Charting the Course for Home Health Quality:
Action Steps for Achieving Sustainable Improvement

Data, Information, and Quality Indicators for Home Health Care

Executive Summary

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THE ISSUE

In less than five years, the home health care industry has moved from a clinical data environment with extremely diverse data collection protocols and little or no dissemination of quality-related information, to an environment where uniformly collected clinical data are being rapidly transformed into information and then into reports available to providers, payers, regulators and consumers. In 1999, CMS mandated the national implementation of a uniform tool to capture home health care patient-level information—the Outcome and Assessment Information Set (OASIS). In early 2002 CMS implemented Outcomes Based Quality Improvement (OBQI) nationally, along with a companion initiative, Outcome Based Quality Management (OBQM), which monitors adverse events in home health care. In April 2003, CMS launched the first phase of the Home Health Quality Initiative (HHQI), a consumer-oriented and widely disseminated "report card" for Medicare-certified home health agencies, in eight states. By October 2003, the HHQI is expected to expand into a national program.

This speed to action in home health care quality monitoring and improvement leaves many questions in its wake regarding the adequacy of the data and their use as quality monitoring tools. Especially now that OASIS data have gone "prime time" (i.e., available to the public in the form of report cards), *what issues should be addressed and resolved to assure that policy intentions can be delivered by the home health care quality programs mandated by CMS?* Among the many scientific, practical and political questions that arise are:

- How *valid and reliable* are OASIS data?
- How much attention is paid to home health care *staff orientation and ongoing training to maximize data accuracy*?
- To what extent will *stakeholders attempt to influence the scope of data and information* available?
- What *risk adjustment strategies* should be used for home health quality indicators?
- What *aspects of home health care that might be used to reflect quality are missing* from existing information?
- To what extent do available quality indicators *capture aspects of care that are sensitive to agency operations and nursing practice?*
- To what extent do *consumers have a voice* in prioritizing or shaping quality indicators?

PAPER OBJECTIVES AND METHODS

This paper has two main objectives. First it aims to *stimulate discussions about the adequacy of data* currently used to measure home health care quality and *the adequacy of the uses to which these data are put* according to the mandates of public policy. Second, it aims to *present a policy context* for discussions about data and measurement adequacy in home health care. *Numerous stakeholders are involved* in charting the course of home health care quality. We distinguish between stakeholders responsible for payment and oversight, who provide money and strings attached to that money, vs. stakeholders responsible for home health care service provision, who receive money and seek to remain competitive and profitable while providing high-quality care. Consumers, too, are important stakeholders, whose voices have not been widely heard in the home health care arena. *Regardless of the scientific adequacy of data, successes in achieving sustainable improvement in home health care quality will depend largely on how well these stakeholders cooperate at local, state, and national levels.*

The conceptual approach taken in this paper is that the *pathway from data to information to quality indicators is fraught with peril due to scientific challenges, practical realities, and political issues*. This pathway can be viewed as a voyage, whereby the availability, scope and accuracy of data influence the nature of the available information, which in turn helps influence the potential types of quality indicators, which lead to actions such as practice reviews and possible changes in practice as well as policy. A return voyage is equally plausible, whereby practice and policy actions could lead

to revisions in quality indicators, which in turn could affect the range of available information, leading back to possible revisions in data scope and availability as well as data collection accuracy protocols. A simplistic diagram of this dynamic 2-way voyage is depicted as follows:

Data<——>Information<—— >Quality Indicators<——>Action: Home Care Practice/Policy

This framework stems from a more generic quality management model based on the premise that both problem solving and decision-making rely on effective uses of data. The scientific, practical, and political issues faced in traversing each step along this voyage are outlined. We also adopt the conceptual distinction between structure, process, and outcome measures of quality in the health care arena.

FINDINGS

Findings are organized according to the paths along the voyage from data to action. For each path, scientific, practical, and/or political findings are highlighted.

Path from Data to Information

- *OASIS items used in the OBQI program have been found to be quite reliable, but very few studies have been published.* It will be important for agencies to periodically check the reliability of OASIS items "in the field" to assure that data submitted to CMS maintain a high level of reliability.

- *ADL and IADL items in the OASIS appear to have adequate validity*, but mental health items appear to underreport the degree of depressive symptoms in Medicare home health care patients.

- No known empirical evidence has been published that quantifies the distribution of time spent by agencies in staff orientation and training for OASIS completion. *Factors affecting data precision* include: extent of staff *training and experience* in administering OASIS, *competing demands* on the time of supervisors and staff, *differences in clinical judgment* between raters from different disciplines, and *ambiguities within categories* of a single OASIS item.

