



Using the CAHPS[®] In-Center Hemodialysis Survey to Improve Quality

Lessons Learned from a Demonstration Project

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Preface

In the spring of 2006, the Agency for Healthcare Research and Quality's CAHPS Consortium¹ embarked upon an initiative to examine the usefulness of the CAHPS In-Center Hemodialysis Survey for the purpose of improving the health care experiences of patients with end-stage renal disease (ESRD). This paper summarizes the lessons learned by the CAHPS grantees over the course of this initiative and provides a set of pertinent recommendations for dialysis facilities or centers, dialysis corporations, ESRD Networks, and the Centers for Medicare & Medicaid Services (CMS).

Background on the CAHPS In-Center Hemodialysis Survey

The CAHPS In-Center Hemodialysis Survey assesses the experiences of ESRD patients with in-center hemodialysis. The questionnaire is designed to collect information that can be analyzed and reported in a standardized way. Like other instruments in the CAHPS family of experience-of-care surveys, it represents a move beyond satisfaction scores, which are a function of expectations, to more accurate assessments based on patients' reports on their care. Also like other CAHPS instruments, this survey is based on extensive research and testing by the CAHPS Consortium to ensure its validity and its usability.

Contents of the Survey

The In-Center Hemodialysis Survey asks about domains of care for which patients are the best source of information, such as communication, professionalism of staff, and privacy. These domains also represent areas that have been found to be important to patients.

The survey consists of 58 core items that produce two different kinds of information:²

- (1) Reports by patients on their experiences with different aspects of care and
- (2) Ratings by patients of their experiences with the dialysis staff, their doctors, and their dialysis center. (These are scored on a 0-10 scale, where 0 is the "worst possible" and 10 is the "best possible.")

Questions that capture patients' reports on care are combined into composite measures that summarize the information contained in the individual questions. Each of these composite measures represents information that can be reported to providers for quality improvement (QI) purposes. The composite measures for the In-Center Hemodialysis Survey are as follows:

- Nephrologists' communication and caring;
- Quality of dialysis center care and operations; and
- Providing information to patients.

Development of the Survey

The impetus for the development of this survey was a request by the Centers for Medicare & Medicaid Services (CMS) in 2002 to create a CAHPS survey and reporting formats for ESRD patients who receive in-center hemodialysis at dialysis facilities. To help patients choose among facilities and to stimulate quality improvement among providers, CMS's ESRD program has successfully developed and publicly reported facility-specific clinical measures on CMS's Dialysis Facility Compare Web site. However, notably absent from the set of quality measures was one that addressed patients' experience of care. A

¹ Funded by AHRQ, the CAHPS Consortium consists of several public and private research organizations. The grantees are American Institutes for Research, RAND, and Harvard Medical School. AHRQ and CMS are the two primary public agencies involved in this program.

² The survey also includes a set of supplemental items that sponsors are welcome to use to customize their instruments.

survey that captures patients' perspectives on their care would provide a more complete picture of the quality of care for ESRD patients not available through other sources. Consumer testing of the Dialysis Facility Compare website revealed that patient satisfaction or patient opinions about the care given in dialysis facilities was the most frequently requested item by consumers for gauging the quality of care provided in a dialysis facility.³

CMS realized that, for a number of reasons, the development of such a survey for dialysis facilities might be significantly more challenging and less straightforward than for other facilities and populations. Chief among the agency's concerns was the proper balance between a survey aimed primarily at internal quality improvement and one that would focus on public reporting to consumers. Many dialysis facilities currently administer their own patient surveys for use in internal quality improvement activities, and CMS would like to encourage and strengthen such efforts to improve quality. However, most of the facility surveys are proprietary and have a wide variety of designs, so that resulting survey information cannot be used to compare facilities across the nation. As a result, the In-Center Hemodialysis Survey was designed to be used both for public reporting and internal quality improvement purposes by individual facilities and large dialysis organizations.

After a thorough development process, the completed survey was field tested in early 2005. The pilot survey was administered by mail and/or telephone to 1,454 beneficiaries who reported their experiences of care at 32 dialysis centers across the United States. At the same time, the grantees designed a quality improvement demonstration to test the use of the CAHPS survey data by dialysis facilities to improve their CAHPS performance.

Overview of This Document

Drawing from the grantees' process evaluations, this report to CMS documents the outcomes of this quality improvement demonstration project for the CAHPS In-Center Hemodialysis Survey.

- Chapter 1 describes the demonstration project itself: its purpose, its design, and its participants.
- Chapter 2 explains the interventions the facilities selected to address their specific problem areas.
- Chapter 3 explores the challenges and successes of the facilities as they worked their way through the quality improvement process. It also summarizes the lessons learned at each step.
- Finally, Chapter 4 offers recommendations to dialysis facilities and corporations, ESRD Networks, AHRQ, and CMS regarding the effective use of this CAHPS survey to improve patients' experiences of care.

The information in this report is intended primarily for CMS, other members of the CAHPS consortium, survey sponsors, dialysis facilities, Networks, and other stakeholders. Others may also find the information useful as they design and use their own consumer surveys and reports. The CAHPS grantees hope that their findings and recommendations will help the ESRD community to identify and implement successful interventions that improve patients' experiences with care.

³ Trisolini M, Roussel A, Schatell D, Harris S, Bandel K, Salib P, Cell J, Klicko K. (April 2004). "Final Report on Focus Groups, Triads & Interviews with Dialysis and Pre-ESRD Patients, Family Members and Professionals." RTI International. Prepared for CMS under contract #500-00-024.

Chapter 1: The Quality Improvement Demonstration Project

The demonstration project for the CAHPS In-Center Hemodialysis Survey was designed to examine the feasibility of using this instrument to define, implement, and evaluate a project to improve patients' experiences of care in dialysis centers. Specifically, the project had three major aims:

- Document the quality improvement strategies and interventions the Networks and facilities carried out with the In-Center Hemodialysis Survey.
- Obtain their feedback on issues regarding the CAHPS survey and reports.
- Learn from the experiences of the Networks and facilities in implementing new practices to improve their performance on specific aspects of the survey.

Participants and Their Roles

The project involved three different participants: seven dialysis facilities, four ESRD Networks, and the three CAHPS grantees.

The Dialysis Facilities. The seven dialysis centers that participated in the demonstration project were selected by the participating Networks (see below) from the 32 facilities involved in the pilot test for the survey. The facilities varied in several important ways, including size, region of the country, urban versus rural location, patient diversity with respect to race and ethnicity, ownership of the facility, and staff experience with quality improvement initiatives.

1.1. Participating Facilities: At a Glance					
	Size	Location	Race/Ethnicity	Ownership	Experience with QI Initiatives
Center A	Mid-size (35 beds)	Mid-sized city	Mostly White with some African American	Fresenius	Limited, focus on clinical indicators
Center B	Small (13 beds)	Mid-sized rural town	Mostly White with some African American	DaVita	Limited, focus on clinical indicators
Center C	Large (225 beds)	Mid-to large-sized urban town	Largely Hispanic	DaVita	Extensive
Center D	Large (150 beds)	Mid-sized rural town	Mixed	Fresenius	Limited
Center E	Mid-size (57)	Mid-sized rural town	Mostly White	Fresenius	Limited to moderate
Center F	Large (216 beds)	Mid-size city	Largely African American and Hispanic	Independent (hospital-based)	Moderate

1.1. Participating Facilities: At a Glance					
	Size	Location	Race/Ethnicity	Ownership	Experience with QI Initiatives
Center G	Large (130 beds)	Large inner city	Mixed: White, African American, and Hispanic	DaVita	Moderate

For more information about the seven facilities, see Appendix A.

All of the facilities worked with their Networks to design and implement appropriate QI interventions. However, each facility approached this effort in its own way. While a few had existing QI teams that had experience with clinical improvement issues, others formed a new team for this project, drawing staff from different areas.

The Networks: Four ESRD Networks participated in the project. Three of the Networks worked directly with the two facilities within their geographic areas. A fourth Network served in a coordinating role with the others; it also supported the work of one facility.

The Networks offered their expertise in quality improvement (QI) to assist and guide the facilities' implementation teams, which were responsible for the execution of the QI tasks. They also provided technical support and training to the facilities as needed. Technical support included help with developing a strategy, methods for implementing practice improvements, data analysis, and measuring and monitoring progress. For example, two of the Networks provided their facilities with training on professionalism. Another Network assisted a facility's QI team in conducting and analyzing patient surveys to identify specific behaviors that patients felt were representative of professional behaviors by the dialysis care team and positive communication by physicians.

The Grantees: Each CAHPS grantee team worked with three Networks and each of their two facilities to document the QI implementation activities and conduct process evaluations in order to learn from the facilities' experiences in implementing QI strategies based on the CAHPS survey. The grantees did not provide technical assistance, except to a very limited extent during the site visits. They also did not evaluate the efforts of the facility affiliated with the coordinating Network.

One grantee team, the American Institutes for Research (AIR), worked with dialysis center staff who were not part of the QI intervention to obtain input on the design of the initial report on the CAHPS survey results. The AIR team also conducted the CAHPS survey data analysis and prepared the reports for the seven participating dialysis centers. Each of the grantees, together with the Network, met with their dialysis centers to review the survey results. Together with the Networks, the grantees met with the centers again at the end of the project to discuss the results of the second fielding of the CAHPS survey.

Design of the Demonstration Project

The demonstration project involved several stages:

1. Identification of performance problems
 - Analysis of the results of the first CAHPS In-Center Hemodialysis Survey
 - Design and distribution of a report to present the results of the survey to dialysis center staff

- Analysis of survey results by center staff to identify and refine potential areas for improvement
2. Development of potential strategies or solutions to the problems identified
 3. Implementation of those strategies
 4. Evaluation of the results using the CAHPS survey

The final step, which is ongoing, is to monitor and maintain progress in addressing performance issues.

The CAHPS grantees, AHRQ, and CMS defined a common framework for implementing the project, evaluating the process, and examining preliminary results of the QI demonstration project. The framework included two site visits by the grantees to each site and a common set of interview questions, some intended for dialysis center staff during the site visits and others for Network staff. Interviews were conducted at the beginning of or prior to the implementation of the QI project and during the implementation process. All data collection efforts (including interview protocols and consent forms) were reviewed and approved by the individual grantees' Institutional Review Boards.

One key element of this framework was a “kick-off” meeting held in August 2005, after the facilities and Networks had had an opportunity to review their survey results. Participants in this meeting included the grantees involved in the project, Network staff, representatives of all seven dialysis centers, and project officers from AHRQ and CMS. The purpose of the meeting was to provide dialysis center staff with the knowledge and resources that would help them to launch and implement an appropriate quality improvement project; training topics including QI methods and patient communication techniques. By the end of the meeting, each facility had begun work with their assigned Network and grantee to define an implementation plan based on their survey results. This work toward their defined quality improvement goals continued for approximately 12 months. The facilities and Network working with the Harvard team also participated in an in-person meeting in Massachusetts.

