Aim

This report summarises a project that aimed to develop and test a comprehensive set of clinical quality indicators for use in British general practice. The study was commissioned by the Nuffield Trust with the aim of transferring expertise and specific measurement technologies from the USA to the UK. The project was conducted as a partnership between the National Primary Care Research and Development Centre, University of Manchester, UK and RAND Health, Santa Monica, California, USA.

Background

The development of methods and tools to measure quality and performance in health care is regarded as a fundamental component of improving health services. The use of specific measures in primary care has tended to lag behind that in specialist services, though the demand for such ‘quality indicators’ from policy makers, managers, professionals and the public is growing.

Quality indicators can be expensive and time-consuming to develop de novo. RAND Health is acknowledged as a leader in the field for almost three decades and in recent years has developed a set of clinical quality indicators for use in primary care settings. This project was devised to examine the utility of these US indicators in UK general practice.

Methods

The project was conducted in two phases: first, indicator transfer and adaptation, then indicator field-testing.

In the first phase, the US indicators for 19 of the most common conditions presenting in general practice, representing acute, chronic and preventative care, were examined by the UK team and by a UK primary care clinical expert for each condition. The literature reviews on which the indicators were based were updated and relevant community-based studies conducted in the UK were added. The indicators and the literature reviews
were then given to expert panels who rated them for their validity as measures of quality and the importance of recording information about them in the patient records. The two-stage rating process was based on the RAND/UCLA Appropriateness Method and resulted in a set of quality indicators with high face validity.

- In the second phase of the study, the highly rated indicators were field-tested on 1600 randomly selected patient records in 16 general practices belonging to two demographically contrasting English Primary Care Trusts. This required manual extraction of data from paper and electronic patient records.

**Principal findings**

- The expert panels rated 168 indicators for the 19 conditions as valid measures of quality. This represents the most comprehensive clinical quality assessment tool ever developed for UK general practice.

- Poor quality of data in general practice records, both in terms of its availability and accessibility, represents a significant obstacle to quality assessment in primary care.

- There was considerable variability in the condition prevalence and the indicator prevalence in the random set of medical records that were examined. As a result, relatively few data were collected for the less prevalent conditions or indicators relating to less common aspects of care.

- Higher quality scores were achieved for preventative care (mean score 61.95% of indicators achieved for 6 conditions) than for acute or chronic care (mean scores 54.5% of indicators achieved for 8 conditions and 60.0% of indicators achieved for 9 conditions respectively).

- The method by which quality scores are weighted may have an effect on the resulting summary scores. The weighting method should reflect the purpose for which the scores are being used.

**Policy implications**

- Transferring quality assessment technologies and specific tools between countries achieves considerable benefits. However, primary care quality indicators cannot be directly transferred between countries with different health systems, clinical practices and cultures and so an intermediate process of adaptation is required.

- There are good arguments for aggregating individual indicator scores to produce summary quality scores at the level of modalities of care, conditions, clinicians, practices or larger primary care organisations. The merits and problems of different methods of computing summary quality scores and the implications of weighting scores for importance or prevalence are examined in this report.

- Quality indicators, such as those developed in this project, have an important role to play in professionally-led improvement, performance management and user
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involvement. However, such a disease-focused approach to measuring quality in general practice will inevitably miss out many important aspects of care, such as issues relating to access and inter-personal care. In addition, the tension between professional led quality improvement and managerially led quality assessment needs to be recognised and addressed.

- Without a major investment in information systems in the NHS, quality assessment will always be expensive, time-consuming and of questionable reliability and validity. Only good information technology will enable the improvement agenda to move forward.

- The clinical indicators developed in this project represents only one part of what general practitioners and primary care nurses do. A comprehensive assessment of quality would need to examine the quality of inter-personal care, the relationship between primary care and other services, patient experience of care, the organisation and delivery of services and their cost effectiveness. Many of these dimensions of care have received minimal attention to date. Future work in this field should focus on further developing specific measures in these domains and on understanding the relative importance of the domains and how they relate to each other.

- Further work is required to test and understand the scientific properties of these indicators in order to maximise their use in quality improvement and their application in performance management.