

318: IS IT POSSIBLE TO MAKE QUALITY ASSESSMENTS OF PRIMARY CARE PROVIDERS IN THE UK USING INFORMATION EXTRACTED FROM PATIENT RECORDS?

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Objective:

Using the results from a 'demonstration study', this paper explores the feasibility of using patient medical records to assess the quality of clinical care given by primary care providers in the UK.

Methods:

The Global Assessment of Quality in General Practice (GAP) project at the National Primary Care Research & Development Centre, England, developed sets of clinical indicators for each of the 23 most common medical conditions seen in primary care practice in the UK. A subsequent 'demonstration' audit was undertaken of 100 randomly selected patient medical records from each of 16 primary care providers in two areas of England (total sample size 1,600). The technical barriers to data extraction and the quality of the data obtained are described. The variability in the data is analysed and the results used to estimate the numbers of records that would need to be audited to produce statistically reliable measures of quality of care, for a variety of situations.

Results:

Conducting simultaneous quality assessment across multiple conditions is highly resource-intensive. A major practical barrier is the poor availability of data in patient records. Greater use of computerised records would help to overcome this.

It is very difficult to make reliable judgements about quality of care at the level of individual indicators. This is because very large samples are required: 142 of the 200 indicators require that the records of more than 100 patients with the underlying condition be audited. Furthermore, it is not feasible at present to sample medical records by condition for most conditions in many UK primary care practices, and the number of records that needs to be audited can be many times higher if purely random sampling is undertaken.

Assessments are more reliable if indicators are aggregated to give condition-level scores. Even at condition level, it may still not be feasible to conduct reliable assessments based on a random sample of records and it would be necessary to identify the records of patients with the relevant diagnosis. Aggregation across a number of providers may be more feasible, though in the latter case cluster effects need to be taken into account. However, there are currently significant technical barriers to calculating aggregate or 'composite' scores. The principle problem is determining the relative contribution of different indicators to the condition-level score, or the relative contribution of different conditions to a provider-level score. The process is complicated by the fact that not all of the indicators are applicable to all patients with a given condition.

Conclusions:

There are high expectations amongst policy makers and managers that data about quality of care will play a significant role in improving patient care and health system efficiency. This study demonstrates that in primary care in the UK this ambition is well ahead of the science that is needed to support it. A principal barrier is the poor quality of data and information management systems in primary care. Until this problem is addressed, the type of quality assessment described in this paper is likely to only be feasible as a research exercise.

Individual quality indicators are useful tools for primary care teams to use within their practices. However, if valid and reliable external judgements are to be made about the relative quality of care of different practices, then individual indicators are much less useful, and composite scores at condition or even higher levels may need to be used. The methods used to create composite scores are in their infancy and more work is required to identify and examine the merits and demerits of different methods.