Reflections on Performance Measurement in Cardiovascular Disease

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As I complete a 3-year term as the Chair of the American College of Cardiology Foundation/American Heart Association (ACCF/AHA) Task Force on Performance Measures, I have been reflecting on the work of the Task Force and the evolution of the field of performance measurement in cardiovascular disease. I have noticed several consistent themes that merit discussion, given that performance measurement will certainly play an ever more prominent role in the work of clinicians, investigators, and policy-makers.

The first is that engagement by clinicians is not only strategically wise—it is also our obligation. Although not all clinicians are convinced, most seem to have accepted the fact that the care that they deliver will be measured. The ACCF/AHA could certainly have decided to fight measurement efforts rather than embrace them. If they had, however, the situation for cardiovascular clinicians would be much worse. Purchasers and consumers insist on measurement, even if this means using poor instruments. Indeed, some measures recently endorsed by the National Quality Forum—the national clearinghouse for national performance measures—use only administrative data or ignore risk-adjustment of outcomes.\(^1\) Although in a few cases the use of administrative data has been rigorously validated,\(^2\) more often it is simply not up to the task of answering critical questions such as the appropriateness of therapeutic or diagnostic decisions. Risk adjustment of outcomes is fundamental to measures validity and protects the sickest patients from adverse selection. Because the ACCF/AHA have been leaders in quality measurement, many current “best in class” measures for cardiovascular disease use clinical data, consider clinically important exceptions to therapies for process measures, and use rigorous risk adjustment for outcomes measures.

Beyond the strategic value of engaging in quality measurement, I believe that clinicians increasingly recognize that unacceptable variability in care and outcomes characterizes clinical practice in the United States. Even though the widely cited figure from the Institute of Medicine of 90,000 deaths annually as the result of medical errors in the United States is only an estimate,\(^3\) and even though the geographic variation demonstrated in the Dartmouth Atlas\(^4\) cannot account for all of the variability in patient populations, the evidence is simply too much to ignore. Despite the imperfections of existing measures, as part of our commitment to serving patients, we must accept accountability for the care we deliver. Therefore, when limitations of performance measures are identified, we should seek to improve them rather than disparage measurement.

Second, clinician engagement is only viable with rigorous supporting methodology. Developing valid, reliable, reproducible performance measures is a substantial challenge. The ACCF/AHA Performance Measures Task Force has described the methodology to guide measure development,\(^5,6\) including methodology for outcomes measures,\(^7\) efficiency measures,\(^8\) and composites.\(^9\) The methodological framework that these documents provide ensures that the measures emanating from the Task Force are of high quality.

A third important theme is that the AHA and the ACCF have gained immeasurably from collaboration in a situation where there would be much to lose from fragmentation. The collaborative tradition—embodied by the joint Task Forces on Guidelines, Data Standards, and Performance measures—has been instrumental to the appropriate perception that the ACCF/AHA are leaders in cardiovascular quality. In conjunction with other organizational partners, the ACCF/AHA have developed several sets of performance measures for cardiovascular diseases. Indeed, the Centers for Medicare and Medicaid Services and The Joint Commission have relied on the ACCF/AHA performance measure specifications for heart failure and acute myocardial infarction for their inpatient quality measurement and reporting efforts.\(^10,11\) This history of collaboration—and the leverage that it has generated—ensures that the ACCF and AHA are able to participate in national discussions of measurement of cardiovascular care. This fruitful partnership will certainly continue to benefit performance measurement in cardiovascular disease.

A fourth common issue that has been repeatedly relevant is that of the potential hazards of relationships with industry, with respect to performance measures. As corrosive as inappropriate industry influence can be in the design and conduct of clinical trials and in the development of guidelines, the stakes are perhaps the highest for performance measures. One can imagine few better opportunities to guarantee the use of a therapy than to have a national publicly reported performance measure.
edging this concern, the ACCF/AHA have further strengthened their policies regarding the composition of performance measures writing groups. Just as guidelines supported directly by industry have been greeted with understandable skepticism, the professional community should view industry-driven performance measurement initiatives with substantial caution. Undoubtedly, there may be instances where the benefits of patients can be aligned with the interests of industry. Although such opportunities may merit exploration, industry involvement in performance measurement should be (at closest) through arm’s-length arrangements governed by strict rules to avoid inappropriate influence.

A fifth observation is the evolution of performance measurement well beyond individual process of care measures for hospitalized patients. Once at the vanguard of quality assessment, these measures are by themselves of diminishing value for several reasons: many such measures are “topped out,” where performance is invariably high; process measures focus on only the population eligible for a specific treatment despite the fact that many patients are not; hospital measurement focuses on a brief snapshot of care in a patient’s experience; and process measures generally focus only on underuse, avoiding overuse and cost considerations. To address these limitations, measures have evolved in many ways, such as the use of composite measures to characterize a range of processes of care; the implementation of outcomes measures, which include a broader range of patients; the exploration of measures of “episodes of care,” following the patient across care settings; and the consideration of measures of efficiency and appropriate use. Although introducing further complexity into measurement, these diverse approaches will provide a more holistic view of quality in a broader patient population. The ACCF/AHA Task Force on Performance Measures has been actively engaged in delineating the methodology for such measures and where adequate methodological rigor is available, exploring a broader family of measures.

Finally, those involved in the development and implementation of quality measures should advocate for explicit evaluation of these measures. Are they valid? Do they address meaningful gaps in care? Does better performance translate into patient benefit? Are they worth the cost of implementation? What are the unintended consequences? For some time, these questions were of intellectual interest but received little focus in the rush to measure quality. Circulation: Cardiovascular Quality and Outcomes has served as the platform for studies that begin to explore these critical issues. In this issue, for example, one study explores reasons for variability in heart failure readmission, a publicly reported quality measure; another rigorously studies the suitability of risk-adjusted time in therapeutic international normalized ratio range as a metric for the quality of care for atrial fibrillation. Quality measurement needs this strong scientific foundation not only to gain credibility but also to ensure that measurement efforts have their intended effect.

The field of quality measurement in cardiovascular disease has evolved substantially over the last 3 years. It is my expectation that the changes over the next 3 will be equally dramatic—where the ACCF/AHA continue to serve as leaders in the field of performance measure methodology and implementation; where measures continue to be developed with the patients’ best interests in mind; measurement captures a broad range of domains of care; and the field becomes increasingly evidence-based. Each of these will contribute to our ability to understand whether we are delivering effective, safe, timely, equitable, efficient, and patient-centered care.

Disclosures
Dr. Masoudi is the past Chair of the ACCF/AHA Performance Measures Task Force. He has contracts with the American College of Cardiology Foundation and the Oklahoma Foundation for Medical Quality. He has research support from the Agency for Healthcare Research and Quality and National Heart, Lung, and Blood Institute.

References


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