1.2. Project Timeline	
January-July 2005:	AIR developed provider-level reports with input from dialysis facilities as well as participating Networks and CMS.
July 2005:	Facilities received their survey results.
July 2005:	Facilities, Networks, and CAHPS grantees participated in calls to review the CAHPS survey results and start identifying and selecting performance issues.
August 3-4, 2005:	All facilities, Networks, and CAHPS grantees met in Baltimore, Maryland, for a kickoff meeting and began developing action plans.
August 2005 to September 2005:	Facilities implemented action plans they had developed. CAHPS grantees conducted process evaluations that included two meetings with each facility.
August 2006:	RAND administered follow-up survey.
September 2006:	Facilities and Networks received survey results.
September 28, 2006:	All facilities, Networks, and CAHPS grantees participated in a second in-person meeting in Baltimore, MD, to share experiences and lessons learned.

Evaluation of Impact

This project aimed to assess the impact of the CAHPS In-Center Hemodialysis Survey in two ways. First, the CAHPS grantees conducted a process evaluation. During the course of the project, each of the three grantees collected information on the QI process and preliminary results of their two assigned facilities through site visits to the dialysis centers, conference calls, and interviews with Network staff. Through these meetings, which were conducted in the Fall of 2005 and the Winter or Spring of 2006, the grantees gathered the perspectives of dialysis center staff, Network staff, and sometimes patients regarding their experiences with the QI initiatives. The grantees documented the implementation of practice changes, identified tools needed to help implement those changes, and assessed the successes and challenges involved in carrying out the QI activities.

Second, in the Summer of 2006, the grantees fielded a follow-up CAHPS In-Center Hemodialysis Survey to identify any changes in the performance of the participating facilities that could be attributed to the facilities' QI initiatives. Due to funding limitations, the process for fielding the post-intervention survey was more limited than it had been for the pre-intervention survey. In contrast to the first survey, there were no reminders or telephone follow-up, and the survey was in the field for a relatively short period of five weeks; this resulted in a response rate of 32 percent, in contrast to 46 percent for the earlier baseline survey. Some of the facilities did not obtain enough responses to have sufficient power to detect statistically significant differences between the baseline and the follow-up surveys. While the survey results did show some positive improvements in performance for some facilities at both the item and composite level, there was insufficient data in most cases to allow for any strong conclusions.

Based on their experience with the second report, the grantees learned some important lessons about how to provide better information to support organizations using CAHPS surveys for quality improvement. The reports for the baseline results, which had been designed and tested with users, worked well. However, there was no funding for developing and testing the reports to present the comparison between the baseline and follow-up CAHPS survey results. To improve these comparison reports, the grantees identified a need to rethink how to report statistical significance and changes in performance over time so that the information is more readily understandable and usable by facility staff for QI purposes. Also, while the CAHPS survey may have been more useful had the response rate been higher, this experience drove home the need to supplement the CAHPS instrument with other small-scale data collection efforts that are tailored to assess the potential effects of specific interventions designed to improve quality.

The process evaluation enabled the grantees to gather results of this project that are not necessarily reflected in the data generated by the second survey. Their findings suggest that the use of CAHPS survey results played an important role in building awareness of patients' experiences, identifying areas of improvement opportunities, and helping the facilities set targets for improvement. The grantees found that, for the most part, participating facilities experienced positive organizational changes, such as enhanced teamwork and stronger staff capabilities with respect to using information to set and meet improvement goals. Although facility staff had different levels of experience with QI in general, and QI based on patient experiences in particular, all developed a better understanding of QI concepts and processes throughout the organization. Based on these observations, the CAHPS grantees concluded that the In-Center Hemodialysis Survey has promise as a tool for motivating and facilitating improvements in patient experience in dialysis facilities.

Chapter 2: Strategies for Improving Performance on the CAHPS In-Center Hemodialysis Survey Domains

Each facility selected areas to focus on based on the results of the CAHPS survey as well as other related information they had from previous surveys or other means. There was little overlap in the specific areas that were chosen; however, staff behavior appeared to be a common focus.

2.1. Survey Topics Selected by Participating Facilities <i>(Item numbers reflect numbering in the current version of the survey.)</i>			
Dialysis Center	Domains in the In-Center Hemodialysis Survey		
	Quality of dialysis center care and operations	Nephrologists' communication and caring	Providing information to patients
Center A	Q14. Patients felt that dialysis center staff cared about patients as people		
Center B	Q43. Patients were satisfied with how staff handled problems		
Center C	S3. Staff covered patients or used curtain to protect privacy ⁴ Q33. Patients were connected to dialysis machine within 15 minutes of scheduled time		
Center D	Q25. Staff behaved in a professional manner	Q4. Nephrologist's explanations were easy to understand Q5 Nephrologist showed respect for patient	
Center E			Q36, 39, 40. Staff communicated with patients regarding modality options; Q28, 29. Staff explained patients' rights.
Center F	Q11 Staff explained things in a way that was easily understood Q15 Staff made patients		Q38. Doctors or staff explained why patients not eligible for kidney transplant;

⁴ This item was included in the core questionnaire used for the field test (as Q19); after the field test, it was moved into the supplemental set, which means it is available for use but not required.

2.1. Survey Topics Selected by Participating Facilities <i>(Item numbers reflect numbering in the current version of the survey.)</i>			
Dialysis Center	Domains in the In-Center Hemodialysis Survey		
	Quality of dialysis center care and operations	Nephrologists' communication and caring	Providing information to patients
	as comfortable as possible		Q39. Doctors or staff talked about peritoneal dialysis.
Center G	Q10. Staff listened carefully to patients Q11 Staff explained things in a way that was easily understood Q12 Staff showed respect for what patients had to say		

This chapter reviews the many of the interventions that each facility chose to address the areas they had identified as performance weaknesses.

Domain: Quality of Dialysis Center Care and Operations

Q10. Staff listened carefully to patients

Q11. Staff explained things in a way that was easily understood

Q12. Staff showed respect for what patients had to say

Center G chose to focus on communication and perception of caring items based on its results from the baseline CAHPS In-Center Hemodialysis Survey. QI leaders noted that they were already aware that these were areas that they needed to work on, but that it was helpful to have the CAHPS survey as a way to show doctors and staff that these were real concerns of their patients.

To address the issues raised by the survey, this center embarked on several initiatives related to improving customer service, including the following:

- **Staff training.** The facility began by providing training to staff to help them see how they were dealing with patients and how they could improve on their professionalism.
- **Scripted education.** Facility staff were provided with scripted information they could use to educate patients and communicate with them in a consistent manner about common concerns, such as fluid needs and foot checks.
- **Formal complaint process.** The facility instituted a formal complaint process so that patients felt assured that their complaints would be heard and their needs would be met.
- **Patient representative council.** The council was intended to involve patients and cultivate continued input from them for ongoing change. However, because of transportation issues, meetings

were difficult to implement. A suggestion by staff and physicians to meet between shifts has met with some success.

In addition, Center G made several changes to improve communications among staff, such as monthly staff and nurse meetings and the development of an RN desk with centrally-maintained information.

To assess progress, Center G conducted a site-level survey midway through the project; this survey indicated that the center's activities were having an impact on performance in the targeted areas. The follow-up CAHPS survey confirmed those results, showing improvement in responses to the three selected survey items.

[Note: Center F also planned and implemented several activities designed to address question 11 (Staff explained things in a way that was easily understood); however, because those activities were intertwined with initiatives to improve how the center provided information to patients, they are discussed in the context of that domain.]

Q14. Patients felt that dialysis center staff cared about patients as people

Given the results of the CAHPS In-Center Hemodialysis Survey and another LDO survey, Center A focused on improving the area related to "How often patients felt that dialysis center staff cared about patients as people." Based on the CAHPS survey data, the results of an internal patient survey, and staff meetings to discuss the findings and potential solutions, Center A defined the following quality improvement activities:

- **Staff to call patients by name.** When calling patients in for dialysis, center staff were to address patients by name, rather than calling them "you" or the like. This idea was suggested by patients.
- **Staff to acknowledge patients in passing.** When center staff walked by patients on the machines or in the waiting rooms, staff were to say "hello" or otherwise acknowledge the patients.
- **Reconfigured schedule.** The center developed a new patient schedule that allowed more flexibility and time in between shifts. It was also designed to reduce the number of patients who are "called in early" on a somewhat arbitrary basis; this was perceived as unfair by other patients who were not called in early and was mentioned in their responses to the questionnaire. By the second site visit, the concept of "rescheduling" had modified from allowing more time between shifts to providing additional time slots, thus allowing patients to choose their dialysis time as much as feasible.
- **"All hands on deck" policy.** In order to facilitate smoother patient shift changes, the center implemented the "all hands on deck" program, which was suggested by one of the dialysis or patient care technicians at the staff meeting. If a shift change was especially hectic, the lead on the floor would page "All hands on deck," and all available staff would drop their less immediate activities and go to the floor to help out.
- **Monthly staff meetings and in-services training.** Trainings addressed professionalism, sensitivity, and decreasing dialysis patient-provider conflict.
- **Informing family members and patients about delays.** As soon as a delay was expected, dialysis center staff would inform patients and families about what to expect as a result.
- **Conducting "fun" activities with patients while they were on dialysis.** Center staff, particularly two social workers, organized several activities that both patients and staff could participate in while patients were on the machines. These included bingo, holiday-oriented activities, and knowledge quizzes for patients about dialysis and dialysis preparation. This knowledge was intended to help patients have a better experience during dialysis treatment.

Center A implemented all of the activities outlined above around the same time. Additionally, to monitor progress, Center A conducted a short survey at different points in time to assess whether staff addressed

patients by name, whether staff treated them with respect, and whether the patients were put on and off the machine in a timely manner. Two of these items had similar questions in the CAHPS survey. The vast majority of patients responded positively to the three questions.

When the CAHPS survey was fielded the second time, 68 of 145 patients responded, for a response rate of 47 percent. However, the results showed no statistically significant difference in the center's 2005 and 2006 CAHPS scores for this item. Center A noted that the center received fewer patient complaints compared to before they implemented the QI activities. During the site visits, many staff members reported several positive outcomes of the changes:

- Their jobs were easier or more enjoyable.
- Relationships among staff had improved. They had a greater sense of teamwork and, in some cases, higher morale. For example, acknowledging patients in passing transferred over to acknowledging other staff; conducting “fun” activities with patients gave staff an opportunity to interact with patients and other staff in a context other than clinical care.
- The overall atmosphere at the center was more calm and pleasant for both patients and staff.

Patients interviewed during the site visit also reported a greater sense of respect from staff.

The schedule reconfiguration and the “all hands on deck” policy allowed more time between shifts for patients to be placed on or taken off the machines, decreased patient reports of having to wait, and increased opportunity for more meaningful communication between staff and patients. Finally, monthly staff meetings and trainings on professionalism, sensitivity, and patient-provider conflict improved the staff's communication skills with each other and with patients.

Q25. Staff behaved in a professional manner

Initially, the leadership team at Center D was unsure which behaviors or actions lay behind the facility's low scores on staff professionalism. Nevertheless, they agreed that the survey results accurately reflected areas needing improvement and that these areas were important to address. The implementation team felt that the attitudes of staff would be the most difficult hurdle to overcome in improving staff professionalism. Some staff appeared to take abusive patient behaviors personally and became angry when treated badly. In particular, the staff seemed to be internalizing patient failures to manage their conditions. The team realized that the staff needed help to learn how to de-personalize such dynamics with the patients and to enable them to better manage abusive patient behavior. Specifically, they needed to appreciate that patients did not have all the rights; strict behavior limits needed to be set and enforced. However, because the staff were young, they did not yet have the experience to know how to do this or to respond appropriately to patients. The team discussed the need to remind staff of their roles as written in their job descriptions.

