markets is critical for service delivery.

The aim of this scoping study is to document our current understanding of the competitiveness of the NHS within local labour markets. In particular, to document the different types of responses NHS organisations use in response to labour market conditions, to document best practice in other sectors, and to document the impact on service delivery and organisation. Gaps in current knowledge are then used to map a research agenda.

Interviews were conducted in ten sites across the UK, selected on the basis of their different experiences of recruitment and retention problems and geographical diversity. This included interviews with two workforce development confederations (WDCs), six NHS trusts in England, one NHS trust in Wales and one in Scotland.

Three areas of the literature were also reviewed. The first was the general economics literature comparing the competitiveness of the public and private sectors. The second was the literature on the competitiveness of the NHS both between different parts of the NHS and with other sectors. The third area of literature examined the experiences of the non-NHS and private sectors.

The analysis of the interviews and the literature was based on four criteria that were used to select studies and to place the interview data and literature into themes. These were:

- NHS competitiveness
- local flexibility
- responses to local labour market conditions
- the impact on service delivery and organisation.

A framework for understanding the link between local labour markets and service delivery was also proposed. This included the local market as a source of supply of labour for the NHS; the influence of the local labour market on the pay and conditions of staff as a way to recruit and retain staff, including those working in national labour markets (for example doctors), and the influence of the local labour market on

the pattern of demand for health services and therefore for different types of skills.

The small empirical literature on the competitiveness of the public and private sectors reveals substantial differentials in pay between sectors, such that the public sector underpays in the low amenity and high cost areas, such as London and the South East, and overpays in the high amenity and low cost areas such as the Cornwall. The use of different datasets reveals different patterns, and further research is required here.

There are surprisingly few studies of local pay flexibility in the private sector. A recent review of a number of the largest private sector organisations with a UK-wide workforce showed that though they too used national rates of pay, they employed a wider variety of different systems to geographically differentiate pay than does the NHS. National bargaining in the private sector has declined steeply in the last 20 years and a more decentralised approach to pay setting has been adopted.

The literature review revealed wide-ranging empirical evidence from the NHS. Forty four studies were included that addressed the criteria. There was some evidence on the relative attractiveness of jobs, but few of these studies explicitly compared across jobs with different employers. Little evidence existed on the role of local flexibility. There were a number of studies reporting details of NHS organisations' responses to shortages that listed a wide variety of local policies and interventions. However, there were no systematic and rigorous evaluations of such interventions. There appeared to be no studies that rigorously evaluated the impact on service delivery and organisation.

The interviews suggested that the nature and characteristics of the local labour market (for example ethnic composition, socio-economic status and geography) were crucial in shaping trusts' responses to shortages and in turn their competitiveness, but often they had not been able to develop policies to respond appropriately to these external factors.

NHS trusts seemed more likely to compete with each other rather than with other sectors, and here WDCs could play a role in reducing the negative effects of this. Relative pay was mentioned most frequently as a critical determinant of the attractiveness of NHS nursing jobs, though this was largely in the context of nursing agencies. The role of other non-pay factors in attracting and retaining staff appeared to be very important but from the literature this was less clear. Trusts also competed on the basis of their reputation, particularly for medical staff, where this was related to teaching status and the advantages that status afforded, and to new capital developments.

Some trusts had used local flexibility in setting pay and conditions, but many seemed reluctant to use these avenues although an

understanding of the reasons for this did not emerge from either the interviews or literature review.

Trusts responded to shortages by participating in national initiatives, such as international recruitment, although a few had also developed their own initiatives including training and job enhancement.

The effects of shortages on the quantity and quality of health care were reported by a number of trusts. These included cancelled operations, longer waiting times because of shortages of staff in diagnostic areas, dissatisfaction and low morale, and a high rate of sickness absence. The speed of service development was also compromised. Trusts mentioned the necessity to share services and work in partnership with other trusts.

The study concludes that overall there is an absence of high quality empirical evidence and a marked lack of primary data collection. There have been no rigorous evaluations of the costs and benefits of the myriad of policy interventions that exist to address recruitment and retention. Those studies that exist have been small and the results are not generalisable. Human resources directors in the NHS seem to have little data or rigorous evidence on which to base their decisions.

Research should focus on specific staff groups within the NHS: medical and nursing staff are a priority because of their centrality to service delivery but allied health professionals, radiology and diagnostic services, pathology, and anaesthesia require analysis for they are fundamental to the speed of throughput.

Two broad themes of research are proposed. First, how competitive are NHS pay and conditions compared to other areas of employment and other careers? Second, what are the costs and benefits of policies and interventions - including changes in service delivery - to increase recruitment and retention and influence the labour market decisions of NHS staff? The study details the research questions underpinning these and outlines appropriate methods of research.

The Report

Section 1 Background

The NHS is the largest single employer in the UK, accounting for nearly 5% of all employees. The highly diverse workforce has a presence in every labour market and in many of these markets it is the largest single employer. The combination of substantial geographical diversity and occupational mix sets the NHS apart from other employers and presents a formidable challenge to the organisation. The NHS must devise pay and reward structures that efficiently recruit, retain and motivate employees in the many different labour markets in which it operates. These markets vary between staff groups and are local, national and international. Local markets are a critical source of supply of a majority of the staff the NHS employs while conditions in local markets have an important influence on the ability of local NHS trusts to attract and retain those they recruit from national and international markets. The responsiveness of local trusts to changing conditions in the local labour market is thus a key to ensuring the delivery of high quality and efficient patient care.

Workforce issues are central to delivery of improved levels and quality of NHS services. The Wanless Report, *Securing our Future Health: Taking a long-term view* (2002) set out ambitious plans for a dramatic increase in the level of spending on the NHS over the next ten and 20 years. Underpinning the Wanless method of identifying the required level of spending is a prominent recognition that desired standards will be obtainable only if the NHS is able to recruit and retain the required medical and nursing staff.

The NHS plan (Department of Health, 2000) identifies three key workforce issues:

- 1 investment in staff - improvements in both the number and quality of staff
- 2 changes in the NHS skill mix
- 3 working practices (a prominent feature is task reassignment between and among different branches of the medical workforce and between the medical and the nursing workforces).

The plan emphasises the critical role of pay structures and of the local variations in these as presently mapped in the NHS market forces factor and associated supplements.

Local flexibility in public sector wage setting has also recently been emphasised by the Treasury. In the April 2003 budget statement (HM

Treasury, 2003) the Chancellor of the Exchequer announced that public sector pay arrangements, including those of the review body groups, should include a greater local and regional dimension. For most groups of public sector staff there would be a stronger focus on the responsiveness of pay to local and regional conditions. The Treasury has declared that the purpose of the policy is to improve service delivery. In parallel with this development new incentives and new pay structures have been developed, for example the new contract for consultants and GPs from 2004. For non-medical staff the Agenda for Change policy (see for example Department of Health, 2003a) proposes a new integrated pay structure, underpinned by a system of job evaluation. The European working time directive will also influence the ability of NHS employers to respond to shortages.

A feature of the NHS plan is recognition of the need to understand the motivations of NHS staff. This again emerges as a prominent concern in a national 'listening exercise' with NHS stakeholders (Cherry and Anderson, 2002), the report of which recognises the need to understand and define staff expectations and emphasises the need to learn how other sectors of the economy deal with staff shortage and adjust to differences in local market conditions. The establishment of the 24 WDCs in England is further and explicit recognition of the importance of local labour markets and the local health economy. Similar developments are also occurring elsewhere in the UK and devolution presents new challenges. Where the devolved territories construct different contractual arrangements for their staff and NHS structures begin to differ between the devolved territories, this will introduce a new dynamic into the flows of staff between them.

Section 2 Aims and key issues

2.1 Aims

2.2 Key issues

2.1 Aims

The purpose of this scoping study is to present a clearer picture of our current understanding of the nature and impact of geographical and occupational labour market diversity on NHS service delivery. There are a number of objectives to this scoping exercise:

- 1 to clearly set out our current understanding of the competitiveness of the NHS in the local labour markets for each staff group in the UK
- 2 to detail the completeness of this understanding by identifying the strengths and weaknesses of the theoretical and empirical methods on which this understanding is based
- 3 to identify the different types of responses available to local employers as they react to changes in local labour market conditions, and examine evidence about the extent to which these responses are used
- 4 to identify best practice in other parts of the public and private sectors and the generalisability of this practice to the NHS
- 5 to identify the gaps in our knowledge and detail the key methodological challenges - both theoretical and empirical – involved in improving our knowledge
- 6 to map out the future research agenda.

2.2 Key issues

A central thrust to current labour market policy in the UK is the need to ensure flexibility; flexibility of response to differences in the initial labour market conditions and flexibility of response to anticipated and unanticipated changes in those conditions. In the public sector the focus of recent policy has been upon the development of systems that respond more flexibly to differences in local labour markets. Key to this exercise is an understanding of the nature of the labour markets in which the NHS operates. Thus in the section reporting results we first establish a framework for understanding the labour markets in which the NHS operate. We establish:

- **A clear and concise conceptual framework for the review.** This is in order to identify more effectively the key differences in the nature of the labour markets and the underlying dynamics and behaviour of these markets. The NHS competes for staff in

several different occupational markets and many different local labour markets. It is important to distinguish between labour markets that are largely internal to the NHS, those for medical staff, and external markets in which the NHS competes for staff with other employers. Examples of the latter are the markets for nurses, allied health professionals, managerial, administrative, clerical and ancillary staff.

- **The defining characteristics of the labour markets in which the NHS operates.** The spatial, geographical, dimensions to these markets will be critical and will vary by staff group. The level of education, the type of training and the gender composition of the group are key determinants of the geographical scope of the local labour markets. This will enable us to define the parameters along which the NHS interacts with these markets.

The following list of issues will then form the basis of criteria that will be used to structure the literature review and interviews.

- 1 What is known about the competitiveness of the pay and conditions offered by the NHS in the different markets? How are and might competitors be defined? In what way does the compensation package offered by the NHS differ from that offered by competitors? How different is the employment and compensation package offered by the NHS - pay, hours, conditions of service, pension - from those offered by other employers? One aspect of this is any existing evidence on geographical pay differences in the NHS and in the public and private sectors. How might this research be developed to reveal the structure of geographical pay differences for each major group of NHS employees? How much does the pay offered by the NHS differ from that offered by the private health care sector in these local markets? What data sets are available to explore this issue and what are their relative merits? A further aspect of this is our current knowledge of the expectations of staff and the relative values that they place on different aspects of the compensation package offered by the NHS and its competitors. Which of these elements offer scope for local flexibility?
- 2 What is known about the extent of local flexibility? Do national rates of pay offer any scope for aligning rates of pay with local market conditions? Will the national system of job evaluation which underpins the Agenda for Change policy increase or diminish this flexibility? The pay of both nurses and medical staff is determined by review bodies, the review bodies establish national, UK-wide, rates of pay. How much scope do these agreements offer for local variations in pay for each of these groups? Where they offer such possibilities do human resource managers, and others concerned with pay setting at the local level, use these opportunities to move rates of pay closer to those paid in the local market?

- 3 What is the range of behavioural responses that local NHS employers can use to address local labour market conditions? This requires a review of the ways in which the NHS locally has dealt with shortages or surpluses. How do the strategies for recruitment and retention differ between parts of the NHS based in different localities? What is the success of these strategies and those used in the private sector and how do these vary between local labour markets?
- 4 Finally, how have the responses of local NHS employers influenced the organisation and delivery of care? How have they substituted one type of staff for another? Has service provision been integrated with other local NHS and non-NHS employers? Have they replaced in house provision with external contractors? How has the performance of the NHS employer been affected by these changes?

Section 3 Methods

3.1 Criteria

3.2 Interviews

3.3 Literature review

The issues listed in Section 2 have led us to distinguish four key criteria for classifying and analysing both the interview data and the literature reviewed. Interviews with a sample of NHS personnel and a review of the published and grey literatures have been used to examine current evidence of the extent to which the above issues have been addressed.

3.1 Criteria

The four criteria that were used to classify and analyse the literature and interview data were:

1 NHS competitiveness

Does the interviewee or the literature describe and evaluate the competitiveness of the NHS compared to other employers in terms of differences in the compensation package, working conditions and job satisfaction?

2 Local flexibility

Does the interviewee or the literature identify and analyse local flexibility to change pay and working conditions and/or do they mention the rigidities imposed by national pay structures and policies? Where flexibility exists do they evaluate its impact and effectiveness?

3 Responses to local labour market conditions

Does the interviewee or the literature examine local NHS responses to changes in labour market conditions and their costs and effects?

4 Impact on service delivery and organisation

Does the interviewee or the literature examine the relationship between local labour market conditions and service delivery, the organisation of care or productivity?

3.2 Interviews

Semi-structured interviews were conducted in ten organisations, including two WDCs and eight NHS hospital trusts. Six NHS trusts were in England, one was in Scotland and one was in Wales. It was important to include a Great Britain dimension as doctors and specialist non-medical staff operate in national labour markets. We interviewed the chief executives or their deputies in the two WDCs and

the directors of human resources or their equivalents (sometimes medical and nursing directors) in each NHS trust.

We used two sets of data to select the two WDCs and the eight NHS trusts. The first was existing evidence of the structure of regional wage differentials. The second was the recorded level of vacancies for qualified nurses and medical and dental staff as reported in the surveys of vacancies compiled by the health departments in England, Scotland and Wales. The former helped identify areas of the country in which it is likely that the pay offered by the NHS differs substantially from prevailing market rates. The second helped us identify trusts with apparently different recruitment and retention problems. In addition to using vacancy and regional wage differential data, we also reflected the geographical distribution and the urban and rural location of the British population.

3.2.1 Selection of interviewees on the basis of evidence of regional pay differences.

Average pay in the private sector, once standardised to take account of differences in the types of jobs people do in different areas of the three countries and the different skills people living in the different areas possess, exhibits substantial regional variation (see Section 4.2.1). In contrast it would seem that the pay structures for the two key professional groups in the NHS, doctors and nurses, exhibit relatively little regional variation. It is thus likely that the gap between what the NHS pays these two staff groups and what the private sector pays for broadly equivalent skills will itself exhibit substantial regional variation. In areas of the country in which the private sector pays a substantial premium, London, the NHS is likely to underpay, and in areas in which the private sector pays the lowest rates, Devon and Cornwall, the NHS is likely to overpay.

Section 4.2.1 reveals substantial geographical variation in rates of pay in the private sector in the UK. It reveals that pay in the private sector is lowest in Cornwall and Devon and highest in London. Accordingly we chose a trust from Cornwall and a trust from London.

3.2.2 Selection of interviewees on the basis of vacancy data

Data on vacancy rates for medical and dental staff and for qualified nurses is available for England from the *Survey of Vacancies* conducted by the Department of Health (Department of Health, 2002). For Scotland and Wales, similar data on vacancies are available. High and persistent vacancy rates suggest that a trust is not competing effectively for labour in the local market, while rising vacancy rates suggest that the position is deteriorating, and declining vacancy rates suggest that the trust has improved competitiveness. We analysed the data for the four years to 2002 to try to discern recent trends and patterns in vacancy rates of this type.

