COMMENTARY

Monitoring mortality: a quality improvement perspective

Guthrie *et al*'s modelling study demonstrates that monitoring mortality in general practices over a period of 3 years is unlikely to detect a murderer who kills fewer than 30 patients.[1]

Monitoring is a method for detecting and acting on signals in data for a range of problems — not just one problem. We monitor patients' temperature postoperatively not just to detect wound infection, but any infection (or even hypothermia). We would certainly miss many infections if we relied solely on temperature. Yet nobody would suggest abandoning the temperature chart. Just as the primary purpose of monitoring the patient's temperature is to improve their health, similarly the primary purpose of monitoring should be quality improvement, not detection of murder.[2–4]

Monitoring serves quality improvement by identifying unusual (special cause) variation, investigating, and learning from such a process. This means systematic investigation to identify data errors, the influence of case-mix, the resourcing, organisation, and delivery of health care. The aim is to learn why mortality might vary and take appropriate action. For mortality differences the most common explanations are unmeasured differences in case-mix.[2] The actions of individual clinicians are among the last in a series of potential special causes.

Mortality monitoring was one of the recommendations of the Shipman Inquiry.[2] Others included closer scrutiny of controlled drug prescribing, changes to the coroner system, and more rapid investigation of complaints. The focus on a single recommendation in isolation seems inappropriate.

Could mortality monitoring have a role? Guthrie *et al* observe that that 85% of practices in Scotland could be monitored for 10 years, not the 3 years that they model. The NHS's present largely *ad hoc* and haphazard system failed to detect Shipman's 200 murders. So, detecting even an excess of 30 deaths is better by comparison. However, the focus on seeking murderers is inappropriate. A better question is how often were useful lessons learned from investigating special cause variation? First lessons include correcting data errors and improving understanding of case-mix. Later lessons will be to understand how resourcing and organisation of health care might influence mortality.

Ultimately, quality improvement requires more than monitoring. It requires the trust, commitment, and cooperation of GPs. Any monitoring system that fails on these counts is unlikely to be effective in either securing quality of care or finding 'bad apples'. To start from a position of trust would be for GPs themselves to agree what indicators should be monitored and to decide how they will investigate special cause variation.

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system to ensure that doctors apply due diligence to accounting for every death appear to have been rejected.[6,20] Based on this analysis, monitoring mortality rates alone is not enough and cannot substitute for other recommended reforms.[4] This study did not examine whether it is worth nationally implementing routine general practice mortality monitoring for quality improvement. Although this has some face validity, there is no strong evidence that such a system would improve the quality of care.[18] However, for the parallel aim of murder detection, then mortality monitoring could at best operate as a backstop to catch a prolific serial killer who has evaded detection by other means.

Commentary

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