Another aspect of the staff's work concerns the processing of patient complaints. The team recognized the importance of following through when responding to valid complaints, and being able to tell the difference between valid and inappropriate complaints. In addition, complaints are occasionally made by staff about patient behaviors and these also need to be addressed responsively.

Working with the Network, the team developed the following plan to collect additional data and take action:

- **Patient surveys to better define professional behavior.** The center worked with the Network staff in the development, planning, tallying, and analysis of patient surveys designed to identify specific actions and behaviors their facility patients felt were representative of the dialysis care team's professional behaviors.

- **Staff training.** Over a three-month period, staff received training on the skills necessary for working with patients, including role playing to give them practice in managing patient concerns and complaints, abusive patients, and non-compliant patients. The QI leadership also held staff meetings after the training modules to follow up with the staff on their usefulness and to emphasize model behaviors. Specifically, Center D did the following:
 - Invited the Network's Quality Improvement Department to present two four-hour workshops on Professionalism and Boundaries, with all staff required to attend one of the workshops.
 - Trained the staff using the Decreasing Dialysis Patient-Provider Conflict (DPC) training videos from the Network. This self-administered video series addresses many staff issues of concern. Staff attended training sessions one-day a week for ten weeks, starting in December until February.
 - Trained the staff on the "Heart → Head → Heart" method of interacting with patients and families. This method was taught at the August kickoff meeting by Wendy Leebov, a specialist in customer-driven health care. It is based on the idea that there should be two sides to every service interaction in order to make it complete and satisfying for the customer. One side is the Heart to Heart side, the human component, which is personal or about emotions. The other side is the Head-to-Head side, the business component, which focuses on information and tasks. This communication model enables staff to strengthen interactions and improve customer satisfaction by addressing both the task at hand as well as the people receiving care and service.
 - Used the parent company's videotape on customer service in staff training workshops.
- **Walk-throughs.** The center conducted "walk throughs," i.e., a simulated dialysis treatment, to heighten staff awareness and empathy towards patients. To simulate the experience, staff had to wait outside the building in the early morning or wait in the waiting room, sign off if they wished to go to the bathroom, sit in a chair for four hours, have their vitals monitored including their weight, and sit with one arm taped lightly to a chair.
- **Scripting of interactions.** The center developed scripts for staff to use during routine interactions with patients, as well as in difficult situations with unhappy, abusive, or non-compliant patients. In the end, this was not completed because the social worker that was to head this activity left the facility.

The main challenge cited by the QI leadership was staff changes (such as nurses going away on maternity leave or staff and trainer turnover) and the logistics of the training schedule. Even though the staff trainings were self-administered, it was still necessary to have another staff member cover for the shift of the staff member doing the training because of overtime issues. Moreover, many staff were also in school and were therefore not able to come in at additional times outside of their scheduled time.

The second CAHPS survey did not detect a statistically significant change in the Center performance on this measure. However, the center was pleased to see an improvement indicated by a shift in responses from "sometimes/never" to "usually." Also, as a result of these various trainings and the focus on improving staff interactions with patients, attitudes and behaviors of the staff improved. According to the in-house staff and patient surveys, the patients felt more cared about and respected by the staff and the staff were more empathetic and caring toward the patients. The "walk throughs" at the beginning of the intervention raised awareness by the staff. The trainings helped the staff find appropriate manners of dealing with tough situations that occur within dialysis facilities. As a result, the center has incorporated the interactive training sessions and the heart to head communication strategies into the new staff training and orientation.

Q33. Patients were connected to a dialysis machine within 15 minutes of scheduled time

To better understand this problem, it is necessary to explain the context in which it occurred at Center C. Patients often arrive early for dialysis, and whenever possible, the unit had been placing them on the machines *before* their official start times. As patients became accustomed to this schedule, they felt they had a right to earlier start times. The impact of this erosion of official start times included feelings of confusion and frustration by patients when they could not start early, as well as a certain amount of stress on staff members as they moved patients off the machines and prepared them for the next patients.

To develop and meet clear expectations among patients and staff, Center C undertook the following actions, refining them overtime by testing the intervention on a small scale.

- **Review of flow sheets** to assess the timeliness of dialysis starts;
- **Training of technicians** on scripting to be used with the patients when explaining their start times;
- **Interventions with a subgroup of patients to enforce the correct start times** by giving each patient a card with their name, days of the week, start time, end time, and the length of dialysis;
- **Cards for staff to document each patient's put-on time;**
- **Verification** a few weeks later to test whether patients knew their official start time; and
- **Purchase of atomic clocks** so all the center's clocks displayed the same time.

The implementation of these changes met with several challenges. The biggest barrier to improvements was time constraints due to staff workload, which has since been compounded by the implementation of the new Medicare Part D for prescription drug coverage. Staff were devoting a tremendous amount of time to working with patients to choose drug plans.

Another challenge was the need to reinforce with the staff the importance of connecting patients at their official start times and to train the staff on how to respond to the various reasons why patients wanted to start earlier than their scheduled time. In addition, the intervention of reinforcing start times with each patient took time. Technical staff would read a script to a patient and hand the patient a card that indicated their days for dialysis, start time, end time, and length of dialysis. It was challenging for staff members to manage the time it took to implement the intervention on top of their regular job responsibilities without rushing the process. Carrying out two simultaneous QI projects (the other project focused on patient privacy) put additional pressure on staff, but the QI team felt it was vital to implement both at the same time. Resources were not an issue because neither intervention was cost-intensive.

The staff reported the following positive effects from enforcing dialysis start times:

- A reduction in stress among staff, particularly technicians and nurses;
- A more relaxed attitude from all staff towards their patients;
- A greater ability to talk to patients during their dialysis;
- More preparation time;
- Increased staff attention to handling the details between patients; and
- Less chaos in the facility.

Based on the data collected during the rapid cycle improvement process, Center C also found an improvement in starting patients on dialysis at their official start times. However, the improvement was greater for the Monday-Wednesday-Friday patient group than for the Tuesday-Thursday-Saturday group. The QI team is investigating why the change in performance was not as large for the latter group.

The second CAHPS report indicated that the average score for this question increased from 67.4 to 72.6, which was not statistically significant. The percent responding “always” increased from 33 percent to 40 percent, and the percent responding “usually” increased from 38 percent to 42 percent.

Center C encountered a number of unexpected issues during implementation, which led to some modifications to their original strategies. But by the end of the grantees’ second site visit, they were planning to expand the intervention actions for “timely start” to apply to the entire facility.

Q43. Patients were satisfied with how staff handled problems

Based on the results of the first CAHPS survey, Center B decided to focus on how staff handled complaints. At the kick-off meeting, they identified the following potential QI activities:

- Reinstating the family advisory group;
- Conducting a dialysis walk-through;
- Conducting in-service customer service training; and
- Training patients and staff about drops in blood pressure.

However, the center underwent a change of ownership during the time of the project and had a related shift in priorities. The original activities planned as part of the CAHPS project were replaced by corporate activities related to the transition. The new corporation conducted many team-building and quality improvement activities related to the new ownership, including financial incentives for staff who reached benchmarks set forth by the LDO, access to web-based postings of best practices, community education about kidneys and dialysis, and having patients and their families advocate for related legislation.

Although Center B did not implement a QI project based on the CAHPS survey results, as part of the transition in ownership to a new LDO, staff participated in a series of activities that could improve patient experience of care directly or indirectly:

- **Team-building training for staff.** This training included various teambuilding exercises and focused on improving processes and interactions among staff and adopting a new vocabulary to create a more cohesive team environment. This included training staff to have a team approach to care for patients.
- **Various types of staff meetings:**
 - Weekly Home Room Meetings – The center holds an unstructured weekly meeting with all staff to discuss work aspects, update others on work implemented, and brainstorm on various aspects.
 - Monthly quality improvement meetings – The meetings have two parts, one to discuss specific patient care plans and issues, and another to discuss the LDO’s quality indicators.
 - Impromptu meetings – It is the LDO’s policy that whenever two or more employees are with a manager, it becomes a meeting where employees can ask the manager questions.
- **Fun activities for patients and staff.** These include holiday-related events, such as providing Easter baskets at Easter; “wacky Wednesdays” in which staff dress up in costumes on the first Wednesday of the month; “Pie in the Sky”, monthly prize drawings, and Bingo.
- **Creative activities to promote familiarity between staff and patients.** All dialysis centers in the LDO competed to create a bulletin board for patients and receive a prize. Center B won the LDO prize for their submission—a board based on a Monopoly® game. Patients and staff were “properties,” and shared personal information (such as pictures of their grandchildren) on their “property cards.” As part of the project, staff also asked one of the patients, formerly a news reporter, to write an article about the experience of being a dialysis patient. This article was published in the local paper.

- **Center volunteers.** Two volunteers work on non-clinical activities on the floor such as talking with patients, and getting them blankets.

At Center B, 9 out of 28 patients responded to the second CAHPS In-Center Hemodialysis Survey, for a response rate of 32%. None of the respondents reported that they had a problem, therefore no one responded to question 51 on how well staff handled complaints. Similarly, there were few or no statistically significant improvements in the rest of the report. However, there were positive results in several other similar areas noted in the 2006 CAHPS report, which led Center B to perceive that progress was made. For example, Center B was the top facility for many of the items, including two items related to managing problems: (Question 27) Staff responded to problems as soon as patients wanted, and (Question 28) Staff were able to manage problems during dialysis.

Dialysis center staff participating in the project noted that team building exercises and “Home Room” weekly meetings established under the new corporation have led to staff being more patient-friendly, better staff communication, staff being open to new ideas, and an increased effort by staff to be more positive and receptive. The fun activities lifted the spirits of both patients and staff, making it a friendlier and more welcoming place to obtain dialysis care.

S3. Staff covered patients or used curtain to protect privacy⁵

To address survey results indicating problems with patient privacy, the leadership team at Center C focused on **educating patients on privacy, particularly the use and availability of screens**. This tactic arose from the staff’s investigation of what specific issues lay behind the patients’ responses to the patient privacy question. The center conducted focus groups with patients to gather in-depth knowledge of the patient’s meaning and need for privacy as well as a mechanism to uncover patient issues with their care. They also conducted pre- and post- surveys with patients on an ongoing basis to drill deeper into the issues of patient privacy.

The interventions for this initiative evolved as staff interacted with patients and got their reactions on privacy concerns. The focus groups helped the staff gain insights from patients and identify patient privacy needs that staff had not been aware of. For example, staff learned at the focus groups that patients felt that their privacy was not being protected when they were sick or emotional or when they were exposed to another patient vomiting or having a really tough emotional day. Staff had been aware of the need to cover up exposed body parts or catheters, but had not previously considered those other issues that patients raised.

Grantee Team Addresses Skepticism, Confirms Credibility of Survey Data

The leadership team at Center C was surprised by their “patient privacy” scores on the In-Center Hemodialysis Survey. Privacy had not been identified as an issue at their facility using the Spanish version of the survey could have misinterpreted the privacy questions. To address this concern, the grantee team provided the facility with the answers to relevant survey questions broken down into English and Spanish versions. The results were consistent, confirming for the leadership team that the CAHPS survey results accurately portrayed patients’ experiences.