Table 1 reports vacancy rates by region for the four years up to and including 2002, the last year available when compiling this report. The data reveals that the pattern of medical and dental vacancies differs substantially from that for qualified nurses. For qualified nurses, London and the South of England had the highest vacancies in each one of the four years and thus over the four years as a whole. In contrast vacancies for medical and dental staff were highest over the four-year period in the Northern and Yorkshire area. Table 1 also reveals that the vacancy rate for medical and dental staff in England has been rising steadily over the four-year period. The vacancy rates for medical and dental staff increased continuously over the period, in particular in the Northern and Yorkshire area, the West Midlands and the South East. In contrast, nursing vacancy rates peaked in 2000 in all but one area (the North West, where the rate peaked in 2001) and have since been falling. Again, with the exception of the North West, vacancy rates for nurses were lower in all areas in 2002 than in 2000.

Table 1 Vacancy rates by region (1999 to 2002)

All medical and dental staff	2002 %	2001 %	2000 %	1999 %	Average
England	3.7	3.0	2.6	1.9	2.8
Northern and Yorkshire	4.6	3.8	3.4	1.8	3.4
Trent	3.7	3.0	1.9	2.3	2.7
West Midlands	4.6	3.3	2.7	2.0	3.2
North West	3.7	3.6	2.5	2.7	3.1
Eastern	3.3	2.8	3.0	1.5	2.7
London	4.2	3.1	3.3	2.0	3.2
South East	2.8	2.3	1.8	1.4	2.1
South West	2.7	1.7	1.9	1.7	2.0
Qualified nurses					
England	3.1	3.4	3.9	2.8	3.3
London	6.1	6.4	7.4	5.5	6.3
South East	4.0	4.5	4.9	3.8	4.3
Eastern	3.8	3.0	4.9	2.5	3.6
West Midlands	1.7	3.0	3.5	2.6	2.7
North West	2.2	2.4	2.0	1.8	2.1
South West	2.2	2.3	2.5	1.4	2.1
Northern and Yorkshire	1.8	2.1	2.4	1.9	2.0
Trent	1.8	1.6	1.9	1.4	1.7

Source: Department of Health Vacancies Survey 2002. Notes: Health authority figures are based on NHS trusts, and do not necessarily reflect the geographical provision of healthcare; percentages rounded to one decimal place; * = figures where staff in post and number of vacancies are less than 10

More disaggregated data is available for this period but this is still classified by the health authority areas that existed before the creation of the 27 strategic health authorities (SHAs) and primary care trusts (PCTs). We distinguished the ten health authorities which had experienced the highest vacancy rates on average over the four-year period for medical and dental staff and qualified nurses. These are reported in Tables 2 and 3 respectively.

The more detailed data in Table 2 reveals a very mixed picture of geographic shortage among medical and dental staff. Northern health authorities, together with several from London, feature prominently among those which have experienced the highest vacancy rates. Health authorities in Yorkshire and Derbyshire are also listed. Table 3 in contrast reveals a much clearer picture for qualified nurses. For this professional group the highest vacancy rates are concentrated in London and the South East. We used this data to select both the WDCs and the trusts we would interview.

Workforce development confederations

WDCs have been established in England to ensure that the programme for creating an integrated approach to developing the workforce needs of the health and social care sector is driven forward at a local level. They were established in April 2001, each one is co-terminus with a SHA, and there are now 27 WDCs in England. We chose to interview personnel at two WDCs.

First we chose the WDC which featured most prominently in Table 2, which covered the largest number of health authorities listed in the top ten in Table 2 (this was Northern England WDC which covers both Northumberland and Gateshead and South Tyneside). We also selected the WDC which covered the largest number of health authorities appearing in the top ten in Table 3 (this was South East London WDC which covers Bexley, Bromley and Greenwich and the Bromley health authority, both of which appear in the top 10 in Table 3 and, it should be noted in Table 2). We interviewed both WDCs.

Table 2 The ten health authorities with the highest vacancy rates: medical and dental

Health authority	2002 %	2001 %	2000 %	1999 %	Average %
1 Bromley		9.8	10.8	4.3	8.3
2 Walsall	12.5	3.7	4.2	7.5	7.0
3 Northumberland	7.7	9.3	4.9	5.3	6.8
4 Bury and Rochdale	8.1	5.8	5.6	6.0	6.4
5 Barking and Havering	6.7	4.6	9.1	4.8	6.3
6 Bexley, Bromley and Greenwich	7.4	7.0	5.1	3.5	5.8
7 Gateshead and South Tyneside	7.1	2.9	5.8	5.5	5.3
8 County Durham and Darlington	6.8	5.7	4.1	4.6	5.3
9 West Pennine	4.8	5.0	5.0	5.6	5.1
10 Redbridge and Waltham Forest	8.2	5.3	3.5	2.6	4.9

NHS hospital trusts

Bromley NHS Trust appears at the top of Tables 2 and 3 and we therefore interviewed a hospital from within the Bromley Health Authority. This appeared from the data to be the area experiencing the most acute recruitment and retention problems for both types of staff. This offered the further advantage that it would enable us to contrast and compare the perspective of a trust and its WDC.

We then did a further cut of the data to distinguish those health authorities in which the vacancy problem had grown steadily more severe over the period and those in which it had grown steadily less severe. We identified all those health authorities which had experienced continually rising vacancy rates for staff and all those health authorities which had experienced continually falling vacancy rates for staff. Sixteen health authorities had experienced steadily rising vacancy rates for medical and dental staff and the ten with the highest average vacancy rates over the period are listed in Table 4. Only six health authorities had experienced steadily rising vacancy rates for qualified nurses and these are listed in Table 5. No health authorities had experienced continually falling vacancy rates for medical and dental staff and only two for qualified nursing staff, the latter are listed in Table 6.

Table 3 The ten health authorities with the highest vacancy rates: qualified nurses

Health authority	2002	2001	2000	1999	Average
1 Bromley	---	10.9	13.3	5.7	10.0
2 East London and the City	4.5	7.0	8.7	10.6	7.7
3 Lambeth, Southwark, Lewisham	9.7	8.8	7.6	3.7	7.4
4 East and North Hertfordshire	8.6	6.2	8.6	5.7	7.3
5 Croydon	3.5	3.5	6.2	14.4	6.9
6 Kensington, Chelsea, Westminster	5.5	7.5	10.8	3.7	6.9
7 Camden and Islington	6.0	4.8	9.7	6.3	6.7
8 Bexley, Bromley and Greenwich	6.8	8.2	5.0	6.7	6.7
9 West Hertfordshire	---	6.6	8.3	5.0	6.6
10 West Surrey	8.5	2.7	6.1	8.0	6.3

We selected three further trusts for interview from among this group. First we selected a trust from a health authority in which the vacancy problem for medical staff had grown worse over the recent period. Since the first listed in Table 4 is the Bexley, Bromley and Greenwich, covered by the South East London WDC (which we had already interviewed), we selected a trust from the second - Redbridge and Waltham Forest. We also interviewed a trust from a health authority in which the vacancy problem for qualified nurses had steadily increased over the period. The health authority at the top of Table 5 is again located in South London, an area in which we were already holding interviews. We therefore chose a trust from the area covered by the second listed health authority - Berkshire. This is also an area contiguous to London and offered the additional characteristic of a fringe area to London, one likely to be adversely affected by the additional allowances that can be paid to nurses in London.

No health authorities experienced consistently falling vacancy rates for medical staff but two experienced consistently decreasing vacancy rates for qualified nurses. One of these, North and Mid Hampshire was located close to other health authorities which were characterised by high vacancies and indeed it was close to Berkshire which had experienced steadily increasing vacancies. We interviewed a trust from this authority in order to discover how they had managed to steadily reduce vacancy rates in an area of tight labour markets.

To obtain appropriate geographical coverage we also chose trusts from Wales and Scotland (from Glasgow and Glamorgan respectively). These areas were selected for the relatively high vacancy rates. Finally we sought first to interview a hospital in a remote and rural area with no provision for doctor or nurse training, we chose a hospital in Cornwall, and a trust from a large metropolitan area other than London. In the latter case, we were looking for a trust which operated

in a labour market which had traditionally been a prominent supplier of skills to the manufacturing sector. We conjectured that the training base might not have fully adjusted to meet modern service demand. We thought it likely that such a trust might be located in a deprived inner city area which might be thought unattractive to staff. To capture the impact of this dimension, the last trust we chose was in Manchester.

Table 4 Health authorities with consistently increasing vacancy rates for medical and dental staff

Health authority	Increase over:				
	2002 %	2001 %	2000 %	1999 %	Avg %
Bexley, Bromley and Greenwich	7.4	0.4	1.9	1.6	5.8
Redbridge and Waltham Forest	8.2	2.9	1.8	0.9	4.9
Wakefield	7.7	3.5	0.3	2.4	4.4
Wolverhampton	10.2	5.2	3.2	1.7	4.3
Tees	7.3	3.5	2.6	0.4	3.3
South Staffordshire	6.4	3.4	1.0	1.2	3.1
Norfolk	4.0	0.4	2.3	0.0	2.5
Leeds	3.5	1.0	0.8	0.9	2.1
Salford and Trafford	6.6	5.3	0.7	0.6	2.1
North Derbyshire	4.9	4.1	0.0	0.8	1.6

Note: There are no health authorities with a consistent declining trend in vacancy rates for medical and dental.

Table 5 Health authorities with consistently increasing vacancy rates for qualified nurses

Health authority	Increase over:				
	2002 %	2001 %	2000 %	1999 %	Average %
Lambeth, Southwark and Lewisham	9.7	0.9	1.2	3.9	7.4
Berkshire	5.0	0.3	0.2	1.5	4.3
West Kent	5.8	0.8	1.4	2.8	3.8
East Riding and Hull	3.5	0.2	2.6	0.0	2.1
South Lancashire	4.1	1.3	2.0	0.4	2.0
Sunderland	1.2	0.8	0.1	0.3	0.5

Table 6 Health authorities with consistently decreasing vacancy rates for total qualified nurses.

Health authority	Increase over:				Average %
	2002 %	2001 %	2000 %	1999 %	
East London and the City	4.5	-2.5	-1.7	-1.9	7.7
North and Mid Hampshire	2.0	-2.9	-0.3	-0.9	4.6

Analysis of interviews

A semi-structured interview schedule was used, which was modified slightly for the interviews with the WDCs (Appendix 1). The interviews with the WDCs were conducted by two interviewers working together. The remaining eight interviews were split between the two. All interviews were taped and transcribed. Both interviewers coded sections of text of each interview using the four criteria, then checked each others' codings for consistency. Within each criterion, sections of text were organised into common themes.

Literature review

Three areas of the literature were searched and reported separately. The first was the general economics literature comparing levels of public and private sector pay across geographical areas. This literature is key in determining the pay differentials between these sectors, and therefore the extent of competition between these sectors in geographical areas and local labour markets. It is important to examine the extent to which this could be applied to the labour markets for health care personnel. This literature is small and well known by the grantholders, and so their expert knowledge was used to identify these studies.

The second area of literature was that reporting practice within the NHS, and comparing the NHS with other sectors. A literature search was undertaken to identify relevant material (published or unpublished) covering a period of ten years (1992 to July 2003). Given the nature of the topic, a range of bibliographic databases were used covering the economic and management literature as well as the fields of medicine, health care and social science. Particular attention was paid to the identification of grey literature through utilisation of sources such as the Health Management Information Consortium Database, specialist library catalogues (for example NHS Scotland Health Management Library), and Internet searching. Internet searching used an algorithmic search engine (Google) as well as visiting known sites of relevance such as Incomes Data Services and the King's Fund.

This was supplemented by the third area of the literature review, additional searches in the non-NHS and private sectors that may be applicable to the health sector. These were carried out on appropriate databases, such as the Social Science Citation Index and EconLIT (and are marked with a * in Table 7).

The table below lists the bibliographic databases searched. Individual search strategies were formulated using a combination of controlled vocabulary terms, where available, and free text terms. Examples of search strategies used may be found in the Appendix 2. The number retrieved for each database includes duplicates of references that may be indexed in more than one database. This accounts for the relatively low number of selected references from some databases.

A number of specific websites were also searched.

- Incomes Data Services
- The King's Fund
- Institute of Employment Studies
- Scottish Executive Health Department
- Department of Health
- UNISON
- NHS Alliance
- NHS Confederation
- NHS Electronic Library for Health
- Chartered Society of Physiotherapy
- Royal College of Speech and Language Therapists
- Institute of Chiropodists and Podiatrists
- British Dietetic Association
- British Association/College of Occupational Therapists

Table 7 Databases searched in the second and third parts of the literature review

Database	Retrieved	Selected
Health Management Information Consortium (HMIC)	492	57
Cumulative Index of Nursing and Allied Health Literature (CINAHL)	234	16
MEDLINE	103	17
EMBASE	12	9
Applied Social Sciences Index and Abstracts (ASSIA)	238	5
Social Science Citation Index	141(105)*	21(1)
British Nursing Index	91(177)	1
EconLIT	31	6
ABI Inform	12	3

** Denotes additional searches in the non-NHS and private sectors.*

Analysis and summary of literature

As a result of these searches, 139 articles, books, working papers, papers and reports were selected for further review. The literature to be included in the final review was then selected according to the four criteria (section 4.1) and the quality of the studies. There are no standard checklists for examining the quality of the literature in this area, and so the quality of the literature was judged by reference to robust academic criteria: peer review; the quality of the data employed; the robustness of the empirical methods employed; sample size and representativeness. The Cochrane Reviewers' Handbook (version 4.2.0; Clarke and Oxman, 2003). was also used to help assess quality. This included the application of criteria such as validity and design characteristics that influence interpretation of results. The results of each study were summarised within staff group according to their setting, study design, type of data used, results and conclusions. Results were also summarised under each of the four criteria.

Section 4 Results

4.1 A framework for understanding the link between competition in local labour markets and service delivery

4.1.1 Local labour markets and service delivery

The local labour market has a fundamental impact on service delivery for three main reasons:

- 1 First and foremost the local market is the primary source of supply of the majority of labour used by the NHS: the overwhelming majority of ancillary, clerical, administrative and nursing staff working in the NHS have been supplied by the local market.
- 2 Even where staff such as doctors, other senior clinical professionals and managers are recruited from national and even international labour markets, the local market will impact upon service delivery because it will determine the level of remuneration that needs to be offered to attract these staff to an area.
- 3 It is one of the determinants of the pattern of demand for local health services, and therefore the demand for different types of skills.

To explore the link between the local labour market and service delivery, an economist would use a relevant theoretical framework such as the 'production function'. A production function specifies the relationship between inputs to a production process and the outputs from that process. The main inputs are labour, capital and technology. In the case of the NHS the outputs are complex and multi-dimensional and range from intermediate outputs, such as number of cases treated, through measures of the process of care that patients value (such as waiting times), to measures of health outcome.

