Health Care Quality Reporting: Changes and Challenges

David J. Miranda, Ph.D.

Introduction and Background

The articles that comprise this special edition of the Health Care Financing Review cover a wide range of topics pertaining to the public reporting of health care quality. For many years, CMS and other purchasers have used public reporting of health care quality measures not only for public accountability of plans and providers for the care they provide, but also to assist consumers, health plans, and purchasers in making informed decisions to select higher quality care. While many purchasers are moving toward implementing pay-for-performance or value-based purchasing strategies, which will undoubtedly have their own impact on the health care marketplace, there is also a growing interest in the purchaser community in consumer-directed health care and other strategies to make employees and other consumers more aware of costs and more invested in careful selection of health care options, using as much cost and quality data as can be made available. Within the Federal Government these are reflected in the Department of Health and Human Services’ Transparency Initiative and in provisions of the 2006 Tax Relief and Health Care Act.

The emerging strategies previously described argue for the need to improve public reporting on measures of quality. Not only will consumers need assistance making sense of an ever increasing array of types of quality data, but purchasers will need to assess that their measurement strategies are fair and equitable, not needlessly burdensome on providers and health plans, and that their measures can be acted on by plans and providers to improve quality, without unintended consequences. The articles included in this special edition of the Review point to the type of research needed in the field to address these urgent concerns.

Quality Report Sponsorship

Two of the articles in this issue look at the behavior of sponsors of public reports and raise questions whether or not adequate resources are being directed to maximize the utility of quality data to sponsors. Felt-Lisk, Barrett, and Nyman look at the behavior of States that collect Consumer Assessment of Healthcare Providers and Systems (CAHPS®) and other Health Plan Employer Data and Information Set (HEDIS®) data for their Medicaid health plans. The authors address how well the health plan data is serving Medicaid recipients and the general public, suggesting that policymakers and consumers could learn much from the relative performance of different groups of health plans (such as for-profit status or integration with physician networks), but that not enough resources are invested yet to do so. Teleki, Kanouse, Elliott, Hiatt, de Vries, and Quigley interviewed a broad range of sponsors of CAHPS® surveys to better understand how they defined and
achieved public reporting success. Sponsors themselves acknowledge that due to limited funding and competing priorities, they are not able to fully invest in tailoring public reports for their audiences, disseminate reports as fully as might be necessary, nor to thoroughly evaluate the effectiveness of their efforts. Similar comments were made about engagement with and oversight of vendors who collect CAHPS® data. While CMS has been a strong supporter of Medicare CAHPS® surveys, these two articles raise interesting policy questions as to the appropriate role of the Federal Government in support for CAHPS® and HEDIS® as they are used by the States for their Medicaid Programs.

Quality Reports and the Reactions of Users and Providers

Three articles explored the potential impact of CMS using nursing home reporting displays that differ from the formats that have previously been (and continue to be) used by CMS. Nursing Home Compare by default shows quality data in bar graphs, with greater detail provided in numeric tables as a “drill-down.”

Gerteis, Gerteis, Newman, and Koepke studied the impact of using simplified graphics that both gave users the ability to compare more than a single facility on one page and that provided interpretive assistance (easily evaluable displays). Consumers made more interpretive errors when using bar graphs than when using alternatives. Consumers also were often confused by unexpected directionality in the measures (when lower percentages meant better performance), obstacles that could be addressed by reframing (from a negative to positive frame) or by using more easily evaluable symbols. While the content of the research conducted by Gerteis et al. was specifically nursing home quality displays, the results have implications for the way all types of quality data are displayed. Indeed, purchasers may not only want to assess how accurately particular measures are interpreted when displays frame the data positively or negatively, but they may also wish to assess the impact of frames on the weight consumers attribute to positively and negatively framed measures in their choice behaviors. That is, consumers may prefer to see data in one format, may interpret it more accurately in another format, but may weight the same data more heavily in their decisionmaking when it is presented in yet another format.

Spranca, Elliott, Shaw, and Kanouse looked at the impact of including health plan disenrollment information alongside other CAHPS® and other HEDIS® data. Reporting of Medicare health plan disenrollment data was required by law with the intention of giving beneficiaries more information to make better health plan choices. Although beneficiaries may indicate a preference for more information, Spranca et al. contribute to a growing body of literature that suggests there may be tradeoffs, unintended consequences, or even impairment in decisionmaking when more information is provided. One particularly interesting facet of their research is that it assessed behavior of Medicare information intermediaries with additional information. The implications of the results are that we cannot assume that publicly reporting any new quality measure will simply improve consumers’ ability to choose higher quality care even with the help of information intermediaries. Either purchasers will need to find ways to combine and simplify data (through composites or decision-support tools) or they will need to carefully consider and select from among measures of quality which to promote as the primary indicators of health.
care quality the public should utilize for choice (with additional measures either not reported or reported as drill-downs).