As a result of this research with patients, the team decided to develop patient education on privacy using flash cards with pictures of the privacy screens. The leadership team then refined the curriculum and process using four small-scale tests with the rapid-cycle-improvement method. Information gathered directly from patients helped to shape the intervention. For example, when patients were asked if they would like a screen to allow them more privacy, many did not understand what was meant by a screen. Ultimately, staff used a picture of a privacy screen and a script for the technicians. They instructed

⁵ This item was included in the core questionnaire used for the field test (as Q19); after the field test, it was moved into the supplemental set, which means it is available for use but not required as part of the standardized survey.

technicians to show each patient a picture of the screen and ask if he/she wished to use it. They also bought another screen so that screens would be available if patients requested them.

The biggest challenge to implementing these interventions was providing consistent training to staff. These actions were scheduled to be carried out for a week in one treatment bay before being rolled out across the other bays in the unit, but the staff were not briefed together. This may have led to variations in how the tasks were actually performed within the first bay.

After completing the pilot intervention in the one dialysis bay, staff believed those patients had gained a good understanding of their rights to screens and more awareness of the overall use of screens. Instead of believing a screen was merely for cardiac arrests or an emergency, the patients realized they could ask for one when dealing with emotional or physical issues, such as vomiting, and other sensitive situations. However, few patients indicated they actually wanted more privacy.

Center A went through about four rounds of the rapid-cycle-improvement (RCI) method to complete patient education on patient privacy using flash cards with the script and pictures of the screens as well as a refined curriculum and process. With their re-survey of patients using an in-house survey that also contained the targeted CAHPS questions, the team found improvements in their responses to the two-part question on the use of privacy screens. Specifically, they saw an increase in the average score from 37.4 to 45.3 and a shift in the percentage of respondents who said “always” rather than “usually;” these differences are not statistically significant, but they are directionally consistent with the results of an in-house survey conducted in May 2006. Center C concluded that although privacy is not an overriding issue at their facility, the intervention had been useful to ensure patient privacy concerns were addressed and to sensitize staff to the issue. To keep the patients up-to-date on privacy issues, the facility plans to conduct the patient education within the facility on a semi-yearly basis.

Domain: Providing Information to Patients

Q28, 29. Staff explained patients’ rights.

Q38. Doctors or staff explained why patients not eligible for kidney transplant;

Q36, 39, 40. Providers communicate to patients about alternative modalities.

Based on the results on the first survey, Center E decided to take steps to educate patients about their rights and their treatment options. Center F also addressed responses to the questions about modality. Both centers began with staff education.

At Center E, the goal was to improve staff communication skills and improve staff morale and teamwork. The leadership also hoped to foster better communication with the patients as the staff shared their knowledge. To that end, the center staff took turns presenting on educational topics to their fellow staff. The presentations included normal kidney function, the history of dialysis, and fluid overload. The staff has been enthusiastic and creative, producing their own props and conducting thorough research in order to communicate their subject matter. Presentations were then posted in the lobby for patients to review.

At Center F, the education committee and the social workers in the dialysis clinic were very involved in assisting the staff in improving their communication skills. They picked different topics each month to present, such as vascular access, creating a teaching tool, and integrated documentation. They also instituted month-long patient education series on various topic, using literature, displays, and interactive education methods. Mentors were assigned to be role models to assist staff in patient education. In addition, a comprehensive problem list was created to assist the staff in engaging patients in conversation.

Center F also designated a social worker to be a liaison to the transplant program in order to facilitate communication in both directions.

Both centers also activated Patient Advisory Committees (PAC). At Center F, the Patient Advisory Committee has met several times to discuss open communication and overcoming barriers to clear communication. However, the PAC was not a success for Center F, which found that patients did not want to have to spend more time at the facility given how often they are already there.

Center E took additional steps to improve communication with patients:

- They started a newsletter for patients to communicate any planned activities with dates for the PAC meetings as well as educational topics.
- Nursing staff developed patient education posters reviewing patient modality options for the treatment of ESRD. Patient responded positively to that form of communication.
- A specific nurse educator was assigned to spend six hours each week in the clinic for patient and staff education.
- The Network Patient Services Manager volunteered to send recently obtained educational material to assist in education about vascular access. Many patients pick up booklets in the waiting room, so this helps them to bring questions to the staff for clarification.
- Staff conducted a one-on-one review of patients' rights and responsibilities, which they plan to continue to do annually.

Center E had mixed results from its interventions. The second CAHPS survey indicated an improvement in responses to the questions about modality options, but not in the question about patient rights; however, given a low response rate, neither is statistically significant.

Center F, which also had a low response rate for the second CAHPS survey, was not able to detect changes in performance. The facility reports that its patient education effort was successful; an internal patient survey found that nearly half of respondents benefited from the program.

Domain: Nephrologists' Communication and Caring (Questions 3-7)

Q4. Nephrologist's explanations were easy to understand.

Q5. Nephrologist showed respect for patient.

Patients' experiences with their nephrologists was a focus for Center D. As with staff professionalism, the leadership team of Center D agreed that this was an area in need of improvement, but were unsure which specific behaviors or actions lay behind the low scores. The facility leadership moved forward to work collaboratively with the medical director to pursue the issue.

At Center D, the physicians visit their patients frequently—sometimes more than once a week—but the actual contact times are quite short. Because the visits go by quickly, the doctors and nurse manager thought that this might be a source of the negative patient perceptions regarding physician communication. Based on the medical director's suggestions, the leadership team decided to undertake the following actions:

- **Fewer visits, more time.** The nephrologists reduce the frequency of the physician rounds at the center, while spending more time with patients as they make their rounds on a given day during the week
- **Doctor Talk cards.** The center staff distribute "Doctor Talk" cards to all patients and keep a stack of the cards at the nurse's stations. When passing out the cards, staff used a script to explain the cards

and their purpose to the patients. Patients can use the cards to write down questions or concerns they want to raise with the doctor on their next visit or extended hours. If there was a Doctor Talk card from the patient, it was flagged on his/her chart.

Despite the efforts by the QI team, the initiative in improve physician communication stalled completely. Even though the two physicians had initially agreed to change their rounds to weekly rounds, neither would alter their rounding patterns, even after the medical director paved the way with letters to the patients. In addition, very few patients utilized the Doctor Talk cards, which led the physicians to question the entire process of change. Several months of trying to persuade the physicians to participate in the QI process failed to gain physician buy-in. In the end, there was no leverage for changing the doctor's behavior or increasing their involvement – neither publicly reported data based on a doctor's performance nor financial incentives.

Chapter 3: The Improvement Process: Challenges and Lessons Learned

As noted in the description of this demonstration project, there are four major stages in an initiative to improve patients' experiences with care:

1. Identify areas where performance could be improved
 - Analyze results CAHPS In-Center Hemodialysis Survey
 - Collect and analyze additional data, often qualitative, to drill down to the root cause of the problem
2. Identify and select strategies to address the problem
3. Implement those strategies
4. Maintain momentum

This chapter discusses the challenges that the facilities faced as they worked their way through these stages of the QI process, as well as the factors that enabled them to move forward and the lessons learned along the way.

Stage 1: Identifying Improvement Opportunities

Most of the facilities focused on two tasks to identify areas in need of improvement:

- Review and analysis of the CAHPS survey results – internally as well as with the grantees and Networks.
- Collection and review of additional data from patients on targeted areas.

Because this was a demonstration project, the facilities also had the opportunity to examine and discuss their results in a collaborative setting with the grantees and Networks during the kickoff meeting. This meeting was unique to the CAHPS project, but a similar program could be replicated by the Networks or LDOs.

Using the information they had assessed, each of the facilities then selected one or more areas for potential improvement and defined preliminary strategies that could improve their facility's performance in those areas on the next CAHPS survey.

Key Steps

1. Understanding the results of the CAHPS survey

The participating facilities received their survey results in the form of a report produced by AIR's CAHPS quality improvement team. With support from their corresponding Networks and grantee partners, dialysis center providers used the reports to learn about their individual survey results and as a resource for defining potential areas for improvement. After the initial report was sent, AIR produced documents that showed which items were driving performance on each of the three summary measures and the overall ratings for nephrologists, staff, and the dialysis center.

Facilities Satisfied with Reports

Through the process evaluation, the CAHPS grantees found that the facility teams were well-served by the reports they received with the survey results. Facility teams found it relatively easy to use and

2. Gathering and assessing other, often more detailed information

While the CAHPS In-Center Hemodialysis reveals a great deal of information about a facility's performance, it is often necessary for facilities to gather additional information to ensure that they have

picked an appropriately important issue and to drill down into the specific problem they are facing. This step is critical to identifying solutions that are likely to have an impact on performance.

For example, Center A chose to focus on how often dialysis center staff cared about patients as people (Question 15). The CAHPS survey results had confirmed some of the findings from an LDO-sponsored patient satisfaction survey for which they had received results a few weeks prior to the start of the CAHPS project. Additionally, this center administered a short questionnaire that asked patients to indicate what would make them feel that they were treated like a person.

Other facilities pursued additional and more specific information as well:

- Center D collected additional information to better understand what patients mean by “professional”. They discovered that patients felt that “professional” behavior included “showing respect” and “showing that the staff care about me as a person.” First, the QI team administered a survey with a mix of multiple choice and open-ended questions for a two-week period, covering each shift and roughly 35 patients. The returned surveys (representing about five or six patients per shift) were helpful in defining the specific behaviors patients were looking for from both doctors and staff, such as eye contact, helping patients with their belongings, taking the time to answer questions, inquiring about their comfort, and simply listening.
- Center C conducted a pre-survey with its patients concerning issues involving timely starts and patient privacy. Staff noted that they were not surprised by their scores on “Timely start of dialysis,” which had been an issue for the past year or two, but had no previous awareness that patient privacy was an issue at their facility.
- At Center B, which had decided to focus on how staff handled problems, the social worker also conducted a two-week poll that asked patients:
 - (1) If they were unhappy with the care they received from staff at the center (i.e., from nurses and technicians);
 - (2) If they were unhappy with the care they received from their doctor (not at the center);
 - (3) Whether they talked to someone about the problem; and
 - (4) How satisfied they were with how the staff handled the problem.

This research can also help facilities identify other patient concerns. For example, when Center C conducted focus groups around privacy issues, additional issues also surfaced. Patients indicated a need for more frequent contact with their physicians, written drug prescriptions for those using public health care organizations, responses to ease patients’ fear at the start of dialysis, the possible use of a buddy system to help patients get information and support, and improvements in the waiting room.

Challenges

While the facilities did not have difficulty using the survey results to identify those aspects of care in need of improvement, they came across a few obstacles that hindered their ability to set goals for their improvement projects. In particular, some had difficulty identifying the specific factors that might be contributing to the performance issues identified by the CAHPS survey results

1. Lack of experience with patient survey data.

In some cases, staff had little if any experience using information on patients’ experiences with care as the focal point for a quality improvement initiative. While the parent companies of these centers had previously conducted patient satisfaction surveys, results were not always shared with all center staff and had never been used to define quality improvement initiatives at the center level. For example, before the CAHPS project, one of the centers had shared the results of the patient satisfaction survey with nephrologists, but just provided the information and let each of them decide whether and how to act on it.

