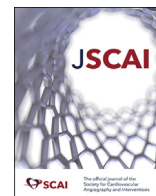


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Editorial

Nonpublic Internal Reporting of Percutaneous Coronary Intervention Outcomes: Improving Quality Without Risk Avoidance

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Reporting physicians' percutaneous coronary intervention (PCI) outcomes are intended to improve the quality of care by influencing clinician behavior and providing transparent information to patients. However, reporting can also have the unintended consequence of making physicians risk-averse and less willing to offer PCI to more complex and sicker patients. SCAI recommends public reporting but emphasizes that excessive reliance on risk-adjusted mortality rates may result in risk-avoidant behavior that can adversely affect the public. SCAI also supports reporting mortality rates both inclusive and exclusive of high-risk patients and avoiding providing operator-level data.¹

In this issue of *JSCAI*, Kovach et al² should be commended for investigating the effect of nonpublic internal reporting of PCI outcomes on future case selection within the US Veterans Affairs (VA) hospital system. Among 251,526 patients who underwent PCI, 913 had a major adverse event (MAE) between 2010 and 2018. These 913 patients were stratified into mortality risk terciles using the VA 30-day PCI mortality risk model. At 1, 2, and 4 weeks after an MAE, there were no significant changes in routine PCI practices in each of the risk terciles. The authors concluded that, unlike public reporting, nonpublic reporting may not make physicians risk-averse. Whether nonpublic reporting improves the quality of care remains to be studied.

This study adds to the body of evidence characterizing the impact of outcomes reporting on physician behavior. Previous research found that public reporting in Massachusetts resulted in lower use of invasive angiography for acute myocardial infarction (AMI).³ Comparing New York (a public-reporting state) with Michigan, which has a nonpublicly reported quality improvement collaborative, public reporting resulted in fewer high-risk patients receiving PCI, with fewer adverse events. In an analysis comparing public-reporting with nonpublic-reporting states, PCI for AMI was performed less frequently in public-reporting states, and AMI mortality rates were higher, predominantly among patients not receiving a PCI.⁴ Interestingly, after New York state's reporting policy

changed to exclude higher-risk patients with shock, the rates of PCI in patients with AMI and shock increased.⁵ This policy change example underscores how improving public-reporting metrics can affect physician decision-making, favoring the best care for the highest-risk patients.

Several limitations of the study reported by Kovach et al² must be acknowledged. First, unmeasured confounders may have affected the primary outcome. As noted by the authors, "operator case selection is multifactorial, and unmeasured factors beyond the clinical and anatomic characteristics" could have driven at least part of the outcomes. Second, the results are not generalizable to practices outside the VA system, limiting their application nationally and internationally. Third, and most importantly, a significant proportion of the patients (approximately 10%) were excluded from the analysis because of missing data. Although most missing data were related to missing VA SYNTAX score information (58% because of missing coronary dominance and 38% because of missing international normalized ratio values), this could have potentially affected the study's internal generalizability.

Ultimately, although public reporting is intended to provide transparency and improve PCI outcomes, some reporting requirements make physicians risk-averse to protect their individual statistics rather than doing what is best for the patients, especially for those at the highest risk. The current study by Kovach et al² suggests that an approach of nonpublic reporting of MAEs, as performed within the VA system, does not appear to affect physician decisions based on patient risk criteria. This study provides important insight into the type of PCI quality improvement program that may improve quality without making physicians risk-averse.

Declaration of competing interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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