DEPARTMENT OF HEALTH AND HUMAN SERVICES

OFFICE OF INSPECTOR GENERAL

Clinical Performance Measures for Dialysis Facilities

Building on the Experiences of the Dialysis Corporations

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EXECUTIVE SUMMARY

PURPOSE AND BACKGROUND

To present lessons learned by the five largest dialysis corporations in using clinical performance measures to hold facilities accountable for the quality of care and to address the implications they have for the Centers for Medicare & Medicaid Services (CMS).

This is the main report in the series *Clinical Performance Measures for Dialysis Facilities*. The two supplemental reports are (1) *Practices of the Major Dialysis Corporations*, and (2) *Lessons Learned by the Major Dialysis Corporations and Implications for Medicare*.

LESSONS LEARNED BY THE CORPORATIONS

Below are the lessons the corporations told us they have learned in using performance data.

- Look to medical directors to exert sustained leadership.
- Secure the commitment of attending physicians.
- Collect a broad set of measures and revisit their relevance regularly.
- Establish minimum performance standards and goals for all facilities to aim towards.
- Apply strict definitions to performance measures and check their accuracy regularly.
- Disseminate timely, comparative feedback of performance data.
- Stress quality improvement projects at the facility level.
- Use performance data as a guide to possible performance problems.

OUR RECOMMENDATIONS TO MEDICARE

Revise the Medicare Conditions for Coverage. The revised Conditions should (1) require facility medical directors to exert leadership in quality improvement, and (2) require dialysis facilities to conduct their own quality improvement projects.

Examine ways to foster the commitment of attending physicians to performance measures. CMS should (1) conduct educational forums that emphasize the importance of performance measures, (2) examine the possibility of physician-specific report cards, and (3) focus greater attention on the responsibilities of physicians.

Develop more effective intervention strategies for facilities. CMS should foster greater collaboration between its two oversight agents, the End-Stage Renal Disease Networks and the States, and address the confidentiality and liability concerns that impede such integrated efforts.

Work with the corporations to share experiences and minimize burdens on dialysis facilities. Both CMS and the dialysis corporations have similar concerns about improving care. More sharing of experiences could be helpful to both parties, and, most importantly, to patients.

COMMENTS

We received written comments on the draft report from the CMS, the Forum of End-Stage Renal Disease Networks, Renal Physicians Association, National Renal Administrators Association, and the five corporate dialysis providers that were the focus of our inquiry. Their comments were strongly supportive of the lessons we presented and of the thrust of the recommendations we made to CMS. We include the full text of the comments in appendix C of the second supplemental report, *Clinical Performance Measures for Dialysis Facilities: Lessons Learned by the Major Dialysis Corporations and Implications for Medicare* (OEI-01-99-00054). On the basis of the comments, we made a number of clarifications and technical changes. Below, we briefly summarize their comments and our responses to them.

Medical Director Leadership. CMS supported our recommendation that the Medicare Conditions for Coverage be revised to require medical directors to exert leadership in quality improvement. The dialysis corporations and the other commenters also underscored the importance of such leadership, but to varying degrees raised concerns about how it might be defined in the Medicare Conditions. They urged that leadership expectations be in accord with the real world in dialysis facilities. Their comments reinforce the importance of CMS clearly establishing the medical director's authority and responsibility to provide leadership if it expects performance measures to be instrumental in improving care in dialysis facilities. At the same time, the comments suggest the value of collaboration between the corporations and CMS in further defining the leadership role of medical directors.

CMS and other respondents supported our recommendation that medical directors be given authority to conduct or initiate peer review of attending physicians. But they were clearly wary of our recommendation that when patients are put at risk because of substandard medical care, the medical director should report the physician to an authoritative body, such as the facility's governing board, the End-Stage Renal Disease Network, or the State medical board. We suggest that this is a vital patient protection responsibility that must be part of the purview of the medical director and that CMS should address it as part of its efforts to foster quality dialysis care.

Securing the Commitment of Attending Physicians to Performance Measures. This is a vital matter having a significant bearing on the successful use of performance measures. CMS expressed its readiness to consider the measures we called for. Other respondents were supportive of convening educational forums. But some raised concerns with the use of physician-specific reports (which are already being used by at least one End-Stage Renal Disease Network and by two dialysis corporations) and with the establishment of more explicit Federal standards or requirements concerning the performance of attending physicians. We recognize that these are difficult issues, but suggest that they warrant careful examination as means of more fully engaging attending physicians in quality improvement efforts.

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INTRODUCTION

PURPOSE

To present lessons learned by the five largest dialysis corporations in using clinical performance measures to hold facilities accountable for the quality of care and to address the implications these lessons have for the Centers for Medicare & Medicaid Services, formerly the Health Care Financing Administration.