Changing the quantities of labour and capital will change the amount of output produced. The amount of output produced will also change if the efficiency with which the inputs are used changes. The efficiency with which inputs (including labour) are used is determined by the present state of technology and the rules and regulations which determine how this technology may be used. In the NHS this dimension is critical.

The output of the NHS is complex and is produced through the co-operation of many different types of labour. The organisation and delivery of health services requires the timely and efficient input of

several different sorts of labour in combination with the appropriate type of capital. Because local markets supply much of the labour used by the NHS the local market will have a significant impact on the amount of output produced. The quantity and quality of labour inputs is therefore important.

The framework provided by the production function also emphasises that the impact of the local labour market on service delivery is mediated by the availability and behaviour of other factors of production. A shortage of one type of labour might be overcome by employing more of another type of labour or by substituting capital for labour. The determinants of these substitution possibilities are both technical and administrative. Is it technically possible to substitute one type of labour for another or capital for labour and, if it is technically possible, do the rules or customary practices allow it? In the NHS these substitution possibilities are strictly governed by national clinical guidelines and rules set by the NHS and the professional bodies that represent employees. Where these national rules and regulations take little or no account of differences between local areas they throw the burden of adjustment to any change in the pattern of required output onto local supply.

4.1.2 The dimensions of the market

The impact of the local market on competition for health service professionals is attenuated by the nature of the skills each staff group possess and the training that has produced these skills. The geographical dimensions of the labour market for medical staff differ from those for nurses because the nature of their training is different. The training of medical staff comprises a period of general training followed by extensive on-the-job training in the chosen speciality. But once the speciality has been chosen there may be only a small number of such posts demanding those skills in any location and the opportunities for advance can only be realised by moving between locations. The structure of specialist training for medical staff is managed by the royal colleges and postgraduate deaneries which emphasise professional and specialty boundaries.

The NHS is the dominant buyer in the market in which medical staff sell their skills and the review body establishes a national price that the NHS has to pay for these skills. The market for medical staff has many of the characteristics of an internal labour market. However within the NHS there is still competition between hospitals in different areas for the services of medical professionals. Moreover the competitors must compensate for aspects of the jobs they offer or the areas in which they are located which medical staff will find unattractive. The lack of flexibility in the wage structure means that this competition is forced onto other conditions of service. If conditions of service and job characteristics cannot be changed to compensate, then dissatisfaction and low morale of staff may be observed.

In contrast because of the nature of their training and because of their mobility – itself a consequence of non-labour market responsibilities and ties and associated career aspirations - the markets for the skills of nurses, ancillaries and clerical and administrative staff are much more open. They are also for these same reasons more local and more evidently competitive because alternative job openings exist in most areas. This means that they will often have important characteristics, such as house prices, in common across the whole market. As a result compensating for differences in house prices is not generally an element in local competition. But in turn this means that competition for the services of nurses, ancillaries and clerical and administrative staff will focus on other aspects of their jobs.

4.1.3 The local labour market and labour supply

The local market has a direct impact on the supply of much of the labour recruited by the NHS and thus supply conditions in that market will be explored. The following dimensions of local markets are key:

- The number and type of skills produced in the local market. The size and the ethnic and gender composition of the local population together with the type and quality of local training and education provision are key to this.
- Local attitudes to NHS jobs. In some areas there may be a greater enthusiasm (or 'public service ethos') for working in the caring professions and in the NHS.
- The presence or absence of competitors. Where other employers compete directly for the same type of skills employed by the NHS or the jobs they offer require no skills, they will have a more immediate impact on NHS service delivery than where the skills required are different. In the latter case employees require retraining before they can do the jobs on offer and this raises the costs of employing that labour. Competitors may be either other NHS organisations or other public and private sector firms. Where they are the former, NHS institutions can moderate competition within the NHS. This is a role that WDCs sometimes perform.

4.1.4 Geographical dimensions

Key to understanding the nature of the competition for staff between employers in different labour markets or indeed employers in the same labour market is the theory of compensating differentials. This theory proposes that competition will require employers to consider the whole of the advantages and disadvantages of the jobs they offer and that competitive balance or equilibrium will only have been achieved in any local labour market when the net advantages of jobs in that area are equalised. Competition means that employers must seek to compensate their employees for any disadvantages that are associated with the jobs they offer and that they may be able to pay less if the jobs are particularly attractive in other respects. Equally if

they are competing for employees with other areas they must compensate for any unattractive features of the area as well as the jobs they offer if they are to be competitive. We shall observe that this theory makes different predictions about the nature of competition for medical staff and nurses, ancillary, and clerical and administrative staff.

The level of remuneration must be set at different levels in different areas of the UK in order to produce the same real income. If it is not then this will encourage turnover and movement of staff across areas of the UK, and persistent shortages of staff in some areas. This is because of two important differences between areas of the country:

- 1 differences in the cost of living
- 2 differences in working conditions and the local environment.

Together these will determine the attractiveness of jobs in any particular area of the country. Differences in the cost of living reflect two things: differences in house prices and differences in the price of local services. The higher the local private sector wages, the higher will be the price of locally delivered services. The higher the price of locally delivered services and the higher the price of houses, the higher pay will need to be to compensate. If the type of work is less attractive, then again pay will need to be higher to compensate for this.

The local labour market and the pattern of demand for health services

The local labour market will be one source of difference in the pattern of demand for health services and thus the type of skills required by local health services. The type of health problems presented will differ according to the type of jobs done in the local market which in turn will reflect the occupational and industrial structure of the local economy. The pattern and types of occupational illnesses and injuries will differ between areas and will present demands for different types of skills. In turn this may offer more or less attractive opportunities for local health service professionals to practice their skills and will increase or diminish the appeal of jobs in the area. This could of course be extended to consider factors beyond the local labour market within the local society for these may also produce demands for different skills which may increase the appeal of jobs in certain areas. For example, doctors wishing to practice their skills in certain types of surgery may wish to spend time in localities which admit cases of gunshot wounds.

4.2 Literature reviews

4.2.1 Empirical evidence on the differences between local labour markets

The first literature review focused on those studies in economics that have examined differences in pay between the public and private sectors across geographical areas (i.e. local labour markets). The literature focuses specifically on the differentials between sectors in terms of pay. This is because in a well-functioning labour market pay would be the mechanism by which employers would compensate employees for doing unattractive jobs or living in unattractive or high cost areas, thereby enabling them to recruit and retain staff who would otherwise move to jobs and areas with more attractive characteristics. One would therefore expect differences in working conditions between sectors to be reflected in pay differentials. Pay differences would therefore reflect the competitiveness between these sectors.

The literature review revealed a small empirical literature reporting substantial geographical pay differences in the UK. Researchers have sought to determine whether the advantages and disadvantages of different jobs are equalised across the country, as they should be if labour markets worked well. For a review of this theory and a survey of empirical work see Rosen (1986). However, researchers have found that differences persist even after differences in the characteristics of the workforce in different areas have been controlled for. For example, differences in the education levels of the workforce (Reilly, 1992), in the working environment, as proxied by the industrial mix (Shah and Walker, 1983), and in the attractiveness of the external environment in which they live and work (Blackaby and Murphy 1995), have all been found to be important in explaining the pattern of geographical pay differences in the UK. But they have not fully explained the observed patterns. This may be because labour must be mobile, labour markets integrated and pay structures flexible for the net advantages of jobs in different areas to be equalised. Where these conditions are not met, then the market is not working efficiently. These studies have all drawn on observational data from large public access surveys, such as the government's quarterly *Labour Force Survey* and the annual *New Earnings Survey*, and have used multiple regression analysis and econometric methods to control for the characteristics of workers and their jobs.

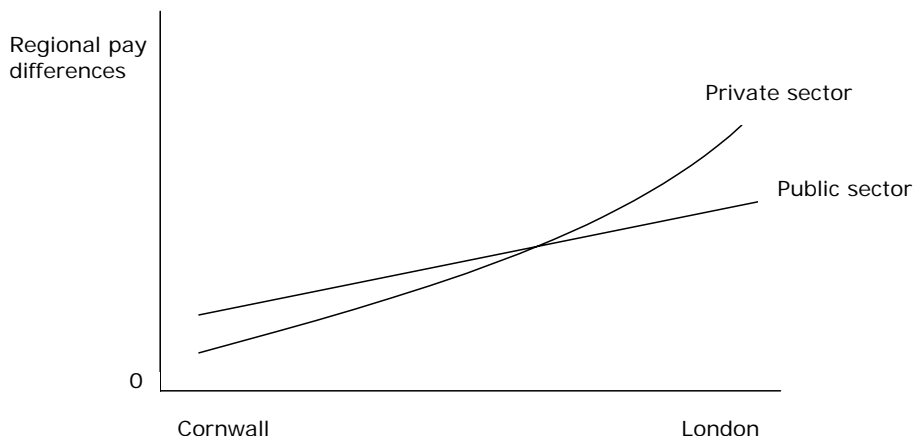
Researchers have pointed to differences in geographical unemployment rates as evidence of temporary disequilibrium (mismatches between the demand and supply of labour). It is worth noting that, strictly, these should be differences in unemployment rates beyond the area's natural rate, however these have not been estimated. Such differences in the unemployment rates between areas feed back into and affect pay. Empirical evidence of a negative

relationship between the levels of local pay and unemployment has been advanced and debated (Blanchflower and Oswald, 1994a and b; Card, 1995; Blanchard and Katz, 1997; Black and Fitzroy, 2000).

But another source of mismatch between supply and demand in labour markets may be inflexible administrative (rather than market-driven) wage structures. This is more likely to be the case in health care. Administrative wage structures reflect the preferences of those participating in the institutions that set pay, for example trade unions or review bodies. Where trade unions have an important role in pay setting, pay is likely to deviate from the rates that would otherwise be paid in the market. If the power of trade unions differs between areas (see Blackaby and Manning, 1991) this will affect geographical patterns of pay. Trade unions and even review bodies are often concerned about equity and fair pay, and seek to negotiate a national rate for an occupation (see Metcalf *et al.* 2001). Where this happens they will narrow the geographical distribution of pay and the resulting wage structure will be flatter than would otherwise occur. The incidence of trade unionism is much greater in the NHS and in the public sector generally than in the private sector. It therefore seems likely that the geographical pattern of pay in the NHS will be much less unequal than in the private sector. Thus even though average pay may be little different in the two sectors, the private sector will exhibit a much steeper profile than the NHS. Such a situation is illustrated in Figure 1.

Under these conditions the NHS will overpay in some areas and underpay in others. If the private sector appropriately compensates its employees for differences in the cost of living and compensates them for working in less desirable areas, then the NHS will underpay in the high cost of living and high disamenity areas and overcompensate in the lower cost of living and high amenity areas. Empirical research has mapped the pattern of geographical pay differences in the private sector but not in the NHS.

Figure 1 The pattern of wage differences between the public and private sectors



Researchers have sought to map the underlying pattern of geographical pay differences by standardising for all of the measurable differences between the composition of the workforce in different areas and the nature of jobs in different areas. The remaining differences in pay are called 'standardised spatial wage differentials' (SSWDs) and reflect the underlying, unmeasured, differences in cost of living and disamenities associated with work in different areas. They reveal what employers need to pay to attract staff to work in different parts of the country, thus these patterns are clearly of interest to the NHS.

To estimate SSWDs, researchers have controlled for differences in the industrial and occupational mix of the workforce and in the educational composition of the workforce in different areas. By further distinguishing between the public and private sectors of the workforce it has been possible to identify the impact of the different institutional arrangements that exist for setting pay.

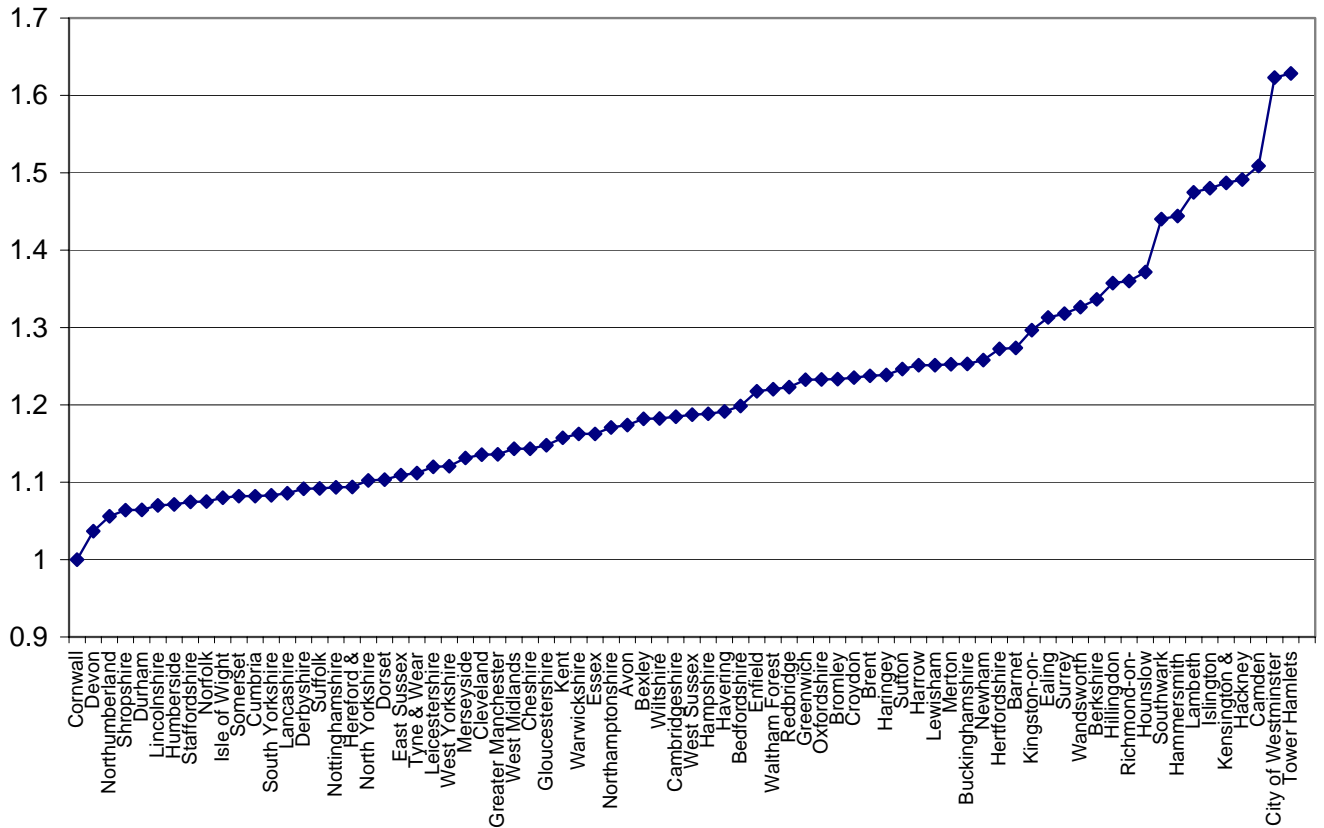
Evidence on the structure of private sector pay differentials is available from two sources:

- 1 research undertaken to inform the distribution of local government finance
- 2 research undertaken to inform the distribution of NHS revenue in England and Wales.

