

Measuring Quality of Prescribing: Where Does the Information Reside?

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BACKGROUND: High quality clinical decision support relies on accurate and complete information input about the patient to measure the baseline quality of care before suggesting any changes. For prescribing, it has proven extremely difficult to capture all of the information required to judge quality of prescribing.

METHODS: A nominal group consensus process (previously described) was used to establish domains for the Appropriateness of Prescribing Evaluation Questionnaire (APEQ). We tested the reliability of paper chart reviews (N=48 charts), both inter- and intra-reviewer then evaluated paper and electronic charts (N=136) of our primary care electronic medical record (EMR) network for their ability to inform APEQ using NSAIDs as test drugs.

RESULTS: Despite 8 domains, each with 5 scoring possibilities for APEQ, chart review reliability was good with weighted kappas for inter-rater reliability of 0.68 (SE .07) and intra-rater reliability of 0.76 (SE .13). For the key domains of patient age, diagnosis, index prescription and previous therapies, definitive information was available in 72-100% of cases from paper or EMR chart. However, such information on contraindications was frequently missing. As the EMRs had only been in use for 2 years and were used by family physicians not consultants, significantly more information ($p<.001$) was available from paper charts on data elements of past diagnoses and previous therapies.

CONCLUSIONS: Since EMRs are a new technology in Canada, there is insufficient longitudinal information and penetration amongst specialists to rely on them solely for information. Currently both paper and EMR chart reviews are required. Within the important domains of information in this analysis, contraindications were poorly documented.