Towards efficient guidelines: how to monitor guideline use in primary care

A Hutchinson*
A McIntosh
S Cox
C Gilbert

School of Health and Related Research, University of Sheffield, UK

*Corresponding author

Executive summary

Health Technology Assessment 2003; Vol. 7: No. 18
Executive summary

Background

The elements of interest in this study relate to the overall drive to improve quality in primary care. The use of national evidence-based clinical practice guidelines is becoming a normal (if not always an accepted) feature of primary care, and National Service Frameworks (NSFs) are the context in which guideline use will take place. Clinical governance and clinical audit requirements mean that primary care teams must give consideration to achieving explicit standards of care, such as those proposed by national evidence-based guidelines. NSFs and performance monitoring will require Primary Care Trusts (PCTs) to monitor the effectiveness of care given by teams to provide, among other things, a global picture of care across the trust. This process is likely to include information collected through the use of clinical audit review criteria, based on guidelines.

There is limited research evidence with which to base decisions on the methods of monitoring guideline use that may be appropriate to the requirements of the wide range of potential users. There has been little evaluation of the types of information that can be used to provide the information that clinical teams need to review their conformance with clinical guideline recommendations.

Objectives

The study aimed to develop a guideline-use monitoring framework in primary healthcare settings. There were five objectives:

- to develop a conceptual framework for guideline-use monitoring in primary care
- to identify the principles that users require for using routine data monitoring of guidelines
- to use survey techniques to review guideline monitoring issues of significance to users, including acceptability, practical applicability and cost in routine practice
- to develop a framework for monitoring the use of both consensus-based and evidence-based guidelines
- to test the model in a limited manner, to determine usefulness in terms of acceptability, practicality, cost and effort required by those using the framework.

Methods

Both qualitative and quantitative methods were used in the study. In Phase 1 a series of semistructured interviews was used to gain an understanding of the issues for potential users, to develop the monitoring framework. These data informed a postal survey among a random sample of primary healthcare professionals. In Phase 2, to test out the framework, a further semistructured interview study was used to explore the practical issues relating to monitoring guideline use. Case studies were then undertaken to investigate the use of evidence-based review criteria and patient-centred outcome measures as methods for providing monitoring information. A case study in one general practice used interviews to examine the possible costs associated with guideline-use monitoring.

In Phase 1 of the study, the interviews were undertaken with primary care professionals from one local health community. The survey was undertaken among staff from a purposive sample of Health Authorities in England and a random sample of general practitioners and practice nurses from the selected Health Authority areas.

In Phase 2, interviews were undertaken among Health Authorities, Primary Care Group (PCG) and general practice staff from three Health Authority areas. Case studies were undertaken in volunteer general practices and among patients who consented to provide confidential health outcome information.

Results

A conceptual framework to support guideline-use monitoring in primary care has been developed, through an amalgam of quality improvement principles from the international literature and an exploration of the requirements of practitioners at three levels in the NHS: general practice, PCGs
and Health Authorities. Clinicians see benefits in having systems that can be used to evaluate how well clinical teams are performing against evidence-based clinical standards. However, few have much experience of using guidelines and then assessing conformance with the recommendations. More importantly, many clinicians have concerns about the demands that such systems would place on them in terms of time and cost. Many also have concerns about the confidentiality of information transfer outside the clinical unit. In particular, clinicians had problems with the notion that someone in, for example, a PCT might be ‘monitoring’ the quality of their care, although many respondents recognised that clinical governance required conformance with standards and that some form of internal and external assessment was required.

Demands on time and the variation in practice computing systems meant that it was only possible in this study to capture review criteria information onto paper-based records, although most of these data were actually held on computer systems. There was a very high level of conformance of the practice teams with guideline recommendations for the management of asthma and stable angina, although the nature of the retrospective data capture meant that the clinical teams had not had prior sight of the guideline recommendations. It appears to be more problematic to capture outcome data from patients, perhaps because of the need to capture new information and to seek informed consent in a study (which would not be required in routine clinical practice).

A costs framework has been developed that can be used to explore the potential costs of guideline-use monitoring and may be of assistance in exploring the wider cost implications of clinical audit at the general practice level.

**Conclusions**

Methods have been demonstrated that would enable primary care teams and PCTs to monitor clinical guideline conformance while understanding the problems of both the practical and the human issues in establishing the systems.

Effective methods can be developed for monitoring guideline use in primary care. The practical difficulties relate to two main issues. The first is the technical issues concerned with efficient capture of clinical information and its evaluation; in particular, the existing variation in expertise in computerised information, and the need for training of teams in the use and meaning of process and outcome information related to guideline recommendations. The second, and more problematic, issue is the limited degree of understanding that many primary healthcare professionals have of the concepts and practical issues in the area of guideline-use monitoring, and of expectations of this within the NHS.

**Recommendations for research**

- To what extent should patient concordance with the guideline recommendations be taken into account in the assessment of clinician conformance with guideline recommendations?
- What are the costs and benefits to patient care of guideline-use monitoring?
- What are the most efficient methods of developing valid and reliable review criteria which are policy (NSFs) and evidence (guidelines) based?
- Are review criteria more useful than guidelines in improving quality of care?
- What additional benefits to patient care can be offered by monitoring patient-centred health outcomes in addition to process of care, and at what cost?

**Publication**

The NHS R&D Health Technology Assessment (HTA) Programme was set up in 1993 to ensure that high-quality research information on the costs, effectiveness and broader impact of health technologies is produced in the most efficient way for those who use, manage and provide care in the NHS.

Initially, six HTA panels (pharmaceuticals, acute sector, primary and community care, diagnostics and imaging, population screening, methodology) helped to set the research priorities for the HTA Programme. However, during the past few years there have been a number of changes in and around NHS R&D, such as the establishment of the National Institute for Clinical Excellence (NICE) and the creation of three new research programmes: Service Delivery and Organisation (SDO); New and Emerging Applications of Technology (NEAT); and the Methodology Programme.

The research reported in this monograph was identified as a priority by the HTA Programme’s Methodology Panel and was funded as project number 94/08/10.

The views expressed in this publication are those of the authors and not necessarily those of the Methodology Programme, HTA Programme or the Department of Health. The editors wish to emphasise that funding and publication of this research by the NHS should not be taken as implicit support for any recommendations made by the authors.

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

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

Methodology Programme Director: Professor Richard Lilford
HTA Programme Director: Professor Kent Woods
Series Editors: Professor Andrew Stevens, Dr Ken Stein, Professor John Gabbay, Dr Ruairidh Milne and Dr Rob Riemsma
Managing Editors: Sally Bailey and Sarah Llewellyn Lloyd

The editors and publisher have tried to ensure the accuracy of this report but do not accept liability for damages or losses arising from material published in this report. They would like to thank the referees for their constructive comments on the draft document.