Typically, the focus of quality improvement activities had been on clinical indicators; LDOs provide centers with information on how to improve as well as data from other centers for benchmarking. Most centers did not know how to begin the process of developing a quality improvement activity based on patient experience data, how to determine potential areas for improvement, or how to collect additional information to define potential causes and promising interventions.

2. Lack of experience with qualitative data.

In most cases, center staff had little experience systematically collecting and analyzing information from patients to further define the problem and potential solutions. Patients at Center B, for example, complained about the redundancy of the short patient survey or poll since they received it every time they came in for treatment over a period of several weeks. Patient responses appeared to be inconsistent and sometimes invalid due to problems with the design of the questionnaire. For example, a Network staff member noted that some patients read one of the response options as “happy” when the form actually said “unhappy.” Moreover, Center B staff never conducted an analysis of the data they collected. One member of the staff involved in the patient survey mentioned that the main challenge to gathering information was that few patients would share comments and concerns. Patients may be reluctant to respond to this kind of in-house survey both because they do not want to take the time to do so and because they fear reprisal from staff on whom they are dependent for their care.

The team at Center D, which had also surveyed patients internally, found themselves somewhat perplexed by the patients’ responses. They decided to gather even more information on patients’ specific opinions on the issues of staff professionalism and physician communication. For example, what types of behaviors were of concern to the patients? Some team members felt that item terms on their first questionnaire were too subjective. The second instrument provided detailed information to help the QI team decide where the facility needed to carry out quality improvements to strengthen their CAHPS scores.

3. The LDOs role as the driver of QI activities.

The large dialysis organizations typically define the quality improvement goals, activities, and indicators (including those required by CMS) for the facilities they own; these tend to focus on the clinical aspects of care. Consequently, it is difficult for these facilities to initiate their own QI interventions. Center A, for example, has a large quality improvement committee that meets monthly and includes managers and supervisors for all staff types. The committee’s role is to monitor compliance with LDO requirements and goals, rather than setting the quality improvement goals or developing QI projects that are unique to the center. Center B also focused primarily on LDO mandates, which were especially demanding and time-consuming during the turnover in corporate ownership.

A related challenge was that the LDOs were not involved or invested in the decisions about where to focus the CAHPS project interventions. While the LDOs granted permission for their centers to participate in the CAHPS project; most of these parent companies were not involved in any aspects specific to the project. This might have been one of the reasons why project staff at the center level felt like there was a lack of buy-in and investment in the project by LDO leadership at the regional and national levels. The lack of encouragement and support from the parent company also made it more difficult for center managers to set priorities for the CAHPS quality improvement activities.

4. Statistical power of the data.

Due to small numbers and limitations in benchmark data, the CAHPS survey data were not always sufficient to clearly define potential quality improvement areas. Center B, for example, is quite small and did not have any items for which the results were significantly lower than the average of all centers. Consequently, Center B decided to work on an item for which they had scored lower than other items (how staff handle patient complaints), but they also relied heavily on their past experience and noted that this was an area where they thought there might be a problem based on information from other sources.

Even when enough numbers were available for significant comparisons, other factors constrained the ability to compare the center's results to the more significant benchmark: the scores of the top performing centers. These restrictions included limitations in the CAHPS survey analysis programs, which did not include ways to examine the statistical significance of differences between an individual center's results and the results of the top centers.

Enabling Factors

The dialysis centers participating in this demonstration project benefited from several factors that enabled them to hone in on performance problems and move ahead to the next step of identifying potential solutions.

1. AHRQ, Network, and grantee support

An important factor was the support of the Network staff and the CAHPS grantees, both of whom worked closely with center staff to assist with interpretation of the results of the In-Center Hemodialysis Survey. Representatives from each Network visited their centers early in the project in order to present the CAHPS data reports in-person and to answer questions from the centers' staff about how to interpret their results (e.g., what does it mean to be in the top 10 percent?). Most centers are typically given instructions for quality improvement from their LDOs and are not usually given as much information as was provided in the CAHPS reports. The kickoff meeting of all centers, Networks, and grantees involved in the project was instrumental in providing centers with an opportunity to interpret the survey results, work together to identify key issues and tasks, and obtain tools for gathering further information to define the problem.

That said, the director of Center E encountered problems motivating staff because they had not participated in the Baltimore meeting. That concern was the reason for a less formal but similar meeting in Massachusetts specifically for that center's staff.

2. Genuine concern and motivation of staff

Interviews with center staff indicated that they are generally concerned about patient complaints and motivated to improve their patients' experiences with care. Most centers review patient complaints at quality improvement meetings, and have some type of system in place to work with patients who submit complaints and try to address their issues. When determining areas on which to focus their QI efforts, one center considered complaints patients had lodged in the recent past.

3. Consistency of survey results with past experience and findings

The facilities' CAHPS survey results were consistent with their past experience and previous survey findings. For example, Center A's decision to focus on how often patients felt that dialysis center staff cared about them as people was confirmed by the LDO patient satisfaction survey results they received two weeks prior to the August meeting. Center B's choice of "how often patients were satisfied with how staff handled problems" was driven in part by the fact that it was an issue they had noticed in the past.

Center C had also wrestled before with connecting patients within 15 minutes of their designated start time. They had tried various other solutions, such as reorganizing the start times or having all patients with catheters in one bay, but none of them had been successful. Center D's CAHPS survey results were consistent with their past experience and knowledge of the unprofessional manner in which staff interacted with patients and their patients' desire to improve patient-doctor communication patterns.

4. Choice of "actionable" areas.

Several centers made a point of choosing areas that they regarded as "actionable." For example, when Center A staff initially discussed the intervention possibilities, they agreed on two criteria: the area had to be something they had the ability to improve, and it had to be something they could work on as a team. "Being seen as professional" was not an area that they felt could be worked on as a team but rather an

area that was more “personal.” However, centers may have different perceptions of what is actionable. Another facility did focus on staff professionalism.

Lessons Learned

The experiences of the participating dialysis facilities point to several lessons for future endeavors to use the CAHPS In-Center Hemodialysis Survey to identify performance problems:

1. The ESRD Networks play a critical role in assisting the facilities in interpreting the survey results. Without their support, many facilities will flounder at this initial step.
2. The provider-level reports developed and distributed by the CAHPS grantees gave the facilities and their Networks comprehensive and important information about patients’ experiences that enabled them to gauge their performance. The key driver analyses and benchmarking data provided in this report (particularly comparisons to the top scoring centers) made it easier for facilities to understand and interpret the data.
3. Support from local management and parent companies in providing quality improvement training would facilitate the work of the centers and Networks and make the identification and improvement of patients’ experiences a priority for facility staff.
4. CMS’s role in this project served as an important catalyst for LDO and facility-level participation. For example, staff at one of the centers mentioned that they were motivated to initiate and implement the project because they were being held accountable for it. Another center mentioned that if the initiative had not been supported by CMS, LDO leadership would not have let them participate in the effort because they have a policy of conducting this type of work only within the LDO infrastructure.
5. Facilities may need help understanding that all of the aspects of care covered by the In-Center Hemodialysis Survey are actionable, i.e., elements of their performance that can be improved. That help could come from either Network or LDOs. For example, ideally an in-person training would be conducted about quality improvement and using the CAHPS data. Additionally, website assistance could be provided, which could provide ideas for quality improvement activities, tools to measure issues, example patient “mini-surveys,” etc.
6. Follow-up surveys enabled facilities to drill down to the root cause of problems identified by the CAHPS survey. For example, the leadership team concerned with their patients’ experience with staff professionalism and doctor communication thought identifying the specific attitudes and associated behaviors would prove difficult. The QI team at this facility composed a survey to first identify the key issues within staff professionalism and communication, and then a second survey to identify the specific behaviors patients associated with their definitions of professionalism and good communication from the first survey. This process led to many ideas on how to fix issues with patient experience.

Stage 2: Identifying and Selecting Potential Solutions

Once the facilities had selected the performance areas they would focus on, the next step was to decide on one or more strategies to improve that performance. In some cases, the process of identifying potential solutions went hand-in-hand with the process of “drilling down” to discover the root cause of the problem

Key Steps

1. Eliciting information and ideas directly from patients and families.

Patients and their families can serve a useful role as sources of information as well as ideas for interventions. To better understand what patients meant by “staff treating you like a person,” social workers at Center A administered a patient questionnaire that asked patients to give three suggestions of

how staff could make them feel that they were treated like a person. Patients filled out the questionnaires while at the center and deposited them in a box; some of their suggestions were eventually implemented. Other centers, including Center C, conducted focus groups with patients to hear directly from them about their concerns, preferences, and ideas.

2. Eliciting ideas from staff, particularly those who deal directly with patients.

Facility staff can also contribute to the process of conceiving and assessing potential solutions to performance problems. At Center A, for example, the social worker in charge of the project shared the results of the in-house patient survey at a staff meeting with nurses, technicians, and other clinical staff. Dialysis center staff at these levels were not accustomed to being involved in decisions about potential quality improvement activities. Despite management's concerns that this approach would lead to "finger pointing" among staff, the meeting was very successful; staff were engaged in the highly participatory process and many useful and helpful ideas emerged from various staff, including technicians.

Challenges

Many of the challenges to identifying solutions mirror the challenges the facilities faced when trying to select a focus for their QI project.

1. Lack of experience with qualitative data.

As with the data collection conducted to hone in on the causes of performance problems, some facilities had trouble gathering and using information from patients to come up with potential interventions. Center A, for example, succeeded in conducting its patient questionnaire, but did not have plans to analyze it in a formal way until the Network offered to analyze the data and summarize the results for them.

2. Poor communication about information gathering needs and methods.

In some cases, efforts to collect information from patients suffered from a lack of communication within the dialysis center and between the center and its Network. For example, although one center had planned to conduct focus groups with the assistance of a Network staff person, there was some confusion about the process and analysis of the information collected. Instead of conducting patient focus groups, the center invited a Network staff person and posted a sign saying that a Network staff person was available to talk to about complaints.

3. Lack of information about "best practices."

Some facilities expressed interest in communicating with high-performing centers to learn about the practices that had made them successful in certain areas. However, due to confidentiality concerns, the CAHPS grantees could not identify the top performing centers. In the context of clinical QI initiatives, some centers were accustomed to receiving this kind of information about other centers that were part of the same parent corporations.

Enabling Factors

1. Involvement of multiple staff.

Some centers found that the development of the intervention benefited from the participation of many types of staff. At Center A, various staff members, many of whom had no QI experience, contributed to a successful brainstorming session after the social worker shared the results of the patient questionnaire. Others found that it was easier to coordinate the quality improvement initiative with a smaller team of management and staff.

2. Help from Networks.

As with the process of honing in on the problem, Network staff played an important role in helping the centers assess potential improvement strategies. Staff at Center A, for instance, did not have previous experience designing a questionnaire or analyzing the results; their Network worked with them on organizing the responses into categories and analyzing and summarizing the results.

3. Experience with continuous quality improvement (CQI) methods, including team approach.

Some centers found this step easier because of they had experience using continuous quality improvement (CQI) methods prior to embarking on this demonstration. Center C, parent corporation expects all of its facilities to use CQI to ensure they are providing quality and effective services to their patients, and the facility had already carried out a number of QI initiatives. However, none of their previous QI initiatives addressed patient-reported information; they all addressed clinical measures of care. Also, Center C took steps to adapt their CQI process to incorporate the use of the rapid-cycle improvement (a strategy of conducting frequent, small-scale tests to develop and refine intervention strategies and tools).⁶

In addition, the culture of Center C's parent company emphasizes the team; as a result, this facility benefited from a good sense of teamwork and experience working as a multi-disciplinary team.