While Gerteis, Spranca, and colleagues evaluated the reactions of consumers and their information intermediaries to publicly reported quality, Laschober, Maxfield, Felt-Lisk, and Miranda studied the responses of providers who were measured. Laschober et al. surveyed hospital executives with responsibility for quality. In this national survey, hospital quality executives reported increasing attention to hospital quality measurement in line with the launching of Hospital Compare. Results were suggestive of the impact of Hospital Compare, although the exact mechanism is not known (policy leaders might hope that the impact reported in the survey was due to public reporting and media attention to it, but, as the authors point out, it is also possible that the observed hospital behavior resulted from executives’ interpretation of the launch as one more signal that CMS will soon link performance to financial incentives). More compelling, perhaps, is the link in the minds of hospital quality executives of their hospitals’ performance to the involvement of their medical staff. Lack of physician involvement came behind poor documentation among the reasons executives cited for poor hospital performance on Hospital Compare. While Gerteis, Spranca, and others argue for careful attention to the display and content of quality reports, Laschober et al. argue for careful attention to the processes within hospitals and other providers in reaction to quality measurement and quality reporting. The technical support offered by the Quality Improvement Organization program, for example, depends on understanding the mechanisms and processes that allow for quality improvement.

Measurement and Analytic Challenges in Quality Reporting

Two topics that have challenged purchasers and sponsors of quality reports for many years are how to usefully, appropriately, and fairly simplify quality measures for multiple purposes and how to adequately risk-adjust data to allow for fair comparisons across providers or plans. These are challenges not only for consumer use of the data, but for policymakers and providers. Not only do consumers need data to be simplified, as Gerteis, Spranca, and others suggest, but purchasers also need data simplification for policy decisions, as Caldis describes. Similarly, not only does adequate and appropriate risk adjustment allow the public to make fair comparisons, but it also allows providers to better target their quality improvement efforts, as Murtaugh, Peng, Aykan, and Maduro describe.

Caldis tackles the problem of simplifying health plan data. Specifically he undertook to demonstrate that a unidimensional composite of HEDIS® quality is possible to construct, and used the National Center for Quality Assurance’s 1999 commercial health plan data to do so. If variability in performance can be shown to be a function in large part of a single organizational factor, purchaser tasks such as providing financial incentives (or penalties) for (lack of) quality to better drive quality improvement may be made easier. Caldis carefully addresses the limitations in the study: Data that was cross-sectional from a single year of commercial health plan performance measures and with significant “missing” data. Despite these limitations, the analysis demonstrates that a single factor composite model could be constructed and to some degree validated against
CAHPS® data for the same organizations. Additional policy areas for which such statistical work may prove helpful include decisions about rotating and retiring particular measures.

For consumers to make appropriate and fair distinctions between providers, such as home health care agencies, they need to have confidence that the impact of different patient mixes is taken into account. A provider serving less ill patients may appear to have better outcomes than one serving more ill patients; risk adjustment levels the playing field for fair comparisons. No single risk-adjustment model developed out of one year’s data set, however, can be guaranteed to be the best risk-adjustment model over a multi-year period. Murtaugh, Peng, Aykan, and Maduro demonstrate there are also tradeoffs in selecting a risk-adjustment model to use for home health care quality measures: How intuitive and easy to explain the model is may run counter to how well the model explains the data. One model may address the evaluation of smaller agencies or those with longer lengths of treatment, but require more costly or less easily accessed sources of data. Decisions about which statistical model to use must take into account the purpose of quality measurement and reporting and the audiences that will use the risk-adjusted data.

CONCLUSION

The articles in this issue address a broad spectrum of health plan and provider quality reporting issues. Current strategies to increase health care transparency and to foster greater public engagement in health care cost and quality decisions bring challenges. These challenges require greater attention to the formatting and content of public reports, to measurement and analytic rigor, to the support needed by sponsors and users of the data, and to the mechanisms and processes that allow public reports to foster quality improvement. The articles in this edition of the Review both address some of these issues and highlight the need for continued work in these areas.

Reprint Requests: David J. Miranda, Ph.D., Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Mail Stop S1-15-03, Baltimore, MD 21244-1850. E-mail: david.miranda@cms.hhs.gov