The first of these produced estimates of SSWDs for the UK in the early 1990s and is reported in Elliott *et al.* (1996). The second is by Wilson *et al.* (2001). See Green (1998) for a detailed evaluation of these reports. Using standard regression techniques to control for all the measured differences in the characteristics of the workforce and jobs in different areas, they estimated SSWDs for the public and private sectors. They reveal that a significant part of the difference in 'raw' or unadjusted differences in average pay levels between areas can be explained by the measured characteristics, but substantial differences in pay between different areas of the UK remain (note that estimates for London only have been produced by the London Weighting Advisory Panel (2002). The differences illustrated in Figure 1 are shown empirically in Figures 2 and 3. The first study used the *Labour Force Survey* and the second the *New Earnings Survey*, hence the differences in the size of differentials (Ma *et al.*, 2003).

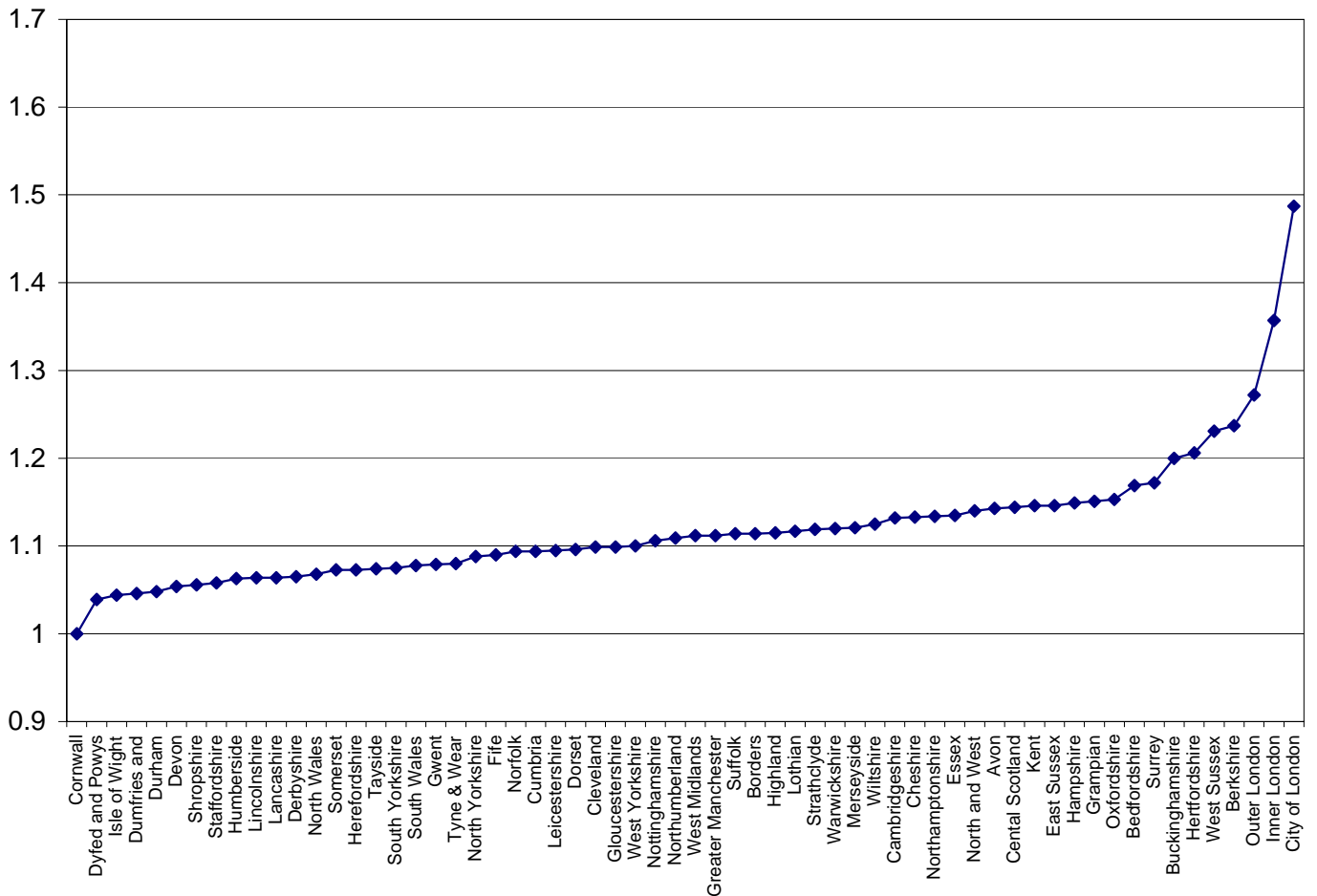
The value of these analyses is that they can identify geographical areas where the differences in pay between sectors is large, and therefore where there are likely to be the greatest recruitment and retention problems. For example, areas in London and the South East to the right of the graphs in Figures 2 and 3 are where recruitment and retention problems lie, and areas such as Cornwall to the extreme left may suffer fewer problems.

Figure 2 Regional wage differences from the *New Earnings Survey* (Wilson *et al.*, 2001)



Other research by Blanchflower *et al.* (1996) suggests that over the period 1973 to 1993 there was an increase in regional wage dispersion in Great Britain. However an article by Duranton and Monastiriotis (2002) suggested that during a slightly more recent period there was a movement towards pay equalisation across the principal areas of the UK. They argue that the returns to all key labour market characteristics (which they define as education, experience and gender) converged over the period 1982 to 1997. These apparently conflicting results are reconcilable, since a feature of the growing inequality of pay in the UK during the 1980s was an increase in the returns to unmeasured productive characteristics as evidenced by the growth in within-group inequality.

Figure 3 Regional wage differences from the *Labour Force Survey* (Elliott *et al.*, 1996)



4.2.2 Empirical evidence from the private sector

The next area of literature to be examined was the private sector. In the private sector of the UK economy the incidence of national pay bargaining declined steeply during the 1980s and 1990s. Some indication of this is given in Millward *et al.* (2000) which draws on the government's *Workplace Industrial Relations Survey* series. This records that the percentage of all workplaces at which multi-employer bargaining was the most important level for setting pay declined from 41 per cent in 1984 to 13 per cent in 1998. Multi-employer bargaining is likely to be national bargaining and, so too, is some of the multi-site but single employer bargaining that covered 12 per cent of all workplaces in both 1984 and 1998. Taken together they paint a picture of a steep decline in national pay bargaining over the 14-year period.

The same survey records that the proportion of workplaces at which pay was set by collective bargaining declined from 60 per cent to 29 per cent over the same period. Today pay is still set by national

bargaining in parts of construction, and the clothing and textiles and road haulage industries, but clearly these industries are exceptions. Elsewhere in the private sector there has been a marked decline in collective bargaining that is frequently described as a move toward more decentralised pay setting arrangements. It has been presumed, rather than established that these more decentralised arrangements, in which employers set pay without recourse to collective bargaining, are more flexible arrangements and moreover that these arrangements are responsive to differences in local labour market conditions.

Following the dismantling of multi-employer bargaining in much of the private sector in the 1980s there was considerable experimentation with new pay structures. These new structures focused on linking pay to performance and concentrated reward on the most highly skilled for whom there was emerging excess demand. But the tighter labour markets that developed in the latter half of the 1990s also led to greater experimentation with regional and occupational pay differentiation. Toward the end of the 1990s, as the labour shortages in London and the South East of England grew more acute, there was a renewed focus on regional pay differences.

There is, as yet, no systematic recording of the different mechanisms the private sector has devised for responding to differences in local labour markets and, perhaps as a result, there is very little robust research into these developments. The major secondary data sets that labour market analysts might use to examine this issue do not distinguish in sufficient detail either the different components of the hours that people work, the timing and bundling of these hours or elements of the compensation package that employers have used to respond to these changes in labour markets. The major exception is a detailed study commissioned by the Office of Manpower Economics (OME). This study (Incomes Data Services, 2002) analyses the practice in a large sample of leading national companies in the private sector - the five major supermarket chains, two major banks, Ford, BT, British Gas, Pickfords, a major private sector child care provider, two building societies, and two insurance companies - as well as local government, the fire and the prison services - and offers the most comprehensive analysis currently available.

The study focuses on large national companies and thus on those private sector companies it might be thought the most appropriate reference point for the NHS. The study reveals that the vast majority of these national companies in the private sector retain national pay structures. But on top of these national structures they then build a set of allowances to accommodate regional or local labour market differences. The allowances always recognise the higher cost-of-living in London and are then awarded according to a set of criteria which determine whether local managers can further adjust pay in response to local shortages. In order to keep control of the pay the authority to

adjust pay is usually agreed centrally, subject to the case being made by local managers following the agreed criteria.

The study reports that most large companies in the private sector which have a network of branches or workplaces spread across the different areas of the UK operate within a single national pay structure but that built into this is the opportunity to pay more to employees in some areas. Most frequently they use zonal or regional pay bands but some pay additional premiums in 'hot spots' or market premiums. The study identifies the following practices in the private sector:

- 1 London allowances and location allowances.
 - Free standing London allowances are paid in the vast majority of companies. These allowances then decrease in two to four bands in line with distance from central London.
- 2 Extending London allowances
 - The principle has been extended in many organisations to cover parts of the South East or large towns. These are paid at lower rates than London allowances.
- 3 Zonal pay systems
 - Out of the three or four concentric circles of London allowances, zonal pay systems have been developed. Areas are allocated to zones, so that zone 1 might be inner London, zone 2 outer London, zone 3, the rest of the south east, zone 4 might be other large towns such as Birmingham, Oxford or Edinburgh. Workplaces in the same region might be placed in different zones. Companies decide on the size of the 'kitty' to be allocated to annual pay increases and then on the basis of local labour market statistics and local market rates decide how this is to be distributed across the zones.
- 4 Regional pay bands
 - Similar to zonal pay bands these divide the country up into a number of distinct regions. They would appear more aggregated and less attuned to differences in local market conditions
- 5 Market-related pay
 - Some organisations pay small additional premiums in addition to other systems of regional pay. This allows them to adjust more finely to market rates or to address hot spots. This system is used on a limited basis and is highly regulated by headquarters with local managers having to provide evidence of recruitment and retention levels and local market data before the payment can be justified.

The OME study concludes that local, or single workplace or site level, pay setting is not very common. The reason for this, the authors propose, is that companies find that local pay setting duplicates effort and thus uses greater resource, that there is often a lack of appropriate local management expertise and that it might lead to a loss of control of the pay bill.

4.2.4 Empirical evidence from the NHS

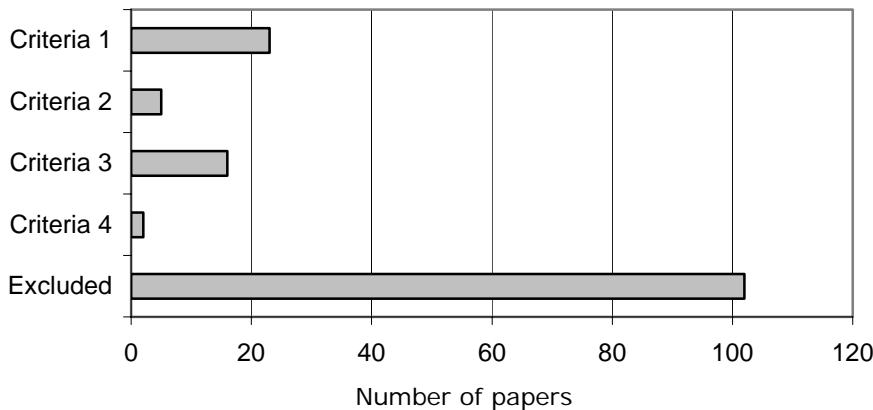
A total of 139 papers/studies (including books, journal articles, editorials, working papers and letters) were retrieved, reviewed and selected or rejected based on whether they addressed the following four criteria.

- 1 NHS competitiveness: Whether the paper describes (either quantitatively or qualitatively) the competitiveness of the NHS compared to other employers in terms of differences in compensation package, working conditions and job satisfaction.
- 2 Local flexibility: Whether the paper mentions the existence of local flexibility to change pay and working conditions and/or mention the rigidities imposed by national pay structures and policies.
- 3 Response to labour market conditions: Whether the paper describes the local NHS response to changes in labour market conditions.
- 4 Impact of service delivery and organisation: Whether the paper describes/examines the relationship between local labour market conditions and service delivery, the organisation of care and productivity.

Any papers or studies that did not meet any of the above four criteria or did not pass the quality tests were excluded. The selected papers/studies (a total of 44) were summarised in two tables in Appendix 3. Table 8 presents a summary of papers/studies reviewed and listed the author(s), number of criteria addressed, study design, sample size, setting (UK-wide or a specific local market), aim of paper and main results. Table 9 then contained authors (as found in Table A3.1, with dates of publications in brackets or reference numbers where there were no dates) and findings of each (selected) study in relation to each of the four criteria.

A majority of the final studies selected were qualitative research or reports about nurses (and midwives). Other staff groups included were doctors, GPs, pharmacists, hospital managers and occupational therapists. The major themes emerging from the reviewed papers are addressed according to the four criteria set out in the reviews. Figure 4 attempts to illustrate the number of papers that discussed each of the criteria, including those that were not selected.

Figure 4 Proportion of criteria addressed



NHS competitiveness

The main source of competition between the NHS and the non-NHS healthcare sectors, especially for nursing staff and care workers, was in the area of employment. With an ever-increasing private healthcare sector (Gray and Phillips 1996; Meadows *et al.* 2000), agency nursing is becoming very lucrative and seriously competing with the NHS for supply of nursing labour. Net growth in nursing employment has been accounted for by increased employment in the various non-NHS sectors. While a high proportion of NHS leavers go to non-NHS nursing jobs (Buchan *et al.*, 1998; Bradshaw, 1999) argues that the NHS is not seen as an attractive place to work. Even though nurses' pay compares favourably to that of other non-manual employees in the NHS, agency nursing offers more flexible working hours and better pay, which could explain why increasing numbers of UK nurses are working exclusively for agencies (Cole, 2001). Some resign from the NHS and move to agencies. According to Finlayson (2002), almost half of all nurses who leave the NHS remain in non-NHS nursing posts, usually in agencies. More generally, O'Kell (2002) found that public services are no longer attractive as a career option to many people, especially as the private sector offers more money. He was writing on the issues affecting the independent care home sector prior to the introduction of national minimum standards for care homes in April 2002 (see Department of Health, 2003b).

