

POSTER ABSTRACTS

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Evaluating Care Delivery 45

The Prevention Index: Using Technology to Improve Quality Assessment

Thomas M. Vogt , MD, MPH, Kaiser Permanente Center for Health Research Hawaii
Mikel Aickin, PhD, Northwest Kaiser Permanente Center for Health Research, Portland,
Faruque Ahmed , MD, PhD, Centers for Disease Control and Prevention
Mark Schmidt, BS, Kaiser Permanente Center for Health Research Hawaii

Electronic medical records (EMR) have the potential to greatly improve quality of care assessments. The Prevention Index (PI) is a new tool for assessing the quality of preventive care using EMR. It differentiates between preventive and diagnostic/monitoring services, weights services by their relative cost benefit, can be readily modified with changes in consensus recommendations, measures all recommended services as well as selected high-resource services that are not recommended, and it can assess care at the system, clinic, provider, and individual patient level. It also identifies excessive as well as deficit delivery of services.

We modeled the PI using data from 1000 randomly selected medical charts from Kaiser Permanente Hawaii over a five-year period, and compared the results to consensus recommendations and to current measures used by the National Committee on Quality Assurance (NCQA). These data suggest that quality assessment practices based on chart reviews and patient surveys modestly overestimate quality of delivery of common screening services, and grossly overestimate (or don't assess) quality of interactive services (those requiring a physician-patient conversation).

Current systems rarely prioritize services by benefit, and also do not address the problem of people who are rarely or never served. The PI deals with all of these issues. EMR will become a standard of care, and we propose a 10-year phase in of EMR as the basis for quality assessment of preventive care. The same approach is applicable to treatment as well. The presentation will describe the PI, present real data evaluated by the PI, with and without priority weights, and compare the outcomes to NCQA data on the same system.