

Measuring the Appropriateness of Prescribing. Can it be Explicit and Evidence-Based?

AM Holbrook, KK Keshavjee, S Troyan, C Goldsmith, T Smiley, K Nabzdyk
*COMPETE Project, Centre for Evaluation of Medicines, Department of Medicine, McMaster
University, Hamilton, Ontario*

Background

Evaluation of prescribing is key to many pharmacoepidemiologic studies. Evaluation in the past has largely relied on the implicit judgments of experts. Trial-based evidence is increasingly part of evaluation but is rarely explicit. The COMPETE study is examining the impact of electronic medical records and computerized decision support on family physicians' prescribing. The main outcome tool is APEQ, the Appropriateness of Prescribing Evaluation Questionnaire which seeks to make the evaluation evidence-based with criteria transparent enough to be programmable. We describe the challenges of developing such a tool.

Methods

Structured, detailed literature search followed by modification of existing tool. Domains of general prescribing evaluation tool were examined for face validity, then transformed into an evidence-explicit musculoskeletal prescribing evaluation questionnaire (MAPEQ). Validity testing is ongoing.

Results

The APEQ is judged to have good face validity, superior to current evaluation tools currently used with administrative databases. Transforming generally agreed upon domains of good prescribing (appropriate indication, appropriate prior therapy, optimal benefit/risk according to evidence, correct dose range, no contraindications, etc) into discrete ordinal scores for evaluating the NSAIDs has proved challenging. A nominal group process of validation of the scoring system is underway. A computer-generated scoring tool requires a discrete data-replete electronic medical record (EMR).

Conclusions

Explicit, evidence-based prescribing evaluation is difficult and resource-intensive but will advance the quality of therapeutics outcomes research.