



Title Comparison of Case Note Review Methods for

Evaluating Quality and Safety in Health Care

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Aim

I) To determine which of two methods of case note review – holistic (implicit) or criterion-based (explicit) – provides the most useful and reliable information for quality and safety of care. 2) To explore the process—outcome relationship between holistic and criterion-based quality-of-care measures and hospital-level outcome indicators.

Conclusions and results

Using the holistic approach, 3 staff groups appeared to interpret case notes differently when they reviewed the same record. When doctors and nonclinical audit staff reviewed the same clinical record, the groups' assessments of quality of care did not differ significantly. The 3 staff groups performed reasonably well when using criterion-based review, although the quality and type of information provided by doctors was of greater value. Hence, when measuring quality of care from case notes, consideration needs to be given to the method of review, the type of staff undertaking the review, and the methods of analysis available to the review team. Review can be enhanced using a combination of both criterion-based and structured holistic methods with textual commentary. Variations in quality of care can best be identified from a combination of holistic scale scores and textual data review. Overall, 1473 holistic and 1389 criterionbased reviews were undertaken in the first part of the study. When the same staff-type reviewer pairs/groups reviewed the same record, holistic scale score interrater reliability was moderate within each of the 3 staff groups (intraclass correlation coefficient [ICC] 0.46-0.52), and interrater reliability for criterion-based scores was moderate to good (ICC 0.61-0.88). When different staff-type pairs/groups reviewed the same record, agreement between the reviewer pairs/groups was weak to moderate for overall care (ICC 0.24-0.43). Comparison of holistic review and criterion-based scores of case notes reviewed by doctors and nonclinical audit staff showed a reasonable level of agreement (p-values for difference 0.406 and 0.223, respectively), although results from all 3 staff types showed no overall level of agreement (p-value for difference 0.057). Detailed qualitative analysis of the textual data indicated that the 3 staff types tended to provide different forms of commentary on quality of care, although the groups showed some overlap. In the process—outcome study, the criterion-based scores for all hospitals were generally high, whereas interhospital variation was greater between the holistic review overall scale scores. Textual commentary on the quality of care verified the holistic scale scores. Differences among hospitals in the relationship between mortality and quality of care were not statistically significant.

Recommendations

See Executive Summary link at www.hta.ac.uk/project/1575.asp.

Methods

In the first part of the study, retrospective multiple reviews of 684 case notes were undertaken using both holistic (implicit) and criterion-based (explicit) review methods. Quality-of-care measures included evidence based review criteria and a quality-of-care rating scale. Textual commentary on the quality of care was provided as a component of holistic review. Data were collected in 9 randomly selected acute hospitals in England, by hospital staff trained in case note review. These local review teams comprised combinations of 3 staff types: doctors (n=16), specialist nurses (n=10) and clinically trained audit staff (n=3) (n=13 in total), and nonclinical audit staff (n=9).

Further research/reviews required

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