A large number of studies focus on the relative attractiveness of NHS health care jobs to non-NHS jobs. The conclusion that emerges is that this is largely determined by differences in compensation packages and working conditions, all of which bear heavily on job satisfaction. The highly centralised pay system in the NHS (Gray and Phillips, 1995) makes it very difficult to respond to short run shocks in the health care labour market, and also makes it less attractive to job seekers. Sources of dissatisfaction for all staff within the NHS include:

- how valued staff feel (see for example Bebbington, 1995; Blenkinsopp *et al.*, 2001; Finlayson, 2002)

- their working environment (Bebbington, 1995; Boardman *et al.*, 2000; Meadows *et al.*, 2000; Davidson *et al.*, 2001; Margallo-Lana *et al.*, 2001; Finlayson 2002; Cole 2002; Scott 2002)
- pay (Gray and Phillips, 1996; Meadows *et al.*, 2000; Finlayson 2002)
- inflexible working (Blenkinsopp *et al.* 1999; Scott 2002)
- inadequate training opportunities and career progression (Bebbington, 1995; Buchan and Thomas, 1995; Beedham, 1996)
- staff shortages (Bebbington, 1995; Meadows *et al.*, 2000; Newman *et al.*, 2002)
- discrimination (Meadows *et al.*, 2000)
- inadequate staff support (Aiken *et al.*, 2002).

However, training and promotion opportunities are reported to be a more important source of dissatisfaction than workload and pay (Shields and Ward, 2001).

Local flexibility

There is an apparent paucity of research on the existence and consequences of local flexibility to change pay and working conditions in the NHS. The NHS pay system functions through review bodies who set national salary scales for most staff groups, but Gray and Phillips (1995) find similarly centralised (and inflexible) systems in other organisations. Inflexibility in pay structures diminishes the scope for local pay bargaining (Grimshaw, 2000) and the deployment of nursing staff in response to variations in patient demand (Carr-Hill and Jenkins-Clarke, 2003). There is conflicting evidence on the existence and scale of pay variations resulting from a centralised pay system for the NHS. While Rice (2003) confirms the absence of significant variation in the pay of women employed as nurses in Britain, Morris (2002) and Skatun *et al.* (2003) report small, significant variations in nurses' pay outside London.

Response to labour market conditions

Carr-Hill and Jenkins-Clarke (2003) report a complete lack of flexibility in deployment of nursing staff in response to patient demand in 30 UK hospitals. However, there is quite a substantial literature reporting how several local NHS healthcare services have responded in various ways to changes in labour market conditions.

Lyall (1992) reports that in 1989, the Warrington District General Hospital offered all of its 2300 employees free annual health checks as part of an award-winning staff benefits scheme which started with a visit to Marks and Spencer's. The 'staff acquisition and retention' (STAR) initiative also included free medicals, chiropody, eye testing, a hospital nursery where staff were entitled to reduced fees, a hairdresser and a general shop.

Richards (1998) reports that recruitment strategies had been successful at the Bethlem and Maudsley NHS Trust because they focused their advertisements on job rotation schemes and professional development study programmes for new therapists.

Faced with a shortage of nurses, the King's Lynn and Wisbech Hospitals Trust set up a recruitment drive offering a range of training and work opportunities. The recruitment drive consisted of advertisements in local papers, including several free sheets, and posters sent to every GP surgery and library. The advertisements and posters mentioned the availability of free courses and opportunities for flexible working. Worby and McGouran (1999) report that a deliberate attempt was made throughout the promotion to appear flexible, friendly and approachable.

Llandough Hospital Community NHS Trust in South Wales introduced a well-planned induction course for its newly-recruited Filipino nurses (Lipley, 1999).

Ryrie *et al.* (2000) describes how one inner-city NHS trust responded to difficulties in recruiting staff by establishing a community rotation scheme that allowed basic grade occupational therapists to gain experience in a range of community-based positions.

Fifteen trusts co-operated in an imaginative attempt to encourage former NHS nurses to return to work, taking approachability and informality as their guiding principles. These 15 trusts came from three health authorities in Avon, Gloucestershire and North Wiltshire, and covered areas from Tewkesbury in the north to Mallet in the south (Duguid, 2000).

The Stepping Hill Hospital in Stockport adopted a flexible approach to contracting in order to cope with winter demand, and giving nursing staff a welcome opportunity to rejoin the workforce. The principle behind the flexible contracts was to allow nurses the opportunity to decide when they worked so long as they completed the hours agreed in their contract during the course of a year and gave due consideration to service needs (Johnson, 2000).

Fife Healthcare Trust used a local employment agency to match demand for bank nurses with supply. The agency is given notice of authorised bank nurses who notify the agency of their availability to work on a weekly basis. Any requests for shift cover are passed to the agency, which then contacts the available bank nurses and allocates shifts. This arrangement saved staff in the trust considerable effort and time in allocating temporary nurses to shifts. West Lothian, East and Midlothian and the Western General Trusts jointly developed a nurse bank software package to help manage their nurse banks. A database was established which contained information regarding availability of each bank nurse, their areas of expertise and qualifications, and a work pattern history. From this, the nurse bank administrator identified nurses who had already worked on a particular

ward. The system automatically updated all records when a firm booking was made and matched the shift required to the staff database. The system greatly improved the efficiency of the nurse bank operation and offered a wide range of management reports, which had previously been unavailable. To overcome staff shortages (and vacancies) in all its departments, King's Lynn and Wisbech Hospitals Trust launched a recruitment drive to encourage nurses back to work. This consisted of advertisements in local papers, mention in local radio and television, and posters sent to every GP surgery and library. Specific mention was made of the need for general, paediatric and mental health nurses, and midwives, as well as the availability of free courses and opportunities for flexible working. The trusts felt that offering this range of training and work opportunities was successful in addressing its nurse shortages (Accounts Commission for Scotland, 2000).

Baker *et al.* (2001) report on a partnership formed (under a teaching company scheme) between the Pendine Park Nursing Home and the Centre for Learning Development to develop care pathways that were specific to the independent sectors. They argue that the adoption of care pathways could provide an alternative that will promote evidence-based practice, incorporate efficient use of resources, combine the efforts of all who contribute to the care and include local protocols within the company.

Duffin (2001) reports that cost-of-living supplements paid to NHS staff in areas with high living costs such as Lambeth, Southwark and Lewisham Health Authority in inner London (who receive the highest allocation), were criticised for being divisive and discriminatory. Such supplements are believed to be the cause of a drift of nurses from Brighton Health Care NHS Trust in East Sussex (which does not qualify for the supplements) towards neighbouring Worthing in West Sussex (which did).

In 1999 the Morecambe Bay Hospitals NHS trust visited local schools to gauge and challenge children's negative perceptions of health care as a career. This was a way to raise the profile of the NHS in the community and was driven by a concern that declining interest in the profession could affect future recruitment efforts (Watkins, 2002).

Aberdeen Royal Infirmary introduced an innovative strategy to boost nurse retention that allowed staff to take sabbaticals (Collier, 2002).

Seventy three health authorities in England reported the use or planned use of schemes, which centred on improved training for GP registrars and recently qualified GPs as part of efforts to ensure an adequate workforce of GP principals. A minority of health authorities were also actively supporting continuing or refresher education for established principals and induction training for potential returners (Leese *et al.*, 2002).

Dickson *et al.* (2002) describes salaried GP schemes as one strategy that has been adopted to improve recruitment and retention. These have been witnessed in Sunderland, Newcastle, Durham, South London and the North West Region health authorities.

These studies reveal that health authorities have explored a wide range of different initiatives in response to different local labour market conditions. The studies generally report that these initiatives have been successful, but there has been no more systematic attempt to distinguish any of the 'knock-on' effects which would emerge if health authorities were competing for a given pool of labour or whether such initiatives have increased the size of the pool as people are drawn back into nursing. The costs and effects of these initiatives have not been evaluated.

Impact of service delivery

In theory, changes in health care labour market conditions are bound to have a significant impact on service delivery, the organisation of care and productivity. However, little evidence exists to support or refute this hypothesis. Unpublished surveys from the Audit Commission of the Department of Health (reported in Scott, 2002) showed that in any one year, 50 to 60 per cent of hospitals have had to refuse to provide services because of staff shortages, and this indicates that staff shortages have a real impact on service delivery.

4.3 Results from interviews.

4.3.1 Characteristics of labour markets

The nature and characteristics of the local labour market seemed to be crucial determinants of the competitiveness of trusts and thus of the shortages facing them. These characteristics were largely outside of the trusts' control and though they had in some cases devised imaginative responses they had not always been successful. The characteristics included travel times and accessibility, ethnic and socio-economic composition of the population, attractiveness of the geographical area and house prices.

Travel times and the accessibility to staff of other local competitors (including other NHS trusts) was particularly important for the nursing and ancillary workforces. The proximity of other trusts also influenced the degree to which services could be provided jointly and staff shared across organisations as a response to local shortages. The ethnic and socio-economic composition of the local population was an important determinant of the size of the available pool of local labour and this influenced the ability of the NHS to recruit from local labour markets and communities. Some ethnic groups were reported to be unattracted by some jobs in the caring professions, for example ancillary positions and nursing.

Where the local pool was too small trusts had to recruit from outside the local area and this was also the case where the local population did not have the required skills. The composition of the local population was also seen as a factor influencing a trust's ability to recruit internationally. Where the local population was ethnically homogenous this was seen as making it more difficult to recruit in the international market.

We haven't done any overseas recruitment...we haven't got a housing infrastructure that supports it, nor a culture that would support overseas recruitment...it would be really quite difficult to bring a cohort of people across...The...community has some very fixed views around people coming into the county. We have recruited people and...they have turned the job down because their partners can't get jobs.

The ethnic and socio-economic composition also influenced the nature of morbidity and therefore the services provided by trusts. This in turn influenced the relative attractiveness of trusts as employers, with the more diverse being the more attractive. On balance it appeared that trusts located in more ethnically and socio-economically diverse areas (usually urban areas) had more options available to them to address shortages of staff and to mitigate the effects of shortages on service delivery.

The attractiveness of the area as a place to live played a role in compensating for other disadvantages, such as poor access to training (Cornwall) or a deprived population (Wales). Crime and schooling were also mentioned. Recent reductions in junior doctors' hours have had the effect of increasing consultants' workload and this may have a disproportionate effect on the attractiveness of consultants' jobs in those areas in which consultants have chosen to work because of the higher quality of life.

Junior doctors' hours are now forcing consultants to work longer hours and that is diminishing their quality of life...we have many staff who resent it more than you might find elsewhere because they have made some choices to come here [for the quality of life].

In London and adjoining areas, the trusts interviewed also mentioned the role of the London allowances.

As far as I'm concerned, it's the south east of England, its very expensive whether you are here or in London and we are all going to struggle to get staff.

But extra pay was not regarded by all respondents as the solution.

There is a bit of myth around that [the effects of London weighting], at the end of the day managers who are in a tight corner over recruitment will shoot off all over the place about why they think that is, in an effort to convince you that we should be piling another £1000 on the salaries of their people.

House prices were also mentioned frequently in interviews conducted in the South East and even the extreme South West where the rate of increase was perceived to be high. Even where subsidised

accommodation was available this did not always provide a solution if the underlying shortages were severe.

We were looking for at least ten anaesthetists. We thought if we offered top notch subsidised accommodation that we would get them in... We did find a new development which is only a mile [away] and we still could not get them in.

The cost of living may also influence the success of recruiting doctors internationally as they may not want to live in the most expensive areas such as the South East.

One of the other trusts interviewing was from the north east of England and the consultant went there because he was convinced that that was the best move for him and his family because of the cost of living.

4.3.2 NHS competitiveness

A number of dimensions of competitiveness were mentioned in the interviews. These included general statements about the nature of competitiveness with other employers, and also perceptions of human resources managers of the relative attractiveness of their organisation. Generally, trusts did compete with each other for staff, and this was on the basis of a number of factors including both pay and non-pay factors.

We compete actively with all of the other large hospitals in [X].... and beyond...they are all half an hour away.

More so than before you have got a sort of migration of consultants from what was traditionally an established post that they were in for life... [this trend has] significantly increased over the last five years.

For trusts located in more rural areas there were different sorts of problems in recruitment. The size of the labour market in which they operated meant new staff had to move to the area and encountered all the location costs.

But our issue really is to work here you have to locate here. You cannot maintain your home wherever it was, you have to physically move. We do have a few people [consultants] who haven't relocated and I am aware...of problems and one who maybe thinking of leaving.

WDCs were playing a role to try and reduce the competition and co-ordinate trusts in their recruitment campaigns. Competition for staff across the territories was also mentioned in one trust, particularly in terms of the new consultants' contract and whether it will offer different rewards in different parts of the UK.

Competition for staff with other employers (public and private) was not mentioned frequently, except in the context of agencies for nursing staff. Private sector hospitals and nursing staff were hardly mentioned as a particular problem. Respondents noted that the Agenda for Change policy will offer five weeks' annual leave which will be a distinct advantage over the private sector. In terms of consultants' private practice, this was something that trusts had to

deal with, although one trust mentioned that consultants compete with each other for private practice, which has implications for recruitment and working together in the NHS.

Relative pay was mentioned frequently in the context of agencies. Although some trusts perceived that they had similar levels of flexibility in working hours to agencies, they believed that higher pay in agencies was the key factor. However, trusts raising the rates of pay in their nursing bank to match rates paid by agencies was not always the solution. The perceptions of respondents that other aspects of the jobs they offer are as attractive as those offered by agencies is evidently incorrect.

It's purely economic, it's purely money. I can understand it, if you are an ITU nurse why would you want to go and work permanently for an organisation when you know you can get 50 per cent more by going through an agency.

But it was also clear that the picture was more complex.

One argument is why don't you just raise your bank rates and cut out the commission and then surely we are quids in, but we are not because the agency stronghold is only in pockets of the organisation and the vast majority of extra shifts are worked via our bank.

A further issue is that some agencies pay staff weekly rather than monthly, which is attractive to some staff. Agencies also enable nurses not to work shifts if they do not want to.

[Offering] a slightly enhanced salary but working when they wanted to and being paid on a weekly basis, the agencies twigged... I think a survey was done... that was as important to the agency nurse as the wage.

Pay was also mentioned in the context of other staff groups. Some trusts mentioned that they had few problems with clerical and secretarial staff as their rates of pay were competitive, whereas others frequently mentioned Tesco and B&Q as competitors for ancillary staff. Some respondents from trusts also mentioned that local authorities paid slightly higher rates for occupational therapists. Pharmacists and the expansion of pharmacies in supermarkets was also mentioned as providing more lucrative opportunities, but this was set against the opportunities in the NHS for specialisation and skills development.

Trusts also competed with other trusts on the basis of their reputation, opportunities for professional development and intellectual challenge, most of which were related to teaching status. Hospitals being involved in the training of doctors and nurses, even if they were not a teaching trust, seemed to offer advantages in terms of people returning once their training was completed.

Historically, we have relied on our status as a teaching organisation, it has been a draw... I think we have quite a high turnover for nursing... actually that's good because we can attract people, we actually want people to come and go. Obviously it needs managing.

In areas without teaching:

...You are not near the body of knowledge... you are away from the people that are going to be helping with your professional development.