Lessons Learned

The experience of the dialysis facilities with this stage of the QI demonstration project suggests the following lessons for future efforts:

1. The identification of likely strategies for improving performance in specific areas was a significant challenge for many of the centers. Given their limited experience and staff resources, dialysis facilities would benefit from having access to information on which interventions are most appropriate and useful for specific problem areas. Once more is known about effective strategies, a dialysis-specific version of the *CAHPS Improvement Guide* (which describes interventions to improve the performance of health plans and medical groups on CAHPS surveys) could be very useful.
2. Dialysis center staff lack quality improvement skills, particularly the ability to define interventions based on data on patient experiences. Staff need assistance with identifying potential solutions and mapping out how to carry out planned activities and measure or monitor new activities. For the purposes of the demonstration project, the dialysis centers were able to participate in a two-day meeting to discuss quality improvement and processes to develop quality improvement plans. Some strategy will be needed to train staff not only to understand patient experience surveys, but also to easily collect other information from patients, analyze that information, and to identify solutions through a collaborative process.
3. While dialysis center staff lack training and expertise in quality improvement, staff at all levels are a powerful resource in developing ideas to improve the care at the centers. Working with all staff to develop QI activities not only uses an internal resource, but also increases the likelihood that staff will support the effort and incorporate these new ideas.
4. Focus groups with patients are a highly useful tool for gathering information. The leadership team at Center C indicated that starting the patient focus groups was their biggest success because patients communicated information and perspectives that the team would never have identified without that feedback. Facilities may benefit from basic education on conducting focus groups, develop focus group guides, and using the results.

⁶ This differs from the standard CQI approach that emphasizes implementing improvement strategies on a full-scale basis over a longer timeframe

Stage 3: Implementing Solutions to Improve Performance

Section 2 of this report outlines the interventions that the facilities implemented to address specific problem areas. The implementation of these interventions met with mixed success. In some cases, the interventions were regarded as very successful from the perspective of management, staff, and patients. In others, unavoidable obstacles prevented the intervention from moving beyond the “idea” stage.

Challenges

1. Other priorities take precedence.

Circumstances may require a shift in priorities. At Center B, which underwent a change in ownership during the demonstration project, staff were unable to follow-through on the walk-through and the trainings they had planned for the CAHPS demonstration project. Activities related to the change took up most of the staff time available outside of patient care. The center director in particular had to focus most of her energy on new policies and procedures, and the logistics of making this transition. Other activities related to the change in ownership may have had an effect on the area of work chosen by this center (how staff handle patient complaints), but they were not designed for that purpose.

Constraints on time are also an issue for dialysis facilities. Some centers noted that certain obligations, such as the need to work with patients on the Medicare Part D issue this year, distracted them from their QI projects. Activities mandated by LDOs also often take priority over other projects. Finally, some staff struggled to balance the training process and the implementation of the QI interventions with their ongoing job responsibilities.

2. Lack of experience with quality improvement projects.

Generally speaking, center staff had little experience developing quality improvement projects. Perhaps because they very seldom developed QI activities without the involvement of their LDOs, it appeared that few staff involved in the project had experience planning the implementation and assessment of a quality improvement project without extensive outside direction.

3. Little sense of ownership by key implementers.

In some centers, those responsible for implementing the project did not necessarily feel much ownership over the project. During the interviews, some facility staff suggested that they did not feel empowered to take a more active lead in QI activities since they did not make the initial decisions. At Center A, for example, the decisions regarding where to focus the intervention and what to do about it were made by the clinical nurse manager and the nephrologists. The social workers expected to take ownership of the project played no role in this decision-making process. While the responsibility for the project was delegated to staff, the authority to implement was not as clearly defined, making it difficult to implement.

4. Need to educate staff and patients.

In some cases, facilities struggled to make staff and patients understand why they were making certain changes. Center C, which had identified start times as a problem, had to take steps to educate their staff and patients on the importance of enforcing official start times. Similarly, some centers found that it was a challenge to keep all of the relevant staff informed about changes that may affect them. After rolling out the privacy initiative, the QI staff team at Center C learned they should have provided more information about their efforts across other parts of the unit, especially to the technicians and nurses, to avoid complaints about the adjustments. During the first implementation cycle, the team members were not given background information on what they were doing and why, resulting in resentment from some staff members. Several staff members also expressed concern that asking patients questions about privacy might lead the patients to believe that their privacy was being neglected.

5. Changes in and attitudes of staff.

Several centers noted that staff turnover and staffing changes disrupted their ability to provide training and develop a consistent set of skills and knowledge across all of the staff. Others indicated that negative attitudes among staff initially hindered them from working together as a team. At Center E, one of the main barriers was keeping the staff enthused about the quality improvement initiative. Motivation sometimes waned when the schedule was busy or staffing was short.

6. Consistency of training process.

Several factors, including the logistics of staff scheduling, competing projects, outside class schedules of some staff, and overtime constraints, made it difficult for the QI teams to create a consistent training schedule that all could attend and/or create a training process as part of the implementation of the intervention.

7. Lack of leverage with physicians.

Certain interventions are difficult to implement without support from physicians, but sites generally found it difficult to get physicians actively involved in QI activities. The interventions that required action on the part of the nephrologists made no progress. Involving and motivating the doctors to engage in the QI process and to change their behavior was a major challenge for centers that focused on changes in medical care. Data based on a doctor's performance is not yet publicly reported nor is it tied to pay, leaving the facility with no feasible way to create incentives for the physicians.

8. Inadequate support from senior leadership.

Senior leadership did not always make the CAHPS project a priority or encourage implementers. At Center A, for example, senior managers at both the LDO and center levels were not involved in the implementation of the project. At Center B, the Center Director did not emphasize the CAHPS project because she needed to concentrate on the change in ownership.

9. Lack of clarity about the Network's role.

In some cases, the centers and their Network were unclear about the level of involvement the Network should have in the intervention process. One Network was heavily involved on the early stages of the quality improvement project, but less involved once the intervention was actually underway. Both Network and center staff suggested that it would have been helpful to have more Network assistance in mapping out the project implementation. At the same time, this Network noted that it would not be feasible to provide this level of assistance to all centers in their region if the survey and reporting were implemented nationally.

10. Limited expertise and experience at monitoring progress.

Center staff have little experience developing strategies for monitoring improvement activities and results. One Network worked with Center A staff to develop an intervention plan that included strategies for monitoring progress. Network staff felt that, without their support, the center would not have included assessment strategies in their plan; they also would not have used the data effectively. Staff at Center A collected data from patients to monitor progress, but did not analyze the data until Network staff offered to do it for them. Even after tabulation, the data were not as useful because of the dichotomous "yes/no" scale was not sufficiently sensitive; most participants answered "yes" to each question. Also, the data were collected by dialysis center staff, who read questions to patients while they were on the dialysis machines; this approach, which may have affected the results, could have been avoided if they had received some orientation on this method of data collection.

This Network also encouraged Center B to develop a similar written intervention plan, but was unable to work with them directly. During the second site visit, a few of the Center B staff suggested that their intervention may have been more successful if they had a written plan that established measurable goals.

Enabling Factors

1. Success with RCI methods.

Short-term successes can be a powerful motivator. At some centers, the fact that staff at various levels were able to see the effects of many of the activities in a fairly short period of time created much-needed buy-in for the full implementation.

Although initially skeptical and slightly resistant to the RCI method, the QI team at Center C used the method to design, implement, and test their QI improvements. With assistance from its Network, the QI team implemented rapid-cycle, small-scale tests and was extremely excited and motivated by the speed at which results were obtained. During the grantees' site visit, the QI team acknowledged the benefits in terms of time and resources of using the RCI method to implement change in larger facilities. The QI team leader plans to approach the corporation to request that such methods be incorporated into their corporate QI program.

Center C made rapid strides in their understanding of and ability to incorporate the RCI method into their existing QI processes. Initially, the facility implementation team sought feedback from the ESRD Network staff during every step of the CAHPS QI intervention. However, as the facility team became more knowledgeable and adept with the RCI method, it became more independent and self-sufficient in carrying out this work on its own.

3. Help from Networks.

Although there was some confusion about their role, some Network staff played a major role in the centers' implementation of their interventions. Those with little experience with QI techniques, such as the team at Center D, required some concentrated guidance and assistance from Network staff.

4. Recognition of staff limitations.

Finding the time to do everything is a significant challenge. QI leadership in all facilities had to work around the enormous barriers of limited staff availability, time, and logistics. However, several facilities found ways to make the training and interventions more compatible with staff schedules by recognizing and planning for staff workload and time limitations. Center D, for instance, had asked staff and the leadership team to complete "walk-throughs" (simulated dialysis treatments to enable staff to experience what the patient experiences), which was extremely time intensive and invariably took a staff person away for the whole day. While about 20 percent of staff were able to do these walk-throughs fairly early on in the implementation process, the facility quickly realized that they had to stage the walk-throughs so more staff could undergo the process with a minimum of overtime work. One center addressed logistical issues by picking fixed dates for meetings and trainings so that staff could plan and build around them. Absentees were given handouts to review. As a result, all staff participated in the training, although not all attended every session.

Lessons Learned

The experiences of the facilities with the implementation stage of the process points to the following lessons:

1. Networks play an important role by holding dialysis facilities accountable for assessing and improving patients' experiences with care. At Center A, staff indicated that their center had been interested in implementing similar QI initiatives before, but that it was being accountable to the Network (and CMS) that prompted management to make this a higher

"We probably would have done the quality improvement activities anyway, but the [CAHPS] project made it [happen] faster. You've really held our feet to the fire, and I really like that. People tend to get lazy, and it's good to have someone who's checking in. It takes it off the back burner. We have to answer to you all and to [the Network]. So there has to be some checks and balances and measurement tools, or it will just piddle away."

– Clinical Nurse Manager

priority. The involvement of the Network also helped to facilitate LDO and center-level support. The presence of external parties also increased buy-in from the doctors. Finally, the involvement of the CAHPS grantees in supporting and evaluating the project both heightened everyone's awareness and increased the sense of urgency.

2. To facilitate an effective intervention, center-level management has to commit time and resources to the project, which means that they need support. In addition to providing encouragement and motivation, LDOs and/or Networks can support facilities by developing and sharing tools that facilities can use to address common problems. These tools could include training videos (e.g., on effective customer service), patient education materials (e.g., on privacy), monitoring tools, assessment tools (e.g., example surveys/polls), guidance on how to collect data best practices, and ideas for quality improvement activities related to specific issues. Given limited resources and expertise, facilities are often not in a position to develop such tools on their own.
3. Despite the best of intentions, the QI process cannot compete with the pressures of corporate change. Changes in corporate ownership can slow down, or even arrest, a quality improvement project. Rather than attempting (and failing to implement) a quality improvement plan, it may be better to put QI projects on hold until the work environment has stabilized after a corporate turnover.
4. Being trained in and using the rapid cycle improvement methods enables facilities to move quickly to test and improve their interventions. By overcoming the main challenge of trial and error, the RCI method gave the centers' QI teams an extra tool to use in the implementation process. As one facility's QI team noted, "we already had the overarching methods, but RCI was a strong tool for refining strategies." The collection of in-house survey data also helped to educate staff as they became more aware of their patients' perspectives and quickly saw the impact of the changes they were making.

