

FROM THE EDITORS' DESK

More Challenges in Measuring Care Quality

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Any observation sometimes attributed to Warren Buffett is that academics study what is measurable rather than what is meaningful. This was explored in depth recently in a series of articles in the *Chronicle of Higher Education* about improving metrics for faculty productivity, and may indeed be often true. However, most investigators working in the field of health care quality improvement strive to measure what is meaningful while overcoming the measurement challenges. They necessarily work to assure that the instruments and tools used for measurement are valid and provide the information that is needed to guide interventions. The complementary adage in the business world is that we can't fix what we can't measure. Without the tools to measure the outcomes we strive to achieve, we can't adequately evaluate the success or failure of our efforts. This is undoubtedly true when designing interventions to improve healthcare delivery processes—without measures to assess outcomes, we can't know if our interventions are effective.

This measurement issue is addressed in two studies in this issue of *JGIM*. The study by Patel and colleagues quantifies preventable admissions on a general medical service and demonstrates a method of physician classification of such events that was shown to be reproducible.¹ This work includes an evaluation of the Agency for Healthcare Research and Quality's (AHRQ) Prevention Quality Indicators (PQIs) as measures of preventable admissions. The PQIs are quality indicators endorsed by AHRQ, derived from measures created in the 1990s. They are intended to be population-level indicators of access to quality outpatient care, and have been endorsed by the National Quality Forum. They are used widely by state and local health agencies, hospital associations, purchasers, and others to examine regional access to care. The PQIs are often used as measures of preventable hospitalizations under the assumption that inadequate primary care leads to hospital admissions that should be considered to be preventable. Patel and colleagues used the classification by their set of physician reviewers as the reference standard for evaluating the PQIs. The physician reviewers categorized 122 of 322 admissions

as preventable. Only 31 admissions were classified as preventable by both the PQI and the physician reviewers; this was not different than chance. The authors suggest that the use of the PQI method for detecting preventable admissions, at a hospital level, may need to be reconsidered, given its poor performance in this study.

Also in this issue, Al-Mutairi and colleagues address a different measurement concern; that is, measurement of diagnostic errors in primary care.² Like preventable admission, diagnostic error is a quality of care issue that threatens patients and is one of the most common types of medical errors in primary care. These investigators tested an approach to improving the accuracy of diagnostic error identification with medical record review. The authors tested the accuracy of reviewers' responses to the question of [whether] "the episode of care under review had a diagnostic error." They were tasked with reviewing a set of 389 medical records with some having diagnostic errors and some having none. The innovation described is that the reviewers were led through a series of 11 questions about possible diagnostic process breakdown that was intended to inform their response to the key question above. The reviewers answered the key question on a scale of 1–6 reflecting how strongly they agreed or disagreed that an error occurred. The investigators dichotomized these responses to generate positive and negative predictive values with different cutoffs. When the responses were dichotomized as 1–3 and 4–6, the single question had a positive predictive value of 78 % and a negative predictive value of 86 %. The authors propose that this approach is useful for identifying cases requiring further study that will inform quality improvement activities.

We are also fortunate in this issue of *JGIM* to include a set of studies on a topic of growing prominence in the U.S.; that is, improving shared-decision making with patients from racial and ethnic minorities who are part of the lesbian, gay, bisexual, and transgender (LGBT) community. The set of articles is introduced by an editorial from Dr. Marshall Chin, who led the University of Chicago team of researchers who contributed this work.³ The three articles are the foundational work of this team based on review of literature from the fields of medical decision making, race/ethnicity, gender studies, and implementation science. The three papers outline a conceptual model for shared

decision making with members of this vulnerable population and present information that may guide interventions to assist individual clinicians and health care organizations in their transformations.

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