New NHS developments and capital investment were seen as improving the relative attractiveness of a number of trusts that were interviewed. This included the setting up of NHS Direct call centres staffed by senior nurses. Changes in the nature of training were also perceived to influence the competitiveness of the NHS compared to other employers.

Now that student nurses are in tertiary education they are doing their degrees with everyone else and I suspect that some of them are deciding that there are other careers out there... the [number of] nurses who are coming out with the qualifications [who are] determined to pursue a nursing career is not as high.

4.3.3 Local flexibility

Opportunities for NHS trusts to respond flexibly to changes in local labour market conditions focused on pay, new roles and training, and the discretion to offer fringe benefits such as subsidised accommodation or relocation packages. A number of examples were given about how these factors became the deciding factor in some cases and practice was discovered to vary widely with respect to some conditions of work.

There were a group of therapy radiographers who qualified in Northern Ireland who said they were quite happy to come and work in our cancer centre...but what happened was that Manchester and Liverpool offered them £1000 golden hellos.

We've got a lot of flexibility here. Nurses can work out any working pattern they like, which we will consider, providing there are no demerits to the service.

There were some issues about the role of WDCs which saw their role as helping and co-ordinating trusts. Some trusts viewed WDCs as reducing their flexibility, while others saw more central support as helpful if it was in line with their trust's needs. Integration of trusts into NHS Boards in Scotland would mean that human resources directors were less 'close to the ground' and may therefore have less flexibility and discretion to make decisions around terms and conditions. Organisational change may therefore result in different degrees of flexibility in different parts of the UK. Scotland also now has a minimum pay deal, negotiated with Unison, which is above the national minimum wage. This raises the competitiveness of the lowest paid NHS jobs.

One trust has had a local pay scheme and negotiation since 1994, but found it costly since it was the only trust in the area that had chosen to do this. It did not seem to give the trust a particular flexibility over setting pay, because they still had a budget to keep within. They had used this flexibility to link salary progression to the employee's

appraisal rating and remove automatic uprating, but as in other areas of the public sector it is now recognised that this was not necessarily an advantage.

People like to see pay scales and amounts of money... if they saw anything different it actually became quite frightening

A number highlighted the possible inflationary effects of using pay as the main way to attract and retain staff.

The reason why I'm happy about Agenda for Change is that it stops this nonsense of one trust piling on £5000 to a pharmacist's salary and not doing anything for recruitment but just creating a pay spiral.

Some trusts also had discretion with pay rates and where to place people on the pay scales for certain staff groups.

We do try and be as flexible as we can in terms of consultants' starting salaries.

You could use greater discretion in terms of starting points on salary... There is discretion to use off-scale points...but I am not aware of anybody who has done that.

At the moment we could be paying medical secretaries grade four, but they [competitors] could be paying grade five or six and the job descriptions are identical but to get them that is what they need to pay.

You could start to review grades... we do try and keep pace with each other in the HR [human resources] community and these are extreme measures... because of the implications on parity and wage drift and so its not something we enter into lightly.

We try and keep it fairly stable, but there are particular areas where we can do something local, we have that power for our remuneration committee to do that.

A number of trusts also mentioned flexibility in training and research.

...we are happy to set up those links, they like it...it widens their experience and we think it makes them a happier employee.

Some trusts mentioned that they are losing their choice over which training grade doctors to have and suggested they will be allocated to hospitals.

They have put them where they want to go, rather than where they are appropriate or suitable.

There were also rigidities in training and developing new roles.

...because of the Royal Colleges and the fact that developing new roles is so tortuous, what we are not able to do is take advantage of those who aren't professionally qualified to bridge the gap between professions... We need the Royal Colleges to remove some of their boundaries.

4.3.4 Responses to local labour market conditions

NHS trusts responded in a number of ways including a number of general recruitment and retention initiatives, overseas recruitment,

and changes in skill mix and training. Most of these were national initiatives or organised by the WDC, although local innovations also played a role. The interviews with WDCs focused on their 'added value', which seemed to be in terms of co-ordination of initiatives across trusts and the production and sharing of information through the setting up of websites. They were also examining the workforce implications of local delivery plans.

General initiatives included return to practice courses, subsidised nurseries, paid parental leave, introducing tighter controls on the use of locums, modern apprenticeships, investment in occupational health services to reduce the sickness absence rate, flexible hours, visiting local schools, recruitment fairs, international recruitment, and transport or parking initiatives in urban areas.

We are now actively tracking where people live and how people get to work to try and work with the local transport providers in designing transport routes.

Partnership and the provision of shared services with other NHS organisations was also important. This was being encouraged by WDCs, although some trusts were already doing this. This included reacting in advance to new NHS facilities being opened locally by creating a dialogue with these other organisations.

We have a lot of meetings with them... protocols around notice periods and about encouraging them not to take certain key staff, and to take part-time staff in the first instance that want to increase their hours.

Trusts also responded with job enhancement and training.

[For] senior house officer grades... we insist that they should all have advanced life support training because there is no onsite anaesthetic support... and they are the people who are there.

What we look for is people that have been made redundant, have been retired with ill health, who can come back in and do some work around the lower skilled workforce.

We support worker role development and shifting the skill mix boundaries between registered nurses and support workers.

However, trusts that were distant from the main learning centres reported problems in developing roles because of the lack of local training courses.

An issue raised by one trust was organisational/management culture.

Some people have no idea how their [management] style impacts on people, they just don't have any idea...and there is an underlying culture within the NHS... that lingers on... In terms of employee relations... I would say that we are 20 to 30 years behind the times here... this is reflected throughout the NHS... it takes quite a lot to support managers into taking charge of their own destiny... and getting them to help them to make decisions.

An issue mentioned by many trusts in England was successful international recruitment of both nurses and doctors, although this

was focused in the trusts in the South East and heavily urban and ethnically diverse areas. As mentioned earlier, this was not considered to be an option for trusts with more homogenous local populations.

We have something like 250 to 300 nurses from the Philippines. We started going out there four or five years ago, but are not planning to go again as our vacancy rate has come down so much.

Twenty-five per cent of our nursing labour force is now from overseas...without it we would be really struggling to deliver basic services.

But it was noted that not all overseas recruits had been retained. trusts also noted that the career aspirations of overseas recruits may be different from those recruited locally. A challenge appeared to be to encourage some groups of nurses recruited abroad to raise their career aspirations and to seek promotion to fill higher grade posts with more supervisory responsibilities.

4.3.5 Impact on service delivery and organisation

A number of issues were mentioned about the effect of labour market conditions on the level and quality of service provision, on dissatisfaction, pressures at work, and on sickness absence rates. There were also general issues with diagnostic and support areas that may cause delays to patients waiting for tests, such as radiology. Most focused on the negative effects on service delivery and quality of care but a few also offered more positive solutions such as partnerships with other trusts.

They had enough of the high turnover, because of its impact on patient care and because you are dealing with acutely ill people that need continuity of care.

The ability to maintain the service over a 24 hour, seven day a week period becomes very stretched, particularly out of normal hours...there is a lot of goodwill and we do rely on them wanting to be part of the rota...as long as you have got a hard core of staff that can provide that service...as soon as one or two drop off, the remainder get very stressed. We have had to buy in agency staff at an increased cost...I wouldn't say that our services to patients have unduly suffered...patients who come in after five [p.m.] do take longer to be seen, but of course we are still achieving our 90 per cent target of patients being seen within four hours.

If you are looking at the surgical patch it may mean you have cancelled operations...this morning I [met] with the managers of ITU and because of our controls in getting agency staff they are having to cancel elective patients because they haven't got the staff...they can't get the staff in quickly enough.

We have beds closed in one of our community hospitals at the moment because we need to do some building work but that was opportune because we couldn't staff them.

People are working longer hours, they are probably being less and less effective, they are not doing a good job. There is money for locums to come in and support them but the bottom line [is that] costs increase.

This clearly affects patient care... A real impact [of not having a shortage] is that we are able to get people through the system quickly... If we can scan right now we can see that there is nothing, give him two aspirin and send him home in which case we have another bed.

It's been a constraint in terms of the speed with which we have managed to [expand services]... at times it has affected the sequence and timescale over which services have grown... We had great difficulty opening a new surgical assessment unit... I'm sure that would have impacted on other services.

It's easier to go off sick if you need a break and change, because it's actually very difficult to change your employer... I think part of our sickness absence levels can be attributed to people who have had enough or have become ill or have chosen to become ill to have a break.

A number of trusts sought a solution by sharing services and working in partnership.

So maybe we stop doing particular things or we link up with other hospitals and we pool our resources and that's probably the way we are going to resolve it.

I think we do have to look at partnerships with other hospitals... we provide our 'max fax' service to three trusts including ourselves... none of us could really sustain a whole department ourselves... We do the same with kidneys and livers... we are used to working in partnership.

Section 5 Research agenda

5.1 Research questions

A substantial number of research questions arise from this scoping exercise. Overall, there is an absence of high quality empirical evidence and a marked lack of primary data collection. There have been no rigorous evaluations of the costs and benefits of the myriad of policy interventions that exist to address recruitment and retention. Those studies that exist have been small and the results are not generalisable. Human resources directors in the NHS seem to have little data or rigorous evidence on which to base their decisions. The role of WDCs is evolving and they need to complement and support the activities of NHS organisations in their area. WDCs may have a role in helping to co-ordinate and facilitate research within and across WDC areas.

Research should focus on specific staff groups within the NHS: medical and nursing staff are a priority because of their centrality to service delivery but allied health professionals, radiology and diagnostic services, pathology, and anaesthesia require analysis.

5.1 Research questions

The research questions have been organised into two broad themes.

5.1.1 How competitive are NHS pay and conditions compared to other areas of employment and other careers?

What are the determinants of flows of staff within the NHS, and between the NHS and other employers? Research should focus on the following:

- 1 The key determinants of the decisions of qualified staff to join and leave NHS employment. In particular much is to be gained by understanding the decisions of nurses to work for agencies or directly for the NHS.
- 2 The determinants of the early career choices of doctors, the factors influencing mobility, choice of hospital and the link between these and specialty choice.
- 3 The factors that explain the choice of a career in the NHS, including the existence and role of a 'public service ethos', and the perceptions of the attractiveness of NHS careers that are held by different ethnic and socio-economic groups in the population.
- 4 The factors that explain variations in aspirations for further professional development between the various ethnic populations employed in the NHS.

- 5 The competitiveness of the NHS for different staff groups across geographical areas of the UK. In particular an understanding of the scale of the underlying variations in the pay of professional groups in the NHS and the extent to which these relate to underlying market conditions.

These studies should focus on the role of relative pay, fringe benefits and other elements of the compensation package, conditions of work, opportunities for professional development and other sources of motivation. It was evident that these factors differed significantly between professional groups and will differ according to family composition and across the life cycles of staff. The role of the characteristics of the geographical area, and the relative importance of each of the above factors must be better understood. It is important that studies focus on factors that can be influenced by policy, while recognising the importance of cultural and professional factors that are more difficult to influence in the short term. Studies should have an explicit theoretical basis in economics or organisational and social psychology.

A range of research methods could be used to answer these questions. These should involve comparisons between jobs, rather than be conducted solely within jobs or single NHS employers. The methods could include the following:

- Robust empirical analysis using multivariate techniques on large secondary and administrative datasets (including securing access to the personnel records of a sample of employers).
- Existing cohort studies using primary data collection which might be expanded in size to facilitate the production of more generalisable results, and be subjected to more rigorous panel data estimation techniques. The selective use of personnel records from a sample of trusts could also be employed in such analyses.
- The prospective evaluation of interventions to influence recruitment and retention and change labour market behaviour (see Section 5.1.2 below).
- The use of attitudinal surveys and stated preference methods, such as job satisfaction studies and discrete choice experiments, but only where these studies compare across different jobs and use multivariate analysis to examine the relative importance of factors.
- Quantitative analysis should be supported by qualitative analysis such as case studies and interviews where appropriate.

Comparisons between the NHS and the private sector must reveal appropriate sensitivity to differences in the performance targets in the two sectors. Where the private sector will choose to discontinue a line of activity when local labour market issues threaten profitability, the NHS must continue to deliver according to the targets set.

5.1.2 What are the costs and benefits of policies and interventions (including changes in service delivery) to increase recruitment and retention and influence the labour market decisions of NHS staff?

The literature and the interviews revealed a considerable diversity in the policies and initiatives that are currently underway, but there was little evidence that any had been rigorously evaluated. Further analysis of the costs and benefits should cover:

- An evaluation of those interventions that are based on the responses of the NHS in terms of changes in service delivery, such as changes in skill mix and role development and the sharing of services across NHS organisations.
- An evaluation of the variety of retention and recruitment schemes which include return to practice, international recruitment, flexible working, crèche and nursery provision.
- An evaluation of flexibility in setting pay and conditions, incorporating the effects of such policies on costs and equity in the workplace. Such an evaluation must also include the opportunities available to NHS employers and the extent to which they are used.
- An examination of the impact of Agenda for Change and the new contracts for consultants and GPs on recruitment and retention and on labour market decisions. These require the early commissioning of research to evidence the situation before the introduction of these changes.

The methods to be used should include:

- a more systematic and critical assessment of the literature on the costs and benefits of recruitment and retention policies in the NHS and more generally, although the research undertaken here suggests that this literature will not be extensive
- research which collects primary data on the costs and benefits of such policies in the NHS
- research using observational data from secondary data sources on the costs and benefits of such policies

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Appendices

Appendix 1 Semi-structured interview schedule

- 1 Ask permission to tape the interview
 - responses will be anonymous and quotes will not be attributed to you.
- 2 Describe background to project
 - aims, objectives outputs.
- 3 Confirm vacancy information we used to select you.
 - how does this data correspond with your trusts experience?
- 4 Confirm understanding of the NHS trust structure.
- 5 Before we examine the experience of the different staff groups you employ I should like to ask you about your understanding of the linkages between the labour market and service delivery. How in your view does the labour market affect service delivery?
- 6 What are the main issues in service delivery for your trust
We'd now like to ask about specific groups of staff.

Doctor

- 7 Vacancy data – reveal for this group
 - are there any differences across specialties – why? (Is it determined by the nature of specialist training? What determines the number of specialists in training?)
 - any differences between trusts in this area – why?
 - are there persistent or hard to fill vacancies - why?
- 8 What steps are being taken to fill these vacancies?
 - recruitment retention initiatives / local-national-international markets.
- 9 What is the effect on service delivery in the short and longer term?
- 10 Where do most doctors come from in the region?
 - do locally trained doctors return to the region at some point?
- 11 What private sector opportunities exist locally for doctors?
- 12 How does the private sector influence the supply of sessions to the NHS?
- 13 How effectively does the NHS compete with the private sector?
 - what is it about NHS employment that is more/less attractive compared to the private sector (pay, hours, terms and conditions)?

