QUALITY REPORT CARDS, SELECTION OF CARDIAC SURGEONS, AND RACIAL DISPARITIES: A STUDY OF THE PUBLICATION OF THE NEW YORK STATE CARDIAC SURGERY REPORTS

When selecting physicians, consumers have access to little useful information—apart from name of medical school, years in practice, and office location. By making explicit measures of the quality of physician care easily available, “report cards” can aid in the selection process and lead to more informed choices. A new Commonwealth Fund–supported study finds that quality report cards may have another important benefit—they can help level the playing field for racial minorities by improving their ability to access the best providers.

In “Quality Report Cards, Selection of Cardiac Surgeons, and Racial Disparities: A Study of the Publication of the New York State Cardiac Surgery Reports” (Inquiry, Winter 2004/2005), Dana B. Mukamel, of the University of California, Irvine, and colleagues compare surgeon selection in time periods with and without report cards, using the New York State Cardiac Surgery Reports as a test case.

First published in December 1991, the New York State reports publish risk-adjusted mortality rates (RAMR) for cardiac surgeons performing coronary artery bypass graft (CABG) surgery, with lower mortality rate indicating higher quality. The reports are available on the Internet and are sent to cardiologists with the expectation that they will be used in making referrals. According to Mukamel and colleagues, the methodology used in the reports is highly credible and has been extensively studied and validated. “[It] offers an excellent test case for the potential impact of quality report cards,” say the authors.

The study includes all Medicare fee-for-service enrollees (FFS) in New York State who had CABG procedures during 1991 (i.e., in the pre-reports period) and 1992 (i.e., the post-reports period). Only FFS patients were included because they are not limited in their choice of surgeons, unlike those enrolled in managed care organizations. The research team surmised that, in the pre-reports period, surgeon selection decisions were made based on observable characteristics, including the hospital in which a surgeon practices, years of experience, Medicare participation, price (with patients interpreting higher prices as an indicator of higher quality), and recommendations of referring physicians.

The researchers found that the explicit quality information published in the report cards had an influence on the surgeon choices made by patients. In addition, the impact of two characteristics used to identify quality in the pre-reports period—price and years of experience—declined once the reports were published, confirming the researchers’ hypothesis that “explicit information about quality replaces implicit signals.” In contrast, the effect of referring physician loyalty did not change after the reports were published. Physicians may be more skeptical of the validity of the data, the researchers said, or may be more interested in other considerations, like collegial relationships.
The results were even more compelling when the researchers examined the effect of the report cards on patients of different races, income, and education levels. The study suggests that patients with lower education levels and black patients of all education and income levels have limited access to implicit information about surgeon quality. Even in the post-reports period, low-education patients, particularly those who are black, were more likely to be treated by surgeons of lower quality. This may be due, the researchers say, to a “crowding out” effect, where the better surgeons are forced to turn down patients due to high demand. This effect may be temporary and, in time, the capacity of the better surgeons may increase or the performance of other surgeons may improve.

The study did provide some good news: In the post-reports period, the effect of the explicit quality information is almost the same for blacks and whites. This suggests that “the report cards level the playing field somewhat for blacks, allowing them similar access to information about surgeons’ quality as whites have.” While the report card has not eliminated disparities in access to high-quality CABG surgeons, the continued use of such items could play an important role in addressing the problem, the researchers say.

All report cards, however, may not be created equal. “Quality report cards are only as good as the measures they include,” the authors write, emphasizing the importance of developing valid and reliable quality measures. Moreover, if report cards present information that is complex or difficult for consumers to understand and use, they may not be effective in influencing provider selection.

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**Facts and Figures**

- The risk-adjusted mortality rate used in the New York State reports has been found to influence market shares of surgeons and the contracting decisions of managed care organizations.
- Patients of low education, particularly if they are black, were more likely than others in the study to be treated by surgeons of lower quality (odds ratios range from 1.12 to 1.30).
- In a survey of New York State cardiologists, only 38 percent indicated that information in the reports affected their referral recommendations. Physicians may need to observe consistent scores over several years to change their referral patterns.

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**Are Patients More Likely to Receive Care from a High-Quality Surgeon?**

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<th>Prior to publication of report cards</th>
<th>After publication of report cards</th>
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<tbody>
<tr>
<td>Whites</td>
<td>8.6% ***</td>
<td>9.6%**</td>
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<tr>
<td>Blacks</td>
<td>-2.2%</td>
<td>9.4%*</td>
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* 0.05 < p < 0.1  ** 0.01 < p < 0.05  *** p < 0.0

* The difference in the probability of selecting surgeons when the difference in their quality is 1 percentage point of risk-adjusted mortality rate (e.g., 2.5% vs. 1.5%).

Note: Calculated for patients with average income and education.