- *Calls for new types of data* critical to the everyday practice of home health care will likely be heard as the OBQI system unfolds in each state and as stakeholders interact to a greater degree. For example, there are no uniform data elements that can be used to provide profiles of the physician's level of involvement in home health care.

Path from Information to Quality Indicators

- Quality indicators are *overwhelmingly outcome measures*, as opposed to process or structural measures, because the OBQI system is grounded in the continuous quality improvement movement in health care, which is outcome-oriented. *Risk adjustment* is used in the OBQI system to control for the degree to which a patient is at risk for a given outcome due to his or her personal characteristics (e.g., demographic, clinical, and functional characteristics) as distinct from the aspects of care provided by the practitioner or organization being assessed.

- Although a growing number of clinical practice guidelines have been developed and translated into performance measures in other health care settings, *very few clinical practice guidelines or performance measures have been developed or adapted for the home health care setting as process measures of quality*.

- *Concerns have been voiced within the nursing profession that the current set of OBQI quality indicators overlook nursing-sensitive contributions to home care patients.* For example, home health care nurses spend a considerable amount of time during home visits teaching patients and their family caregivers about disease trajectories and prognoses, self-care and

disease management strategies, indications and contra-indications for medications, and the importance of adequate nutrition and hydration, but OASIS-based quality indicators fail to capture these critical nursing interventions.

- Expectations of home health care patients and their family caregivers are essentially unknown due a lack of consumer-oriented stakeholder involvement in home health care. *Little work has been done to consider quality indicators from the consumer perspective in home health care.*

Path from Quality Indicators to Action

- Aside from the approximately 200 Medicare-certified home health agencies that participated in the multi-state and New York State OBQI demonstration projects, anecdotal evidence suggests that there is *wide variation in the extent to which OBQI reports lead to vigorous efforts to implement quality improvement changes.* However, many agencies have recently received training from Quality Improvement Organizations (QIOs) contracted by CMS to help implement OBQI.

IMPLICATIONS AND RECOMMENDATIONS FOR HOME CARE POLICY, RESEARCH AND PRACTICE

Action-oriented implications and recommendations are organized according to the conceptual voyage described at the outset, beginning with the path from data to information, and ending with the path from information to quality indicators.

Path from Data to Information

1) Agencies should monitor and report to other stakeholders the accuracy of OASIS data by *testing for inter-rater reliability on a routine basis*. Furthermore, the home health care industry stakeholders should *develop a tool kit or resource inventory of strategies and approaches* for improving the reliability of data collection in the field.
2) Industry stakeholders should systematically examine the major conditions (e.g., heart disease, diabetes, cancer, skin ulcers, pulmonary disease, depression) and problems encountered in home health care (e.g. pain, dyspnea, physical function, medication management) and *develop an agenda or roster of additional data that could or should be collected to enhance disease management, quality of life and patient outcomes in the home care setting*.
3) Major modes of communication among professionals and paraprofessionals in home health care could be systematically examined to *develop a roster of clinical team interactions with a demonstrable link to improved performance and outcomes,* leading to an expanded scope of data about quality based on clinician communication patterns.
4) *Voices of consumers could be incorporated into an expanded scope of uniform data* about the process of receiving health care in the home setting.

Path from Information to Quality Indicators

1) Continuing efforts should be made to *clarify for all stakeholders the approaches, strengths, and limitations of risk adjustment techniques* used to convert information from OASIS data into outcome-based quality indicators.
2) Efforts could be made to *develop quality indicators that are grounded in published clinical practice guidelines* for specific medical conditions such as diabetes, strokes, and skin ulcers, and symptoms such as pain and dyspnea.
3) Stakeholders from the entire range of clinical disciplines representing home health care could convene to develop acceptable thresholds and ranges of communication timeliness, as well as consensus definitions of communication effectiveness, throughout episodes of care.

4) *Consumer-focused information could be converted into quality indicators based on consensus ranges or thresholds of acceptable responses to issues of home health care staff timeliness, dependability, and effectiveness in communicating disease management information to patients and families*. Stakeholders representing consumers as well as home health care clinicians could be included in groups convened to develop these consumer-focused quality indicators.

General Implications and Recommendations

As the public reporting system for home health care evolves (HHQI), growing anecdotal evidence suggests that agencies are concerned about the potential impact of having quality indicators misinterpreted once they are disseminated to the general public and to the media. *Innovative strategies implemented by pilot HHQI states to communicate with the public and media could be monitored for effectiveness, and a menu of effective strategies could be developed and refined by stakeholders as the HHQI prepares for national implementation.* In addition, because many stakeholders in the home health care quality arena are state-level organizations, *states should serve as laboratories for the development of best practices for implementing and refining the OBQI process*.