

365: A COMPREHENSIVE PLAN TO DEVELOP PHYSICIAN PERFORMANCE MEASUREMENT TOOLS FOR CHRONIC STABLE CORONARY ARTERY DISEASE

Authors:

Kmetik K.S., Drozda J., Messer J.V., Kresowik T.S., Kresowik R.A., Naughton K., for the Chronic Stable Coronary Artery Disease Work Group of the Physician Consortium for Performance Improvement

Objective:

The objectives of this effort were to 1) develop evidence-based physician performance measures for the management of patients with chronic stable coronary artery disease and 2) develop reliable and valid tools to facilitate implementation of the measures by practicing physicians.

Methods:

The American Medical Association convenes the Physician Consortium for Performance Improvement (The Consortium), an organization of more than 50 U.S. national medical specialty societies whose vision is to become the leading source organization for evidence-based clinical performance measures and outcomes reporting tools by and for physicians. The Consortium convened an 18-member, cross-specialty work group charged with 1) translating clinical guidelines for chronic stable coronary artery disease (CAD) into physician performance measures and 2) developing a portfolio of tools to facilitate the use of the performance measures by practicing physicians.

The performance measures were developed in a number of face-to-face and telephone conferences over a 12-month period. The workgroup used guidelines with high levels of scientific evidence ratings for prioritizing the processes of care selected for measure development.

The work group next applied the desirable attributes of measures (e.g., actionable by user, data collection feasible) as defined by leading U.S. quality organizations. Constructing the measures and defining the data element specifications required extensive discussion and expert consideration.

Because electronic medical records (EMRs) and systematic data collection channels are not yet widespread in U.S. physician offices, tools to implement performance measures within clinical practice must be made available in different media. The comprehensive plan to develop a portfolio of tools to implement the CAD measures includes designing and testing 1) specifications and tools for retrospective data abstraction from paper medical records; 2) a paper flowsheet for prospective data collection; 3) an electronic data collection tool for retrospective or prospective data collection without an EMR; and 4) instructions for querying an EMR for the required data.

Results:

The final measurement set includes measures for antiplatelet therapy, lipid profile, drug therapy for lowering LDL-C, beta-blocker therapy after acute myocardial infarction, blood pressure monitoring, smoking cessation, and symptom and activity assessment.

A pilot test was completed to evaluate the retrospective data abstraction specifications and tool. A team of four medical record abstractors reviewed a total of 100 records from four separate clinical practice settings: cardiology (1), family practice (2), and internal medicine (1). As part of the pilot test of this retrospective tool, reliability was calculated as a percentage of agreement on a data element for two abstractors. An average inter-rater reliability of 98.1 was found for 31 data elements across all sites. A Cohen's kappa statistic was calculated for five data elements with values ranging from 0.82 to 0.98.

Feedback from practicing physicians resulted in designing a two-page flowsheet for prospective data collection. The flowsheet accommodates data from several visits for a single patient and includes data required to construct all of the CAD measures. In 2002, the flowsheet will be further evaluated by practicing cardiologists. In addition, drawing on prior work with electronic data collection tools for diabetes, work is underway to develop electronic tools for the CAD measurement set, both with and without an EMR.

Conclusions:

The Physician Consortium for Performance Improvement, through a consensus process involving practicing physicians, successfully developed evidence-based physician performance measures derived from the clinical guidelines for chronic stable CAD. A reliable tool has been developed for retrospective data abstraction, and a paper flowsheet is available for prospective data collection. Recognizing the need to provide various implementation tools, the portfolio of tools will include electronic data collection vehicles.