BACKGROUND

In our report, *External Quality Review of Dialysis: A Call for Greater Accountability*, we urged the Centers for Medicare & Medicaid Services (CMS) to use facility-specific clinical performance measures as a key part of its oversight of dialysis facilities. Clinical performance measures are quantitative indicators, typically expressed as a percentage, that reflect the quality of care patients received. CMS concurred with the directions we suggested and presented a detailed action plan to strengthen its use of performance measures. Since then it has been active in carrying out this plan.

In this follow-up inquiry, we examine the practices of the five largest dialysis corporations in using clinical performance measures to hold their own facilities accountable for the quality of care. We regard such an inquiry as important because:
(1) these corporations account for about 70 percent of all dialysis patients in the United States, the vast majority of whom are Medicare beneficiaries, and represent over 2,000 facilities, (2) they have a substantial body of experience in using performance measures, and (3) they have gained know-how that can be helpful to CMS and others.[1]

This report is the main report in our series on *Clinical Performance Measures for Dialysis Facilities*. In addition to this report there are two supplemental reports. The first supplemental report, *Practices of the Major Dialysis Corporations* (OEI-01-99-00053), describes the processes the corporations have to collect and use performance measures. The second supplemental report, *Lessons Learned by the Major Dialysis Corporations and Implications for Medicare* (OEI-01-99-00054), presents 14 lessons the corporations have learned in using performance measures and presents our recommendations to CMS as it further develops its own system to use performance measures. All three reports are based on our review of corporate documents, interviews with corporate medical directors, and site visits to several dialysis facilities. The information contained in this report was self-reported by the dialysis corporations. We did not audit or validate the data the corporations collect from their facilities.

We conducted this study in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

CORPORATE PRACTICES

In the following section we present two summary tables that illustrate how the five dialysis corporations use clinical performance measures. The first table shows some of the clinical performance that the corporations collect. The second table, on the following page, shows how the corporations collect and use these measures.

Table 1. Facility-Specific Clinical Performance Measures Collected by the Dialysis Corporations

Performance Measure	Company #1	Company #2	Company #3	Company #4	Company #5	CMS
Urea reduction ratio	✔	✔	✔	✔	✔	✔
KT/V	✔	✔	✔	✔	✔	
Hematocrit	✔	✔	✔	✔	✔	✔
Hemoglobin	✔	✔	✔	✔	✔	✔
Iron indices (TSAT and Ferritin levels)	✔	✔	✔	✔	✔	
Parathyroid	✔	✔	✔	✔	✔	
Albumin	✔	✔	✔	✔	✔	✔*
Blood pressure	✔	✔	✔	✔		
Hospitalization rate	✔	✔	✔	✔	✔	✔
Missed treatments	✔	✔	✔	✔	✔	
Mortality rates	✔	✔	✔	✔	✔	✔
Peritonitis rates	✔	✔	✔	✔	✔	
Type of vascular access	✔	✔	✔	✔	✔	✔**
Clotting events with vascular access		✔			✔	
Transplantation rate		✔		✔		✔
Creatinine clearance	✔	✔			✔	

* CMS collects this information when the patient is first diagnosed.
** CMS obtains from the Center for Disease Control and Prevention
This chart does not represent all the measures that the corporations and CMS collect.

Table 2. Comparison of the Dialysis Corporations' Practices in Collecting and Using Facility-Specific Clinical Performance Measures

	Company #1	Company #2	Company #3	Company #4	Company #5	CMS
Years of experience in collecting facility-specific performance measures	10+	20+	10+	20+	5	10+
Percentage of patients within a facility for which measures are collected	100%	100%	100%	100%*	100%	All Medicare Patients
Data collected electronically from dialysis machine	no	no	yes	no	yes	no
Data submitted electronically from the facility	yes	yes	yes	yes	yes	no
Data collected electronically from labs	yes	no	yes	yes	no	no
Frequency of data collection	monthly	monthly	by treatment	monthly	monthly	varies
Frequency of dissemination of facility-specific performance reports	monthly	quarterly	monthly	quarterly	monthly	annually
Age of data by time it is disseminated	less than 4 weeks	1 day to 12 weeks	1-3 weeks	6-7 weeks	4 weeks	~3 years
Main format for facility-specific reports	intranet	intranet	intranet	intranet and mail	intranet and mail	internet and mail
Compares the facility to its region	yes	yes	yes	yes	yes	yes
Compares the facility to the past	yes	yes	yes	yes	yes	yes
Compares the facility to the company	yes	yes	yes	yes	yes	NA**
Compares the facility to the entire nation	yes	yes	yes	yes	yes	yes
Compares the facility to a minimum standard	yes	yes	yes	yes	yes	yes
Compensation for the facility medical directors is tied to performance measures	no	no	no	yes	yes	NA**
Facility-specific clinical performance measures are routinely publicly available	no	no	no	no	no	some
Provide physician-specific reports	yes	no	yes	no	yes***	no

*except for patients in managed care plans, **not applicable, *** only for facility medical directors

LESSONS LEARNED BY THE CORPORATIONS

Lesson 1. Look to medical directors to exert sustained leadership.

