

## **Evaluation of the Quality Indicator Survey (QIS) Summary of the Final Draft Report**

*Note: The information in this document is taken either directly from or is paraphrased from "Evaluation of the Quality Indicator Survey (QIS): Final Report," Abt Associates Inc., December 2007. Chapter 8 of this report is written by Andrew M. Kramer, M.D., the Head of the Division of Health Care Policy and Research at the University of Colorado at Denver and Health Sciences Center. While not part of the Abt evaluation, Dr. Kramer was invited to contribute this chapter, which reflects his experiences with the QIS.*

*This is a summary of the draft evaluation and does not reflect any opinion that the American Health Care Association has regarding the Quality Indicator Survey.*

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In the fall of 2005, CMS launched a demonstration of the QIS, conducting surveys of record by trained state survey staff. Five states were selected to participate in the demonstration: California, Connecticut, Kansas, Louisiana, and Ohio. The evaluation of the QIS was conducted in two phases. Phase I of the evaluation, the formative evaluation, focused on ways to improve the QIS, particularly related to time and efficiency. The second, summative phase of the evaluation focused on how well the QIS achieved its primary objectives of improving the accuracy, consistency, and documentation of the nursing home survey process within existing survey resources. According to the study, "the results do not appear to be consistent with the expectation for improved targeting and efficiency for the two-staged QIS process." This statement is tempered, however, by several reminders in the document that the study had a small sample size, which makes it difficult to make generalizations from the study to the larger population.

The study focused on five questions:

1. Does the QIS lead to increased accuracy?
2. Does the QIS result in improved documentation of survey deficiencies?
3. How does the time required to complete the QIS compare to the time required for the current survey?
4. How does the QIS impact the number and types of deficiencies that are cited?
5. Does the QIS improve surveyor efficiency?

## Conclusions

- *Does the QIS lead to increased accuracy?* Based on the relationship between survey findings and a set of care indicators intended to measure the quality of care provided by nursing facilities, the researchers did not find evidence that the QIS was more accurate than the Standard survey. The findings suggest that more survey deficiencies with scope greater than isolated could have been cited for both QIS and Standard surveys. Furthermore, the researchers felt that there appears to be a great deal of surveyor discretion and judgment that influences the decision to cite.
- *Does the QIS result in improved documentation of survey deficiencies?* The study found no significant differences in documentation quality between the QIS and the Standard survey. Note, however, that “inter-rater reliability concerns limit the strength of this conclusion.”
- *How does the time required to complete the QIS compare to the time required for the current survey?* QIS took considerably longer to complete than Standard surveys in two of the five demonstration states; two states consumed about the same amount of time and one state’s time was open to different interpretations.
- *How does the QIS impact the number and types of deficiencies that are cited?* The results indicate that the QIS cites more deficiencies, at higher levels, and more in these usually under-cited areas.
- *Does the QIS improve surveyor efficiency?* The correlation between time and deficiencies was higher for QIS surveys than for Standard surveys. Ohio was the only state for which the QIS was associated with an increase in surveyor efficiency.

The study also made a number of recommendations for improving the QIS and focused on ways to improve the accuracy of the QIS:

- *Improve specificity and usability of investigative guidelines.* The care elements that are recommended for investigation in existing interpretive guidelines and Critical Element pathways should be modified so that they are consistent with the principles that guide reliable and accurate measurement.
- *Provide competency-based training for surveyors to improve consistency.* Survey staff should have training in the principles of reliable measurement and be able to use the investigative protocols to produce consistent and accurate quality conclusions.
- *Evaluate how well the QIS Stage I and unstaged protocols identify problem areas that should be investigated in Stage II.* If the QIS is accurately detecting areas for investigation, then quality measures for facilities that are

flagged for an investigation should be different and worse than the measures for facilities that are not flagged. These differences were not found and this study suggests that the question of whether Stage I accurately identifies areas in which there are potential quality problems needs further examination.

- *Increased structure in Stage II to make decision making more explicit in determining noncompliance, scope, and severity.* There is a great deal of structure for surveyors during Stage I of QIS. Stage II and some facility-level tasks of QIS become increasingly subjective. According to the study, the development of additional Critical Element pathways for care areas where these do not exist is of highest priority. Also important is to improve the integration of the Critical Element pathways into the Stage II investigation.

The final chapter (Chapter 8), written by Dr. Kramer, provides additional background about the initial development of QIS and discusses highlights of what has been learned during the early demonstration of QIS. Dr. Kramer reflects on the four QIS objectives identified more than a decade ago and what the demonstration has revealed:

1. Improve consistency and accuracy of quality of care and quality of life problem identification through a more structured process.
2. More comprehensively review regulatory areas within current survey resources.
3. Enhance documentation through greater automation to organize survey findings.
4. Target survey resources on facilities with the largest number of quality concerns.

Finally, Dr. Kramer provides recommendations for QIS moving forward.

