EDITORIAL COMMENT

Seeking Quality Cardiac Care

Is Public Reporting the Answer?*

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ublic reporting of health care outcomes and the ranking of health care facilities can be traced back to early endeavors by Florence Nightingale and Dr. Ernest Codman (1). Although intended to improve patient outcomes, neither of these efforts was well received, nor was the initial public release of risk-adjusted death rates at U.S. hospitals by the Health Care Finance Administration (now the Centers for Medicare and Medicaid Services [CMS]) (2). Nevertheless, the desire to improve health care delivery in the United States and demands for increasing transparency have resulted in an explosion of public reporting efforts not only for hospitals but also other types of health care facilities and physicians. For example, the Hospital Compare web site was launched by CMS in 2002 and has grown to include separate Web sites comparing home health agencies, nursing homes, dialysis facilities, and several other types of facilities. In 2016, CMS started providing 1- to 5-star ratings for hospitals, but this effort has been criticized by many, resulting in CMS's delaying further updates (3). In addition to CMS, the pace of public reporting efforts is accelerating, with numerous state government and independent organizations releasing increasing amounts of information. Both the Patient Protection and Affordable Care Act of 2010 and the Medicare Access and CHIP Reauthorization Act of 2015 include language that ensures continued public reporting efforts.

Public reporting is built on the foundation that the information provided will affect the decisions and

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behaviors of the many interested parties and ultimately lead to an improvement in health care delivery and outcomes. However, evidence that this is actually happening is sparse and conflicting (4). Critics of public reporting voice many concerns about the accuracy and reliability of information contained in public reports, as many are derived from administrative data sources that were never designed for this purpose (5). Moreover, multiple studies have documented the unintended negative consequences of the public release of data, resulting in risk-avoidance behaviors by hospitals and physicians (6-9).

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In this issue of JACC: Cardiovascular Interventions, Sukul et al. (10) report on a comparison of the appropriateness ratings and selected outcomes of percutaneous coronary intervention (PCI) among hospitals ranked in the public report of the top 50 hospitals for cardiology and heart surgery by U.S. News & World Report with nonranked hospitals. The outcomes evaluated were the rates of in-hospital mortality, post-procedural bleeding, and acute kidney injury obtained from the National Cardiovascular Data Registry CathPCI Registry with appropriateness ratings assessed using the 2012 appropriate use criteria for coronary artery revascularization (11). After adjusting for case mix, their comparison showed no significant differences in the adjusted odds of in-hospital mortality, acute kidney injury, or post-procedural bleeding at top-ranked versus nonranked hospitals. Similarly, no differences in any of the outcome variables were found in a subgroup representing stable elective PCI patients. Top-ranked hospitals had a slightly lower proportion of appropriate PCIs compared with nonranked hospitals, but the absolute numeric differences were small. The investigators conclude that PCI performed at top-ranked hospitals was not associated with superior outcomes compared with PCI outcomes at nonranked hospitals.

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This report touches several important issues, but I can comment on only 2 in the space available. First, I agree with Sukul et al. (10) that these findings should reassure patients who do not undergo PCI at top-ranked hospitals. In addition, these same findings are also a tribute to the physicians, nurses, and other health care professionals at nonranked hospitals who are achieving outcomes no different from those seen at top-ranked hospitals. However, the investigators' conclusion comes with stipulations that hospitals participate in the CathPCI Registry and meet the minimum guideline-recommended hospital volumes for PCI. The first stipulation should not be a concern, as the CathPCI Registry is used at more than 90% of PCI-capable hospitals in the United States and all but 1 of the 50 top-ranked hospitals (12). However, in their main analysis, hospitals performing <400 PCIs annually were excluded, leading to the elimination of 891 of the 1,545 hospitals (58%). It is sobering that so many facilities are performing fewer than the guideline-recommended number of procedures. To their credit, the investigators performed an additional sensitivity analysis including the facilities performing <400 PCIs annually and showed similar results for the 3 outcome measures and appropriateness ratings. Hopefully, these favorable observations would also apply to the 29% of facilities performing <200 PCIs annually, as the volumeoutcome relationship for PCI continues to be controversial (personal communication, CathPCI Registry 2017 first-quarter report).

Second, the investigators used *U.S. News & World Report*'s 50 Best Hospitals for Cardiology and Heart Surgery to identify the top-performing group for comparison. This is a widely read and influential public report with the intent to identify the best hospitals for complex specialty care. Because the first word in the phrase "public reporting" is *public*, it is reasonable to ask how much these efforts help the public decide where to get health care and how much control a patient really has in this decision. In many instances, where a patient goes to receive health care is determined by insurance contracts, health plans,

and requirements to stay "in network," leaving little real choice to the patient. Although in a different area, the results of a national poll on how parents choose doctors' for their children are interesting and relevant (13). Ranked in order of importance were accepts my health insurance (92%), convenient office location (65%), doctor's years of experience (52%), word of mouth (50%), referral from another doctor (40%), and website rating (25%). One reason website ratings may score low is the public's confusion over the number and results of what has been an explosion of public reporting sites on the Internet. For example, in a comparison of 4 prominent national rating systems, it was found that no hospital was rated as a high performer by all 4 systems (14). However, the most striking finding was that only 10% of the 844 hospitals rated as high performers by 1 rating system were rated as high performers by any of the other rating systems. It is not difficult to explain this inconsistency, as each rating system uses different data sources, has its own rating methodology, defines different measures of performance, and has a different focus to its ratings.

In this era when there are multiple consumer websites rating just about every product and service available, there is little reason to argue that health care should be immune. Many have argued that transparency will improve health care, but for the public, this is getting to the point of "too much information." Despite the external forces that determine where a patient is directed for health care and the plethora of rating sites and results, this study addresses what is often the foremost question of patients and their families in their hometowns: Is my local hospital doing a good job? To the extent measured by the variables in this study, it is reassuring that the answer appears to be "yes."

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