For example, early in the QI process, the Center C's team realized they had not educated their staff as much or as appropriately as necessary to ensure that they were disseminating consistent information to all patients about their start times or the privacy screens. Under the RCI method, the QI team was able to revise their cards and scripts and devote more time to educating staff, which placed everyone on the same page. This resulted in immediate positive feedback.

5. A consistent training process across all staff, particularly those closest to the patient, is critical to ensuring effective and consistent implementation of QI interventions. Having one person take over the task of educating staff members can help in this regard. Another useful approach is to ask staff for feedback on their understanding of the issues and actions. Implementation of quality improvement activities requires clear communication about staff roles and responsibilities.
6. Many of the QI activities benefited the center staff as well as the patients. Many staff members reported that the changes made their jobs easier or more enjoyable. Staff also reported a greater sense of teamwork and, in some cases, higher morale. For example, at Center A, the idea of acknowledging patients in passing transferred over to acknowledging other staff; also, conducting "fun" activities with patients gave staff an opportunity to interact

"I think the quality improvement activities have been much needed. I think they give the patients a chance to relax and have fun on something that isn't fun. I think the staff enjoy it too, seeing the patients happy, like with the Easter baskets. Some of our continuous quality improvement is about physical well-being. This is about mental well-being. We need to look at both and to have a blend. They need both to be a productive person."

– Charge Nurse

with patients and other staff in a context other than clinical care.

7. Including various staff, including technicians and nurses, in the planning and development process contributes to the effective implementation of QI interventions. Staff involvement provided a tremendous sense of ownership of the process and helped facilitate the implementation of the proposed initiatives. Most of the QI teams concluded that they should have provided more information about their efforts across all types of staff from the very beginning.

Looking Ahead: Maintaining Momentum and Sustaining Gains

The dialysis facilities participating in this demonstration project for the CAHPS In-Center Hemodialysis Survey are not quite sure where they go from here. While some staff indicated that they hoped to continue the QI activities after the second CAHPS survey, many felt that this would be challenging.

Challenges

For the participating facilities, continued progress with patient-oriented QI initiatives will have to overcome a few significant obstacles.

1. The loss of external sources of motivation and support.

Without external assistance for the Network, and support from the LDO, staff were concerned that less emphasis would be given to these activities, so that they would slowly lose momentum. Staff at Center A, for instance, noted that “All Hands on Deck” had already lost some of its urgency, and that staff did not always respond when paged. Others expressed concern that any “unnecessary” activities would be curtailed if there were a staff shortage.

Center staff are also concerned that, once the CAHPS project has ended, support from the LDO and center management support will lessen. At both Centers A and B, staff noted the activities would continue only if center management required them. Center managers felt that the impetus would have to come from the LDO, to whom they are accountable.

Finally, without assistance from outside sources, such as the corporate offices or the Network, center staff lack the knowledge needed to develop a plan for monitoring quality improvements, track change, and develop the tools to implement their plan. They may also not realize that passively receiving information from the LDO and/or patients is not sufficient.

2. Uncertainty about measurable impact of interventions.

The ability to assess progress using the follow-up CAHPS survey was limited, particular for those centers that had chosen to work on items that were only applicable to a subset of patients. In part because of resource constraints on the follow-up survey fielded for this project, the number of responses available for analysis was in many cases too low to have enough power to detect meaningful differences in performance as measured by the survey.

3. Corporate pressures and turbulence.

The dialysis facilities will have a hard time sustaining their QI activities if they have to deal with changes in their corporate environments. While working on the CAHPS project, several of the centers were undergoing leadership turnover, ownership changes, and other changes unrelated to their CAHPS intervention activities. These changes made it difficult to differentiate the causes of any measured improvements in quality.

4. Staffing changes.

Some dialysis centers noted that because of high turnover, they will have to start fresh to educate and engage new staff in activities focused on patients’ experience. One suggested possibly using existing staff

as mentors for new colleagues. Changes in staff can complicate the process of learning from and building upon short improvement cycles.

Enabling Factors

The CAHPS grantees identified a few factors likely to contribute to programs that last beyond the demonstration project.

1. Positive impact of changes to date.

Several staff reported that the QI activities resulted in immediate positive effects. In some cases, new activities had fostered better relationships with patients and other staff, which made their jobs easier or at least more pleasant. Having activities that are rewarding to both staff and patients is likely to encourage continued implementation.

2. Easily sustainable changes.

Some managers and staff indicated that because they had “started small” (i.e., with activities that were neither labor- nor resource-intensive), many changes would be relatively easy to sustain. Yet many of these small changes had a positive impact on patient-staff and inter-staff relations.

Also, center staff had incorporated many of the interventions into their daily routine. At Center A, for example, many staff felt that their daily activities had changed because of the intervention, and that many of the smaller activities (such as calling patients by name) had become habits.

Lessons Learned

At the September 2006 summit meeting, the Networks and facilities were asked to give some thought to an action plan documenting their next steps. Most indicated interest in continuing their activities in some form and exploring how this effort could fit into their scope of work. Their discussion of anticipated challenges and proposed next steps suggested the following lessons:

1. There could be some benefit to fostering the development of “learning communities” composed of facilities, Networks, and possible LDOs to facilitate the sharing of interventions, tools, and success stories.
2. It may be possible to leverage the existing infrastructure of biannual Network meetings to improve communication about effective QI strategies among and within Networks.
3. The participating Networks and facilities can help to “spread the word” about using the CAHPS survey to improve patients’ experiences by inviting other providers to learn about their project and its successes.

Chapter 4: Recommendations

The following recommendations represent the views of the CAHPS grantees based on their observations and their evaluations of the dialysis facilities participating in this QI demonstration project. They reflect three critical findings. First, the idea of focusing on the experiences of patients rather than clinical quality is new to dialysis centers. They are not at all accustomed to conducting quality improvement initiatives based on this kind of data, even if they have seen data collected by their LDOs or Networks.

Similarly, dialysis facilities are unaccustomed to defining their own QI interventions; either the LDO or the Network has traditionally established goals and provided strategies. Even those with experience at implementing QI projects do not necessarily know how to select a focus and identify and assess potential interventions.

Finally, there is little doubt that support and technical assistance from the ESRD Networks is critical to the future success of any efforts to improve patients' experiences with in-center hemodialysis.

Recommendations are provided for dialysis centers, Networks, CMS, and AHRQ.

Recommendations to Dialysis Centers and Dialysis Corporations

1. **Start small and apply the concept of small tests of change.**

Starting small with easily defined and easy to implement quality improvement activities can increase chances for success and be a motivating factor for further action. Small tests of change get staff involved in low-risk, easy-to-implement QI interventions and build success that motivates people to tackle larger, longstanding problems.

"You want to start with a small problem, one that you can actually fix."

– Center Administrator

2. **Cultivate and build upon internal quality improvement expertise at the center level.** Key center staff need to develop expertise in QI including how to identify areas for improvement, determine potential solutions, develop quality improvement activities, and monitor quality improvement activities. Although staff at some centers may have this expertise with respect to clinical aspects of dialysis care, there is a need to develop this same knowledge and capacity with respect to improving patients' experiences of care. Parent organizations can adapt their QI training programs to address patient experience issues. Also, the Networks can be instrumental in identifying specific needs and ways of coordinating with and complementing efforts by parent organizations.

3. **Develop a QI plan and tracking mechanism.** A successful QI project requires a written plan that includes documentation of initial decisions and findings. This should begin with how the center identified the problem to be addressed, collected additional information to further define it, and identified potential solutions and tracking measures. To that end, the centers will need to use LDO and/or Network resources as they are available. This plan will give dialysis centers something concrete to guide their actions, go back to for reference, and reexamine after achieving some results.

4. **Delegate responsibility and authority to key staff to lead QI activities and have them involved in the process from the beginning, including the definition of the problem.** It is also necessary that staff who are assigned quality improvement responsibilities have adequate resources to conduct QI activities and can call on other staff for assistance in implementing activities.

5. **Involve all center staff in QI activities.** At many dialysis centers, QI activities focusing on clinical quality have been defined from the central or regional offices of the corporation and center-level staff are often only involved in data collection. However, while not all staff must have expertise in the QI process, they should all play a role in order to enhance the facility's capacity for improvement. This is important not only because many of the changes may require the collaboration or participation of all

staff, but also because different staff will have different perspectives on the sources of the problems and/or the solutions.

6. **Involve patients and families in quality improvement activities.** Focus groups or interviews to better define problem areas or examine progress made can play an important role in shaping QI projects. Patients and families can also work on QI teams (whenever possible) and review patient education materials or other aspects of QI interventions where they are the target audience. These activities will enable centers to incorporate the patients' perspective beyond the CAHPS survey and obtain ideas and/or reactions to improvement strategies.
7. **Increase staff empathy and awareness of the patients' experience.** Strategies such as “walk throughs” and interactive training sensitize staff to the need for improvements from the patients' perspective. Increasing staff empathy and awareness of patients makes everybody happier. QI leadership indicated that the interactive training gave staff more patience when implementing their own actions. Staff also appeared more satisfied at having attained this greater understanding; consequently, their overall attitude improved.
8. **Combine the CAHPS survey with other tools for assessing the impact of QI interventions.** The CAHPS In-Center Hemodialysis Survey can be used to assess the effect of QI interventions on performance when sufficient data can be collected. However, some of the items in the survey only apply to a subset of patients; the nature of a CAHPS survey makes it difficult to capture enough data for problems affecting a small number of patients. Since facilities are likely to focus on issues that affect many patients as well as those that affect only a minority, it is both appropriate and necessary to develop and use supplemental assessment tools that can be tailored to capture the impact of specific interventions on smaller populations.
9. **Provide management-level support at the facility and the LDO for the QI initiative.** While management may not lead the quality improvement activities, it is critical for the staff involved in the QI initiatives to have management support to carry out the activities and sustain changes.
10. **Share quality improvement tools and experiences across dialysis centers.** The majority of centers routinely receive information on the results of patient surveys, but many have not had experience in quality improvement in this area. Sharing experiences and tools with other centers working on similar areas can be mutually beneficial. Parent organizations are well-positioned to facilitate this process.

“My manager is always very supportive, and has been supportive. At some point, it has to be very time-consuming. So if I have to do it, I will, but someone needs to do my work.”

– Social Worker

Recommendations to the Networks

1. **Provide dialysis centers with quality improvement training and technical assistance that focuses on patient experiences of care.** The ESRD Networks played an important role during the QI demonstration project. While it is not feasible for them to provide the same level of direct assistance on an ongoing basis, there are ways in which Networks can support facilities by building on existing efforts and their training by the Institute for Healthcare Improvement. Mechanisms commonly used by Networks for their regular activities could be used to reach a larger number of centers more efficiently. For example, Networks can incorporate CAHPS-related topics into their QI workshops with facilities.
2. **Encourage dialysis centers to involve patients and families in quality improvement processes.** Some of the centers involved patients as a result of this demonstration, although not extensively. Dialysis centers need encouragement to focus on both the clinical indicators and the patient experience. Networks can explain and reinforce the idea that part of focusing on the patient

experience is bringing patients and family members into the quality improvement process. In addition, Networks can provide facilities with training and support in obtaining and using input from patients and families effectively.