Nurses

- 14 Vacancy data – reveal for this group. Tell us what you know about the nature of vacancies for nurses:
 - are there any differences across specialties – why?
 - any differences across trusts – why?
 - are they persistent or hard to fill?
- 15 What steps are being taken to fill these vacancies?
 - recruitment retention initiatives / local-national-international markets.
- 16 What is the effect on service delivery in the short and longer term?
- 17 What other employment opportunities exist outside of the NHS?
- 18 How effectively does the NHS compete with other employers?
 - what is it about NHS employment that is more/less attractive compared to the private sector (pay, hours, terms and conditions).

Other staff groups

- 19 Are there other staff groups where local labour market issues are affecting service delivery?
- 20 What would enable the NHS to be more responsive to changes in local labour market conditions, and for it to compete more effectively for staff.
- 21 What in your view are the main workforce issues that require further research?
 - information deficiencies (e.g. vacancy data)
 - gaps in knowledge (e.g. determinants of medical vacancies).

Appendix 2 Examples of individual bibliographic database search strategies

Main search strategy

MEDLINE (Ovid)

- 1 exp Health Personnel/
- 2 exp Health Occupations/
- 3 1 or 2
- 4 Personnel Turnover/
- 5 Personnel Loyalty/
- 6 labo#r market\$.tw
- 7 labo#r supply.tw
- 8 (recruitment adj3 retention).tw
- 9 or/4-8
- 10 exp Great Britain/
- 11 united kingdom.tw
- 12 uk.tw
- 13 britain.tw
- 14 british.tw
- 15 national health service.tw
- 16 nhs.tw
- 17 or/10-16
- 18 3 and 9 and 17
- 19 limit 18 to yr=1992-2003

Social Science Citation Index (Web of Science)

(nurse* or doctor* or consultant* or physician* or medical staff or health professional* or health occupation* or NHS staff* or NHS personnel or pharmacist* or technical staff or laboratory staff or scientific staff or ancillary staff or clerical or secretar* or support staff or professions allied to medicine or allied health personnel or allied health occupations* or occupational therap* or physiotherap* or physical therap* or radiograph* or chirop* or podiatr* or dietetics or dietician* or audiolog* or speech therap* or language therap* or optometr* or orthopti* or psycholog* or ancillary) AND (recruitment or retention or supply or turnover or wastage) AND (national health service or nhs or britain or british or uk or united kingdom or scotland or england or wales)

Additional search strategy

Social Science Citation Index (Web of Science)

private and (pay or remuneration or salar* or wage* or labour market or labour supply or turnover or wastage or recruitment or retention) and (uk or united kingdom or britain or british or england or scotland or wales)

EconLIT (Cambridge Scientific Abstracts)

((private sector or private employ*) AND (pay or remuneration or salar* or wage* or labo?r market or labo?r supply or turnover or wastage or recruitment or retention))) AND (DE=((u.k.)))

Appendix 3 Literature reviewed

Table 8 Summary of papers/studies reviewed.

No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results
Nurses and midwives							
1	Carr-Hill and Jenkins-Clarke (2003)	1, 2	Short, quantitative report	30 nurses	Hospitals in the UK	Set out key findings and implications from an analysis of the activity and workload of nurses of different grades. To develop appropriate and relevant strategies for changing skill mixes in terms of balance of staff groups deployed.	Differences in staffing levels between hospitals suggest that there is potential for efficiency gains in some hospitals.
2	Finlayson <i>et al.</i> (2002)	1	BMJ qualitative article	Number of nurses not specified	NHS in England	Assess the extent of recruitment and retention problems in nursing in England	The serious problems facing acute trusts in England in retaining and recruiting nurses result in high financial costs and low morale and may affect patient care
3	Aiken <i>et al.</i> (2002)	1	Qualitative article	10 319	Adult acute care hospitals in USA, Canada, England, Scotland	To examine the effects of nurse staffing and organisational support for nursing care on nurses' dissatisfaction with their jobs, nurse burnout, and nurse reports of quality of patient care in an international sample of hospitals.	Adequate nurse staffing and organisational/managerial support for nursing are key to improving the quality of patient care, to diminishing nurse job dissatisfaction and burnout and, ultimately, to improving the nurse retention problem in hospital settings

Impact of local labour market factors on service organisation and delivery

No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results
4	Duguid (2000)	3	Qualitative article	15 NHS trusts and 3 health authorities	NHS in England	Evaluating the outcome of trusts' imaginative attempt to encourage former NHS nurses to return to work	The campaign seemed very attractive to the media and provided a relaxing ambience for people who were unsure about returning but wanted to discuss options in a non-institutional environment. The campaign also showed a more human face than the NHS sometimes displays and it could be replicated successfully in other parts of the country.
5	Cole (2002)	1	Qualitative article		Nurse banks	Reviewing the trend of nurses working exclusively for agencies, as opposed to working directly for the NHS	Perhaps the most significant move has been the launch of NHS Professionals, a new NHS-run agency to offer nurses the flexibility of agency nursing combined with the security and development opportunities offered by the NHS.
6	Worby and McGouran (1999)	3	Qualitative article	1 hospital trust	King's Lynn and Wisbech Hospital Trusts	Report on one trust's set up of a recruitment drive offering a range of training and work opportunities	The campaign has been successful recruitment drive for the trust. It has also been very interesting, educational and rewarding for all those involved
7	Turner T (1994)	3	Qualitative article	1 trust	Taunton and Somerset NHS trust	An evaluation of a cost-cutting scheme set up at the trust which is saving thousands of pounds a year and at same time building direct links with potential employees and the college that trains them	Both nurses and managers welcome the scheme

Impact of local labour market factors on service organisation and delivery

No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results
8	Baker <i>et al.</i> (2001)	3	Qualitative article	1 nursing home	Pendine Park Nursing Home	Describes an innovative approach to tackling the issues of recruitment, retention and provision of quality care, currently faced by nursing and residential homes in the independent sector	The introduction of innovative practice and the provision of complex and demanding care through a loyal and caring workforce will enhance the profile of the independent sector
9	Collier (2002)	3	Qualitative article	1 trust	Aberdeen Royal Infirmary	Looks at a local strategy to boost retention, in which nurses are allowed to go temporarily	Efforts are considered to have been worthwhile. Other nurse managers should consider the idea of unpaid sabbaticals for staff as a tool to aid better recruitment and retention of staff
10	Lipley (1999)	3	Qualitative article	2 trusts	Royal Hull Hospitals NHS Trust and Humberside Trust	Some trusts' experiences with overseas recruitment of nurses	Well planned induction courses, good mentorship and career paths seem to make overseas recruiting a success
11	Margallo-Lana <i>et al.</i> (2001)	1	Qualitative report	13 healthcare facilities	9 private facilities and 4 NHS facilities	Longitudinal comparison of depression, coping and turnover among NHS and private sector staff caring for people with dementia	The assumption that stress is an important factor in the high turnover of professional carers seems to be unfounded. Promotion of better links between the NHS and private sector could increase stability and allow efficient delivery of training programmes and the development of mutually supportive staff groups

Impact of local labour market factors on service organisation and delivery

No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results
12	Johnson (2000)	3	Qualitative article	1 hospital	Stepping Hill Hospital, Stockport	Evaluation of hospital's scheme to pilot an annualised hours contract for some of the nursing staff recruited to the medical directorate	A flexible approach to contracts has enabled the hospital to cope with winter demand and given nursing staff a welcome opportunity to rejoin the workforce
13	Newman <i>et al.</i> (2002)	1	Qualitative article	130 nurses and midwives	4 London trust Hospitals	Presents findings of a qualitative study, based on interviews with over 130 nurses and midwives in four London trust hospitals on: the main factors influencing nurse satisfaction and retention, empirical support for the robustness of a conceptual framework or model, 'the nurse satisfaction, service quality and nurse retention chain'; and managerial considerations for recruitment and retention	For recruitment and retention, improving the image and reputation of nursing along with improvements in work-life balance were pre-requisites for meeting the challenging target of an additional 20,000 nurses on the wards by 2004
14	Buchan and Thomas (1995)	1	Qualitative article	203 bank nurses	3 NHS nurse banks in Scotland	Reports on a survey of nurses working on three nurse banks in the NHS in Scotland	No standard model of a nurse bank in the NHS in Scotland and no standard profile of bank nurses
15	Buchan <i>et al.</i> (1998)	1	Book	Various sources		Nurses' work: an analysis of the UK nursing labour market	Despite its size and importance, the characteristics and motivation of the individuals comprising the nursing workforce are often misunderstood or misinterpreted. The nurse labour force is a national asset and it requires and deserves sustained national policy attention

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No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results
16	Accounts Commission for Scotland (2000)	3	Long, qualitative report	Survey of 35 trusts (before reorganisation)	NHS Scotland	Reporting key findings of the Accounts Commission's review of the use of bank and agency nursing staff in Scotland	Trusts will always rely on bank and agency nursing staff to some extent to fill unforeseen staffing gaps, but these staff should not be the first option considered. The challenge for trusts is to ensure that the quality of patient care is maintained, even during periods of staffing shortages
18	Shields and Ward (2001)	3	Empirical study	9,625	Nurses in England in 1994	To investigate the impact of job satisfaction on nurses intentions to quit	Nurses who report overall dissatisfaction with their jobs are more likely to intend to quit. Controls for, but does not report regional variations in job satisfaction
19	Askildsen, Baltagi and Holmas (2003)	5	Empirical study	18,066 individuals	Nurses in Norway 1993-98	Estimates the responsiveness of nurses' labour supply to changes in nurses pay.	Reveals a low overall wage elasticity with substantial regional variation
20	Holmas (2002)	5	Empirical study	5,284	Nurses in Norway 1993	To examine the determinants of the exit rate from employment in the public health sector	Both wages and working conditions affect nurse turnover. The geographical location of the hospital has an impact on the relationship between working conditions and turnover
21	Morris (2002)	5	Empirical study	171 881 16-60 yr old women	UK 1997-2002	To analyse determinants of qualified nurses' pay and compare these to the pay structure of other non-manual employees	Little regional variation in nurses' pay outside London.
No.	Author(s)	Criteria	Study	Sample	Setting	Aim of paper	Main results

Impact of local labour market factors on service organisation and delivery

		addressed	design	size			
22	Rice (2003)	5	Empirical study	524 women employed as a nurse during period	UK 1991-1999	To investigate the determinants of the labour supply of nurses	Finds a low wage elasticity of hours of work. Tests for regional differences and reveals no significant effects
23	Skatun, Antonazzo, Scott and Elliott (2003)	5	Empirical study	1285 married or co-habiting women	UK 1999-2000	To estimate a model of labour supply for married and co-habiting nurses	Finds a low wage elasticity of hours of work. Finds significant regional differences remain after controlling for large numbers of household and individual characteristics
Doctors and GPs							
1	Beedham (1996)	1	Qualitative article			Attempts to quantify the problem, the trends and the reasons why young doctors are leaving medicine	Some left because they entered medicine for inappropriate or emotional reasons. Others had inadequate preparation, lacked professional or pastoral support, or experienced stagnant, unstructured career. Probably a few doctors will always leave medicine permanently but a larger group will return more readily if appropriate re-entry programmes are available
2	Davidson <i>et al.</i> (2001)	1	Qualitative article	1717 doctors	UK	To provide systematic information about doctors' retirement intentions	The impact of early retirement on medical workforce supply may be considerable, hence approaches to retirement policy need to shift away from the extremes of either full time employment or total retirement.
No.	Author(s)	Criteria	Study	Sample	Setting	Aim of paper	Main results

Impact of local labour market factors on service organisation and delivery

		addressed	design	size			
3	Davies and Harrison (2003)	1	Qualitative article	Review of international developments, pre-existing reviews of changes in the NHS doctor-manager relationship and a range of empirical studies.	NHS, UK	Summarises the doctor-manager relationship in the UK and in particular how much this relationship has been shaped by the changing structural arrangements from within which healthcare is delivered	Despite the many good reasons that doctors may not wish to be involved in management, and the considerable tensions that arise when they are, further engagement is needed
4	Leese <i>et al.</i> (2002)	3	Qualitative article	73 health authorities	NHS in England	To provide more sophisticated empirical evidence than previously available on the scale and nature of GP recruitment and retention problems, and approaches being developed to address these problems	A greater commitment to long-term strategic planning is required at all levels. Many initiatives remain unco-ordinated and restricted by short-term budgetary constraints
5	Dickson <i>et al.</i> (2002)	3	Qualitative article	40 health authorities	NHS in England	Review of existing salaried schemes to address recruitment and retention issues, provide higher professional training for GPs and provide care to specific groups, among other objectives	Evaluation of the scheme from the perspective of the salaried GPs (through a focus group) found that the main attractions were the opportunity to gain experience of inner city general practice without the commitment to a partnership, opportunities for professional development and support from the peer group of salaried GPs
No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results

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Pharmacists							
1	Blenkinsopp <i>et al.</i> (1999)	1	Quantitative article	2568 pharmacists	Those working in the West Midlands	To identify and measure the current working patterns of pharmacists in one geographical region	Pharmacy has a high retention of its workforce within the profession. Pharmacists' choices about when and where to work have significant implications for retention.
2	Boardman <i>et al.</i> (2000)	1	Qualitative article	2568 pharmacists	Those working in the West Midlands	To identify the kinds of changes pharmacists had made to their work in the past three years and those changes that they intended to make in the next three years	If intentions regarding changes to work are implemented there will be significant implications for the pharmacy workforce, particularly for community pharmacy
3	Blenkinsopp <i>et al</i> (1999)	1	Qualitative article	2,568 pharmacists	Those working in the West Midlands	To quantify the extent of current and planned employment of primary care pharmacists (PCPs) and to explore the experiences of PCPs and the perceptions of other pharmacists who aspire to become PCPs	The satisfaction experienced by PCPs appears to offset to some extent the dissatisfaction expressed about traditional pharmacy work in community pharmacy. The high level of interest in PCP work may also be a proxy for pharmacists' dissatisfaction.
4	Scott (2002)	1, 4	Short, qualitative article	Unspecified number of pharmacists	NHS hospitals in the UK	Discusses the current state and trends in hospital recruitment	Staff vacancies in hospital pharmacy are continuing and have a major impact on services to patients; there are also worrying shifts in grade patterns

No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results
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Impact of local labour market factors on service organisation and delivery

Other staff							
1	Gray and Phillips (1995)	1	Qualitative paper	Unspecified number of non-clinical staff	NHS and 3 non-health firms	Summary of results of a short survey of recruitment and retention initiatives among businesses in other sectors of the economy which may compete with the NHS for certain categories of labour	Labour management policies need to be placed in a much broader context. Labour supply should be seen in the context in which health care providers ensure that appropriate health care is provided efficiently and effectively.
2	Cole (2002)	1	Qualitative article	Unspecified number of chief executives	NHS	The consequences of attrition rates for chief executives in the NHS	Increased instability at the top is having an impact on recruitment. The level of the current attrition rate portends a very wasteful process.
3	Ryrie <i>et al.</i> (2000)	3	Qualitative article	Occupational therapists	1 inner city NHS trust	Sought to evaluate the basic grade community rotation scheme in terms of the post holder's perceptions	The community rotation scheme has led to the development of autonomous practice and the varied nature of the work. Further work is needed to facilitate the recruitment and retention of current and future practitioners.
4	Richards (1998)	3	Qualitative article	Occupational therapists	1 inner city trust	A survey of what motivates occupational therapists at the Bethlem and Maudsley Trust to stay, in order to inform the trust's retention policy	Improving development opportunities for occupational therapists will encourage a good core of therapists to remain at that grade long enough to consolidate their skills and to develop the confidence and competence to consider applying for senior grades within the trust.
No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results