### **Highlights: What We Have Learned**

1. It is feasible to implement this major change in the survey process in six states with highly variable traditional survey processes with respect to survey time and deficiency rates.
2. The QIS requires major changes in surveyor behavior to follow the more structured protocols and utilize the fully automated process. Over 75% of surveyors in the pilot states prefer QIS to the traditional process by three months of implementing QIS in their respective states.
3. Providers are increasingly receptive to QIS, despite higher deficiency rates, with state provider associations promoting use of QIS resources and QIS training as implementation becomes statewide.

4. The QIS is beginning to bridge the gap between regulation and quality improvement with providers using QIS forms to assess residents' quality concerns and the Critical Element pathways as quality management tools with notable success.
5. The most frequent term used to describe the QIS by both surveyors and providers is "objective," reflecting their support of a system that is less "subjective" than the traditional survey process.
6. The QIS is more resident centered with a much greater focus on resident and family interviews and resident observations, leading to more citations in regulatory areas such as quality of life, oral health, and highest practicable well being. These concerns are of great import to residents and were often overlooked in the Standard survey process.
7. The automation allows for an offsite audit approach that is being used by survey agency supervisors and ultimately federal surveyors to identify specific noncompliance issues among survey teams and individual surveyors.
8. All of the demonstration states are interested in statewide implementation, and 13 states applied to be new QIS states in response to the Centers for Medicare & Medicaid Services Request for Proposals.

## **Findings Summary**

- *Improve consistency and accuracy of quality of care and quality of life problem identification through a more structured process.*
  - Providers and surveyors have found the survey process more consistent.
  - The QIS includes substantially larger random samples of residents yielding more valid inferences about care provided to all residents and systems of care. Further, the admission sample targets unique care issues in the growing post-acute population that have previously been largely overlooked in the survey process.
  - The Stage II in-depth investigation and facility tasks, while less structured, use QIS protocols that are more prescriptive than any that have been provided to surveyors in the past.
  - The structure enables off-site analysis of the QIS survey data. This audit has been conducted in all six states and reported to agency supervisors. Supervisors have identified QIS surveyor inconsistencies and the need for remediation training in different aspects of survey.
  - Providers are beginning to use and promote the QIS structure as a tool for ongoing quality improvement. Providers have reported success in using QIS tools to assess and improve quality in response to noncompliance identified in surveys and findings from self-administered Stage I interviews.

- *More comprehensively review regulatory areas within current survey resources.*
  - The first stage of the QIS is a mandatory investigation of many more regulatory areas than are generally covered in the traditional survey based on 128 resident-centered quality of care and quality of life indicators.
  - A major change resulting from QIS is that in-depth investigations of residents in Stage II are triggered mostly from resident interviews and observations, and family interviews. Thus, the QIS results in far more resident-centered assessments where information is derived in large part from residents and families.
  - The current time estimates for the QIS when averaged across surveys generally represent greater amounts of time than will be required in a steady state because these time estimates were obtained during the early stages of demonstration implementation. Surveyors were undergoing extensive training, the process was still being substantially refined and streamlined, and considerable problems with the software occurred early on and there was not an adequate software support system to accommodate the demands of surveyors in multiple time zones entering facilities at all times.
  - Within the variability that exists in survey resources by state, the QIS provided a more comprehensive review with relatively comparable resources.
  
- *Enhance documentation through greater automation to organize survey findings.*
  - The proof of whether documentation has improved is that survey agencies report fewer informal dispute resolutions and less frequently overturned deficiencies in their QIS surveys relative to the traditional survey.
  
- *Target survey resources on facilities with the largest number of quality concerns.*
  - The QIS process is designed to expand or contract in Stage II based upon the findings in Stage I, which is completed by the end of the second day of the survey. Experience with QIS in the demonstration supports meeting this objective in that surveys have ranged in length from three days, when very few quality concerns were triggered at the conclusion of Stage I and only mandatory facility tasks needed to be completed, to nine days when substantial numbers of care areas were triggered for the second stage.
  - Greater variation exists in the number and types of citations in QIS. About 4% of QIS surveys had zero deficiencies and 25% had 15 or more deficiencies distributed across all states. Although the QIS has resulted in an average increase of about two deficiencies over the previous traditional survey, about 55% of facilities had more deficiencies under QIS, 35% had fewer, and 10% had about the same number.

## **Recommendations**

- 1. Continue with QIS expansion in the demonstration states and additional states because initial experience in the demonstration has demonstrated very promising changes to the survey process and provider behavior.*
- 2. Increased structure in Stage II and certain facility-level tasks can render decision making more explicit in determining noncompliance, scope, and severity.*
- 3. Reprogram the software in a Web-based production version, so that it can be updated more readily without all the problems of releases, installation, and data storage.*
- 4. Statewide implementation of QIS in the demonstration states and expansion of the QIS should be coupled with a rigorous ongoing monitoring and refinement process.*
- 5. Encourage communication, training, and software for providers so that they can use the QIS for quality management and improvement.*