Corporations look to their medical directors to exert leadership in two key ways. One is to lead by example. Since the medical directors typically account for a majority of a facility's patients, such leadership by example is of no small consequence. The other dimension is to ensure sustained attention in the facility to the improvement opportunities that performance measures can offer. The corporations expect the medical directors to serve as the primary on-site agents to implement the corporate initiatives concerning the collection and use of measures.

The Role of the Facility Medical Directors and Attending Physicians

Medical Directors. The Medicare Conditions for Coverage require each facility to have a physician who serves as a medical director who is responsible for "planning, organizing, conducting, and directing the professional [end-stage renal disease] services." Corporations contract with local physicians to serve in this capacity. For facilities that are not part of a corporate chain, the facility owner and medical director can be the same person. In addition to their medical director duties, these physician directors have their own patients that can make up the majority of patients at a facility. It is not uncommon for a medical director to also be an attending physician at another facility regardless of the ownership.

Attending Physicians. Dialysis facilities allow local physicians to send their patients to them for treatment. Attending physicians may send patients to several facilities that may be owned by several different corporations or entities. The physicians are not contractors or employees of the facility or the corporation, and their privileges can be revoked if they do not adhere to the facility's policies.

The medical directors' contracts spell out their leadership responsibilities. These contracts include the responsibilities required by the Medicare regulations as well as outline additional responsibilities required by the corporations.[2] Among the contracts that we reviewed, we saw specifications that medical directors review their facilities' performance measures monthly, attend regular training or meetings concerning quality improvement, and address attending physicians who are not performing adequately. Two of the corporations even include in their contracts a provision indicating that a portion of the medical director's salary is contingent on how well their facilities fared on various clinical performance measures.

The corporate officials disagreed about how fully they are able to hold facility medical directors accountable for exerting leadership. Some stated that they had all the authority they needed through their contracts with facility medical directors. For them, it was simply having the will to enforce their contracts. Others drew attention to the limited leverage that the medical directors themselves have over the attending physicians who, unlike medical directors, do not have contractual obligations to the facility or the corporation and who often have patients at various facilities.[3] The Medicare Conditions

unwilling to invest their time in collecting and reviewing them. The corporations rely on internal expert committees that make recommendations on which measures should be collected and how.

Lesson 5. Establish minimum performance standards.

All the corporations have minimum standards. Corporate officials emphasized that setting clear expectations for facility performance is key to ensuring a minimum level of care across all facilities. Minimum standards typically have two components: a target value and the percent of patients within a facility that are expected to meet the target value. For example, one corporation established its target value for KT/V, a measure of the adequacy of dialysis treatment, at $\geq$ 1.4 and further established that 90 percent of the patients within a facility should meet that target. All the corporations determine their minimum standards using internal expert committees comprised of renal physicians that review the recent literature and practice standards.

Lesson 6. Develop performance goals.

Corporate leaders emphasized the need for all facilities, even the top performers, to continually improve their performance. In order to prevent facilities from striving just to meet the minimum standards, three of the corporations established goals for each of their performance measures. One company established its goals by using the values achieved by the top 10 percent of its facilities. Another corporation stated that its goal is to have 100 percent of its patients meet the target values set for each measure.

Lesson 7. Apply strict definitions to performance measures.

All the corporations indicated that it was important to make clear exactly what the measure represents, so that all facilities are collecting the same data, and to allow for meaningful comparisons across facilities. Standard definitions and processes need to be in place prior to collecting the data. Many of the clinical performance measures that are widely used as part of regular treatment can be collected and calculated in multiple ways. For example, some corporations exclude patients with certain terminal diseases in calculating mortality rates and some do not. With hospitalization, some count the length of stay, while others count the number of admissions. All of the corporations have carefully defined their performance measures so that within the corporation facility data are comparable.

Lesson 8. Check the accuracy on performance data regularly.

The review process serves two main functions: it helps ensure the accuracy of the data and it helps to foster the integrity of the entire performance measure program among physicians and facility staff. If care givers perceive the data to lack integrity, they will likely ignore any reports generated from them. Accuracy reviews most often take place at a central level where all the data can be reviewed at once. All the corporations have full-