enhance our understanding of clinical outcomes, however, and that sometimes the data we already have are accurate.

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See Article page 676.

Commentary: Data—what is it good for?

Pranav R. Shah, MD,^a and
John F. Butterworth IV, MD^{a,b}

Cardiac surgery has been at the forefront of using quality metrics to drive improvement in patient care. The choice of interval after surgery to assess outcomes is thorny. When the interval is too short, one runs the risk of missing delayed adverse events that should clearly be associated with the surgical procedure. In contrast, given a long-enough interval, all patients will experience a wide variety of adverse events that are clearly NOT a reflection of perioperative quality. Thus, adverse neurobehavioral outcomes observed long after coronary artery bypass grafting (CABG) were almost certainly completely unrelated to the operation if they were not present at a 3-month assessment.¹

In this issue of the *Journal*, Mittel and colleagues² investigated whether using 90-day rather than 30-day mortality after CABG would better inform quality comparisons. They reviewed all procedures in the New York State Planning and Research Cooperative System

From the ^aDivision of Cardiac Anesthesiology and Critical Care Medicine, and ^bDepartment of Anesthesiology, Virginia Commonwealth University School of Medicine, Richmond, Va.

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Address for reprints: John F. Butterworth IV, MD, Department of Anesthesiology, Virginia Commonwealth University School of Medicine, PO Box 980695, Richmond, VA 23298-0695 (E-mail: jfbivjbutter@yahoo.com).

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Pranav R. Shah, MD, and John F. Butterworth IV, MD

CENTRAL MESSAGE

Hospital comparative data should be meaningful to patients and physicians while providing guidance on how to improve.

(SPARCS) to identify adult New York (NY) State residents undergoing a CABG-only procedure at surgical centers performing at least 100 cardiac procedures per year in adults between 2008 and 2014. They linked this list with the NY State and NY City vital records to obtain 1-year mortality. After adjusting for patient and hospital characteristics (although not the “urgency” of the procedure), each *institution* was assigned a risk-standardized mortality rate. Institutions were stratified based on how they performed compared with the 95% confidence interval for their predicted/expected mortality ratio. Their results were as follows: 30-day mortality was 2.2% (interquartile range 0.69), and 90-day mortality was 3.7% (interquartile range 1.0). At 30 days, 4 facilities were “good outliers” that performed better than expected, 33 facilities performed as “expected,” and 5 facilities were “poor-performing outliers.” When assessed using 90-day

rather than 30-day mortality, only 3 of 42 institutions were reclassified, and none changed 2 levels (ie, from poor to good, or vice versa).

This study identifies several points worth discussing. Mittel and colleagues noted that a large fraction of patients undergoing cardiac surgery do not return home directly from the hospital. Instead, they go first to a post-acute care facility for additional therapy, confounding cost and outcome comparisons of surgical centers. Second, the authors found that 90-day outcome assessments added little marginal value over 30-day assessments. In this instance, a “negative” answer no way denotes a “negative study.” These both are useful findings. Generating, analyzing, and reporting data all consume resources. Moreover, the aphorism “what gets metric-ed gets managed” is true! Therefore, the determination that comparing variations in 90-day mortality does not identify large, new signals for quality improvement is an important result.

So, where to go next for a more informative metric? Perhaps a patient-reported outcome such as based on PROMIS (Patient-Reported Outcomes Measurement Information System) might identify variations in quality.^{3,4} In the meantime, we congratulate Mittel and colleagues for preventing us from misdirecting our attention to outcomes that will be unlikely to improve surgical quality.

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