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5	Davies and Harrison (2003)	1	Qualitative article	Unspecified number of managers and doctors	UK	Summarises UK doctor-manager and how much this relationship has been shaped by the changing structural arrangements from within which healthcare is delivered	Despite many good reasons doctors may not wish to be involved in management, and the considerable tensions that arise when they are, further engagement is needed
6	O'Kell (2002)	1	Qualitative article	Care staff	UK	To provide a snapshot of issues affecting the independent care home sector prior to the introduction of the national minimum standards for care homes in April 2002.	Major issues around recruitment and retention are pay/conditions and job satisfaction. Motivation for care workers to stay in the job depends on good physical working environment, an emphasis on the delivery of high quality care, access to appropriate staff training as well as fair management
7	Bebbington (1995)	1	Project report	1242 Speech and language therapists	NHS in the UK	Findings of research project funded by Women's Unit and initiated by College of Speech and Language Therapists to study the career paths of people with a speech and language therapy qualification	Experienced therapists are leaving the profession with a corresponding loss of economic resources and professional expertise
All staff							
1	Finlayson B (2002)	1	Literature and series of focus group reviews	Unspecified number of contacts from NHS, Dept of Health and NHS Executive	NHS	To evaluate moral and motivation in the NHS	Too much rapid change and too much political control are demotivating and among reasons people cite for wanting to leave the NHS. Mixed political messages about public service workers need to be replaced by clear support.
No.	Author(s)	Criteria addressed	Study design	Sample size	Setting	Aim of paper	Main results

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2	Gray and Phillips (1996)	1	Qualitative article	All staff - 300 000 employees	103 UK district health authorities	Examines the relationship between staff turnover and a range of labour market, job and worker characteristics	Staff groups of different skill levels each have distinct labour markets, and this needs to be recognised in the future design of human resources management policies
4	Watkins (2002)	3	Qualitative article	All staff	1 hospital NHS trust	Reports Morecambe Bay Hospitals NHS Trust's visit to local schools to gauge children's perceptions of working in the NHS	Participation at the programme was impressive. Quotes include: 'Having attended the course, I can say with confidence that it was a life-changing experience filled with passionate, enthused and determined people who really cared about their parents, careers – and us as well'
5	Lyll (1992)	3	Qualitative article	All staff - 2300 employees	Warrington District General Hospital	A report of the STAR ('staff acquisition and retention') initiative launched at Warrington District General Hospital	Staff attitudes to STAR have moved from 'suspicion' to 'overwhelming enthusiasm'
6	Grimshaw (2000)	4	Survey and qualitative analysis	Unspecified number of interviews	UK 1993 and 1994	Explores some of the problems associated with local pay flexibility in the NHS	Local pay structures are less transparent and the overall wage structure may be less coherent and more fragmented

Table 9 Findings of each study in response to each of the four questions

No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
1	Carr-Hill and Jenkins-Clarke (2003)		'While staff are deployed differently to different specialties, there is no apparent flexibility in the deployment of nursing staff in response to variations in patient demand'		
2	Finlayson (2002)	Three sources of low morale (dissatisfaction) are whether staff feel valued, their working environment and pay/resources			
3	Gray and Phillips (1995)	NHS pay system is highly centralised. Review bodies, set national salary scales for most staff groups, making special allowances for differences in the cost of living in different areas. 'Similarly centralised (and inflexible) systems operate in other organisations'. British Rail pay structure is highly centralised; while pay determination in Midland Bank is by far the most flexible among organisations surveyed (NHS, Midland Bank, supermarket chain and British Rail)			

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No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
4	Finlayson <i>et al.</i> (2002)	'Almost half of all nurses who leave the NHS remain in nursing, typically in non-NHS nursing posts or general practice nursing' Reasons for retention problems (for nurses) in the NHS include pay and cost of living, the changing nature of the job, perceptions of being valued, career breaks, retirement, maternity leave, nurse education, non-nursing work, travel and other employment opportunities			
5	Blenkinsop <i>p et al.</i> (1999)	Sources of dissatisfaction among pharmacists include consumer expectations, stress and long hours of work			
6	Boardman <i>et al.</i> (2000)	The reason most frequently mentioned for changes made to work plans (quits) was to 'do more interesting work/seek greater job satisfaction			
7	Blenkinsop <i>p et al.</i> (1999/2001)	Pharmacists' accounts 'indicate that they felt professionally undervalued and saw PCP work as a means of increasing both professional status and job satisfaction'			

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No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
8	Beedham (1996)	Young doctors left because they entered for inappropriate or emotional reasons, had inadequate preparation, lacked professional or pastoral support or experienced stagnant, unstructured career			
9	Cole (2002)	Among the major factors for chief executives moving on is pressures of the job which can lead to early burn-out (there are more inspections, more targets to meet, more to be done about security and clinical governance)			
10	Davidson <i>et al.</i> (2001)	Main reasons doctors consider early retirement are to reduce work-related pressure, increase leisure time, job dissatisfaction, disillusionment with NHS and wanting a healthy retirement			
11	Ryrie <i>et al.</i> (2000)			One inner city NHS trusts responded to difficulties in recruiting staff by establishing a community rotation scheme that allowed basic grade occupational therapists to gain experience in a range of community-based posts	
No.	Author	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service

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	(year)	delivery
12	Aiken <i>et al.</i> (2002) Organisational/managerial support for nursing had a pronounced effect on nurse dissatisfaction	
13	Duguid (2000)	Fifteen trusts co-operated in an imaginative attempt to encourage former NHS nurses to return to work, taking approachability and informality as its guiding principles. These 15 trusts came from 3 health authorities in Avon, Gloucestershire and North Wiltshire, and covered areas from Tewkesbury in the north to Shepton Mallet in the south
14	Richards (1998)	'At the Bethlem and Maudsley trust, recruitment strategies had been successful – focusing on advertisements, job rotation schemes and professional development study programmes for new therapists'

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No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
15	Cole (2001)	Expenditure on agency nurses is at an all-time high, and increasing numbers of nurses are working exclusively for agencies. Agency nursing offers a flexibility of hours and opportunity that the health service cannot match combined with reduced stress and very good rates of pay			
16	Worby and McGouran (1999)			Faced with a shortage of nurses, the King's Lynn and Wisbech Hospitals trust set up a recruitment drive offering a range of training and work opportunities. The recruitment drive consisted of advertisements in local papers, including several free sheets, and posters sent to every GP surgery and library. The advertisements and posters mentioned the availability of free courses and opportunities for flexible working. A deliberate attempt was made throughout the promotion to appear flexible, friendly and approachable	

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No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
17	Turner (1994)			The Taunton and Somerset NHS trust set up a scheme which saved thousands of pounds annually and at the same time built direct links with potential employees and the college that trained them. The scheme was in the form of a six-monthly clearing house for newly trained nurses	
18	Gray and Phillips (1996)	Two local labour market variables were significantly related to turnover across staff groups – the size of the private health care sector and the pay of the staff group relative to the local average for comparable workers. Results indicate that alternative employment opportunities in the private health care sector affect the behaviour of most staff groups. Relative pay (the pay of the staff group relative to the local average for comparable workers) is also seen as a significant determinant of staff satisfaction			

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No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
19	Baker <i>et al.</i> (2001)			<p>A partnership was formed (under a teaching company scheme) between the Pendine Park Nursing Home and the Centre for Learning Development to develop care pathways that were specific to the independent sectors. The adoption of care pathways could provide an alternative that will promote evidence-based practice, incorporate efficient use of resources, combine the efforts of all ho contribute to the care and include local protocols and guidelines within the company</p>	
20	Watkins (2002)			<p>In 1999 the Morecambe Bay Hospitals NHS Trust visited local schools to gauge and challenge children's' negative perceptions of healthcare as a career. This was in a way to raise the profile of the NHS in the community, 'driven by a concern that declining interest in the profession could affect its future recruitment efforts'.</p>	
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery

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21	Collier (2002)			Aberdeen Royal Infirmary introduced an innovative strategy to boost nurse retention that allows staff to take sabbaticals	
22	Lipley (1999)			Llandough Hospital Community NHS Trust, South Wales, introduced well planned induction course for its 18 newly recruited Filipino nurses	
23	Lyall (1992)			In 1989, the Warrington District General Hospital offered all of its 2,300 employees free annual health checks as part of an award-winning staff benefits scheme which started with a visit to Marks and Spencer. The Staff Acquisition and Retention (STAR) initiative also included free medicals, chiropody, eye testing, a hospital nursery where staff are entitled to reduced fees, a hairdresser and a general shop	
24	Margallo-Lana <i>et al.</i> (2001)	Levels of stress in NHS homes were lower than in private facilities, although the difference was not significant			
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
25	Davies and	'One reason for the high level of			

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	Harrison (2003)	doctors' discontent lies in the doctor-manager relationship...such discontent reflects international trends that have led to diminished autonomy and a reduced dominance of doctors in health care'			
26	O'Kell (2002)	'O'Kell (2002) found that public services are no longer attractive as a career option to many people. There are better jobs, offering more money, available in other occupational areas, especially in the private sector'			
27	Leese <i>et al.</i> (2002)	31 (44%) and 17 (24%) health authorities reported the use or planned use of schemes which centred on improved training for GP registrars and recently qualified GPs, as part of efforts to ensure adequate workforce of GP principals. A minority of authorities were also actively supporting continuing/refresher education for established principals and induction training for potential returners			
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
28	Dickson (2002)			One strategy to improve recruitment and retention is salaried GP schemes. These have	

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				been witnessed in Sunderland, Newcastle, Durham, South London and the North West Region health authorities	
29	Johnson (2000)			The Stepping Hill Hospital in Stockport adopted a flexible contracting approach to cope with winter demand, giving nursing staff an opportunity to rejoin the workforce. The principle was to allow nurses the opportunity to decide when they worked so long as they completed the hours agreed in their contract during the course of a year and gave due consideration to service needs	
30	Scott (2002)	Poor facilities, excessive demands, long hours and seemingly irrelevant paperwork are recognised as sources of job dissatisfaction among staff in hospital pharmacy			Unpublished Audit Commission (of the Department of Health) surveys showed 'that in any one year, 50 to 60% of hospitals had to refuse services because of staff shortages' indicating 'that the staff shortages have a real impact'
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
31	Newman <i>et al.</i> (2002)	Two main sources of job dissatisfaction for nurses were staff shortages (with direct and			

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		indirect consequences) and poor management			
32	Duffin (2001)			Cost-of-living supplements paid to NHS staff in areas with high living costs such as Lambeth, Southwark and Lewisham Health authority in inner London (who receive the highest allocation), has been criticised for being divisive and discriminatory. For example, there was a drift of nurses from Brighton Health Care NHS Trust in East Sussex (which does not qualify for the supplements) towards neighbouring Worthing in West Sussex (which does)	
33	Buchan and Thomas (1995)	A survey of 203 bank nurses revealed high levels of reported dissatisfaction with access to training opportunities			
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
34	Buchan <i>et al.</i> (1998)	Both the NHS (which employs approximately half of all nurses on the register) and			

private employers must recruit qualified nurses from the pool of qualified nurses registered with the UKCC. 'In recent years net growth in nursing employment has been accounted for by increased employment in the various non-NHS sectors. Also, a high proportion of NHS leavers go to non-NHS nursing jobs

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Fife Healthcare Trust used a local employment agency to match demand for bank nurses with supply. Agency is given notice of authorised bank nurses who notify the agency of their availability to work on a weekly basis. Requests for shift cover are passed to the agency which contacts available bank nurses and allocates shifts. Arrangement has saved trust staff considerable effort and time in allocating temporary nurses to shifts. West Lothian, East and Midlothian and the Western General Trusts jointly developed a software package to help manage their nurse banks.

No. 35 continued...

A database was established which contained information regarding availability of each bank nurse, their areas of expertise and qualifications, and

			<p>a work pattern history. From this, the nurse bank administrator identified nurses who had already worked on a particular ward. The system updated all records when a firm booking was made and matched the shift required to the staff database. System greatly improved the efficiency of the nurse bank operation and offered a wide range of management reports which had previously been unavailable. To overcome staff shortages (and vacancies) in all its departments, King's Lynn and Wisbech Hospitals Trust launched a recruitment drive to encourage nurses back to work, e.g. advertisements in local papers, mention in local radio and television, and posters sent to every GP surgery and library. Specific mention was made of the need for general, paediatric and mental health nurses, and midwives, as well as the availability of free courses and opportunities for flexible working were also mentioned. The trusts felt that offering this range of training and work opportunities was successful in addressing its nurse shortages.</p>		
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
36	Bebbington (1995)	The factors influencing therapists' decision to stay or leave the NHS include: poor			

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		working conditions, poor career opportunities, dissatisfaction with speech and language therapy, lack of recognition, size of workload and increased demands due to NHS reforms.			
37	Meadows <i>et al.</i> (2000)	<p>'The NHS is generally not seen as an attractive place to work by job seekers (Bradshaw, 1999)' p1.</p> <p>'The proportion of nurses in the independent sector (acute and nursing homes) rose from 11.5% to 17% between 1990-96. The proportion of newly qualified nurses going straight into the NHS fell from 99% in 1991 to 90% in 1996' p2. There was general dissatisfaction with level of pay, poor working conditions and facilities (leisure and recreation, child care, staff catering, car parking and accommodation), staff shortages (which led to increased workload) and discrimination (particularly racism) in the NHS.</p>			
No.	Author (year)	1 NHS competitiveness	2 Local flexibility	3 Labour market response	4 Impact of service delivery
38	Shields and Ward (2001)	Training/promotion opportunities are more important source of dissatisfaction than workload and			

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pay				
39	Holmas (2002)			
40	Morris (2002)	On average nurses' pay compares favourably to that of other non-manual employees	Little local flexibility. Outside London there is little variation in nurses pay	
41	Rice (2003)		Outside London, no significant variation in the pay of women employed as nurses in Britain	
42	Skatun, Antonazzo, Scott and Elliott (2003)		Reveals some small but significant variations between regions outside London in the level of nurses pay	
43	Grimshaw (2000)	Managers saw local pay setting as an opportunity to move away from national delineation by occupational group and pay band. Local NHS pay bargaining constrained by presence of national pay arrangements and resource implications. Local pay settings had been introduced for unqualified nurses and ancillary staff in most trusts interviewed.	Pay was linked to the local market using a number of different strategies	The impact on service delivery was not recorded

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Addendum

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