3. **Take advantage of planned activities or trainings.** Networks can look for ways to support work on projects being implemented at the center level that may not be exactly the same as the one as the Network is encouraging but are related. For example, when one Network provided previously planned training on conflict resolution to its centers, one of the social workers in charge of one of the center's CAHPS QI projects applied the training to teach staff how to better interact with patients.
4. **Facilitate the sharing of quality improvement tools among dialysis centers.** Like LDOs, Networks are in a prime position to support improvement efforts by identifying and disseminating successful tools so that the dialysis facilities do not have to continuously start from scratch. Examples of tools include focus group discussion guides, chart formats, and "doctor talk" cards.
5. **Explore with CMS the prospects for continuing the QI projects initiated as part of this project.** The Networks and dialysis facilities involved in this QI project expressed interest in not losing the momentum they had created. Both the current participants as well as others could approach CMS about continuing this work as part of satisfying the current Statement of Work.

Recommendations to CMS

1. **Provide Networks with assistance and resources to continue and expand efforts to measure and improve patients' experiences with dialysis care.** CMS could build on the achievements of the facilities and Networks participating in this project by continuing the project with either the same group of facilities or an expanded set. However, in the future, the Networks will not be able to provide nearly as much assistance as they did for this pilot project. At the same time, dialysis centers will need assistance in using the CAHPS survey reports for quality improvement purposes. CMS will need to better define the role of the Networks and provide more guidance to alleviate the sense of guilt and responsibility the Networks felt about this project. CMS will also have to provide Networks with more resources to continue and expand their training and support their work with providers.
2. **Direct facilities' attention to improving patients' experiences with dialysis care.** To communicate the importance of improving patients' experiences, intensify the urgency of the QI process, and energize the staff to create change and improvements, CMS could:
 - undertake a systematic review of facilities' QI projects around patient experience;
 - provide a technical support system that focuses on the implementation of project designed to improve experiences with care;
 - provide financial support to create improvement tools; and/or
 - convene and support the coming together of Networks and facilities to share lessons learned and solutions to common problems.
3. **Provide incentives and recognition** for facilities and Networks who make great strides in improving their patients' experiences with care.
4. **Fund an annual CAHPS survey of in-center hemodialysis patients** to keep the emphasis on quality improvement.
5. **Fund a supplement to the *CAHPS Improvement Guide*** that would focus on strategies for improving care in dialysis facilities.

Recommendations to AHRQ

1. **Anticipate and adjust to challenges to the overall project plan.** When identifying key milestones and responsibilities with CMS, AHRQ needs to be realistic about the time needed to complete the various tasks and the obstacles that are likely to arise. For example, a delay in CMS's production of the sample frame for the follow-up CAHPS survey led to delays in mailing the questionnaire; also, resource constraints prevented the grantees from conducting the telephone follow-up that would have ensured adequate response rates for the second survey. When appropriate, AHRQ can also work with the grantees and CMS to develop contingency plans to ensure that the milestones are met on time.
2. **Target management at regional and national levels, particularly LDOs, when planning a project.** To gain support of the project and help ensure it will be sustained, corporate management needs to be committed and engaged. However, involvement of senior management should balance its engagement with support and encouragement of the center staff's autonomy, creativity, and initiative.
3. **Establish a communication strategy that ensures that CMS, Network, and key center staff understand the project, its objectives and implementation timeline.** The demonstration project was a developmental effort and involved multiple complex organizations at the local, regional and national level. This made effective communication more challenging as well as more essential for success. Quarterly reports, accompanied by discussion and improvements in project planning, the final report and debriefing, as well as regular operational calls made an important contribution to the successes of the demonstration and should be included in future projects.
4. **Develop a tool kit to support the activities of staff at the dialysis centers.** Staff responsible for implementing CAHPS-related QI activities would benefit greatly from tools they can use to identify issues, improve care, and assess progress, especially for smaller populations. These may include tools that help staff conduct focus groups, analyze the root causes underlying performance of individual CAHPS questions or domains, and implement quick and small-scale surveys to gauge the impact of potential interventions.
5. **Conduct research to better understand the QI interventions.** During the course of this project, dialysis center staff generated a number of potentially effective and generalizable interventions that could lead to improved CAHPS scores. Study of these interventions through qualitative research would build a stronger evidence base and provide guidance on which centers and which patients would most benefit from these interventions.

Appendices

A. Description of Participating Dialysis Centers

Center A is a relatively large dialysis center with 35 stations. More than three-fourths of patients at this center are White and slightly less than a fourth of the patients are African American. Both the center administrator and the clinical nurse manager were new to their positions at the start of the project. Center A has a quality improvement committee that includes managers and supervisors in several clinical areas, but no patients or family members. The committee meets monthly to examine clinical measures and to determine strategies for improving clinical outcomes. Most or all quality improvement projects are defined and initiated by the LDO, as are the clinical indicators and the goals for each one.

Center B is a smaller clinic with 13 stations that is open three days a week. As in Center A, more than three-fourths of patients at this center are White and slightly less than a fourth of the patients are African-American. Because of its size, Center B has a relatively small management team. Two of the key participants in the team, the social worker and dietician, work at two different centers. Under the ownership of the first LDO, Center B had monthly care plan meetings with the nurses, the medical director, the center director, the social worker and the dietician. During these meetings, they examined clinical data and, to a lesser degree, patient feedback based on complaints.

Center C is a large facility with 225 beds and 52 peritoneal dialysis patients. It is located in a mid-to large-sized urban town with a largely Hispanic patient population. This Center already had extensive experience with QI methods, reflecting the emphasis placed on QI by its corporate organization. Its leadership also had a proactive and structured management style.

Center D is also a large facility with 150 beds. It is located in a mid-sized rural town with mixed patient demographics. This facility is the only dialysis facility in the area, giving patients little choice of dialysis providers and staff few employment choices in dialysis care. The facility leadership had not had much experience with QI, and quality measurement and improvement activities tended to be driven “from the top” by its parent corporation

Center E is a small facility with 13 stations treating about 55 hemodialysis patients. Owned by a large dialysis corporation, it is located in a rural setting with a mostly white population.

Center F is a large facility with 40 dialysis treatment stations, caring for about 190 hemodialysis patients, as well as a CAPD clinic on another level. This is an independent hospital-based center in an urban setting with a largely African-American and Hispanic population.

Center G is a large hemodialysis facility serving more than 100 patients. It is owned by a large dialysis organization. The patient population reflects the diverse urban area it serves. The facility was involved in a corporate sale during the course of the project and some re-work was required to bring the new owners up to date on the project mission, purpose, and goals. Throughout the project, many of the center's staff were involved in the project, but the driving force came from the facility clinical manager and social worker. The center experienced a high rate of staff turnover and a change of Center Administrator twice during the project timeframe. Prior to the project, the center had an identified quality improvement methodology which became stronger through the project.

B. CAHPS In-Center Hemodialysis Survey: Reporting Measures

The tables below list the questions for each of the global ratings and composites used to report results from the CAHPS In-Center Hemodialysis Survey.

Nephrologists' Communication and Caring		
Q3	In the last 3 months, how often did your kidney doctors listen carefully to you?	Response Format <ul style="list-style-type: none"> ▪ Never ▪ Sometimes ▪ Usually ▪ Always
Q4	In the last 3 months, how often did your kidney doctors explain things in a way that was easy to understand?	
Q5	In the last 3 months, how often did your kidney doctors show respect for what you had to say?	
Q6	In the last 3 months, how often did your kidney doctors spend enough time with you?	
Q7	In the last 3 months, how often did you feel your kidney really cared about you as a person?	
Q9	Do your kidney doctors seem informed and up-to-date about the health care you receive from other doctors?	Response Format <ul style="list-style-type: none"> ▪ Yes ▪ No

Quality of Dialysis Center Care and Operations		
Q10	In the last 3 months, how often did the dialysis center staff listen carefully to you?	Response Format <ul style="list-style-type: none"> ▪ Never ▪ Sometimes ▪ Usually ▪ Always ▪ For question
Q11	In the last 3 months, how often did the dialysis center staff explain things in a way that was easy to understand?	
Q12	In the last 3 months, how often did the dialysis center staff show respect for what you had to say?	
Q13	In the last 3 months, how often did the dialysis center staff spend enough time with you?	
Q14	In the last 3 months, how often did you feel the dialysis center staff really cared about you as a person?	
Q15	In the last 3 months, how often did the dialysis center staff make you as comfortable as possible during dialysis?	
Q21	In the last 3 months, how often did dialysis center staff insert your needles with as little pain as possible?	

Q22	In the last 3 months, how often did dialysis center staff check you as closely as you wanted while you were on the dialysis machine?	21 only: I insert my own needles
Q24	In the last 3 months, how often was the dialysis center staff able to manage problems during your dialysis?	
Q25	In the last 3 months, how often did dialysis center staff behave in a professional manner?	
Q27	In the last 3 months, how often did dialysis center staff explain blood test results in a way that was easy to understand?	
Q33	In the last 3 months, when you arrived on time, how often did you get put on the dialysis machine within 15 minutes of your appointment or shift time?	
Q34	In the last 3 months, how often was the dialysis center as clean as it could be?	
Q43	In the last 12 months, how often were you satisfied with the way they handled these problems?	Response Format ■ Yes ■ No
Q16	In the last 3 months, did dialysis center staff keep information about you and your health as private as possible from other patients?	
Q17	In the last 3 months, did you feel comfortable asking dialysis center staff everything you wanted about dialysis care?	
Q26	In the last 3 months, did dialysis center staff talk to you about what you should eat and drink?	

Providing Information to Patients

Q18	In the last 3 months, has anyone on the dialysis center staff asked you about how your kidney disease affects other parts of your life?	Response Format ■ Yes ■ No
Q19	Do you know how to take care of your graft, fistula or catheter?	
Q28	Did this dialysis center ever give you any written information about your rights as a patient?	
Q29	Did dialysis center staff at this center ever review your rights as a patient with you?	
Q30	Has dialysis center staff ever told you what to do if you experience a health problem at home?	
Q31	Has any dialysis center staff ever told you how to get off the machine if there is an emergency at the center?	

Q36	In the last 12 months, did either your kidney doctors or dialysis center staff talk to you as much as you wanted about which treatment is right for you?	
Q38	In the last 12 months, has either a doctor or dialysis center staff explained to you why you are not eligible for a kidney transplant?	
Q39	In the last 12 months, did either your kidney doctors or dialysis center staff talk to you about peritoneal dialysis?	
Q40	In the last 12 months, were you as involved as much as you wanted in choosing the treatment for kidney disease that is right for you?	

Global Ratings

Q8	Using any number from 0 to 10 where 0 is the worst kidney doctors possible and 10 is the best kidney doctors possible, what number would you use to rate the kidney doctors you have now?	Response Format 0-10 scale
Q32	Using any number of 0 to 10 where 0 is the worst dialysis center staff possible and 10 is the best dialysis center staff possible, what number would you use to rate your dialysis center staff?	
Q35	Using any number of 0 to 10 where 0 is the worst dialysis center staff possible and 10 is the best dialysis center possible, what number would you use to rate your dialysis center?	