CHAPTER 3

Quality of care in rural areas

RECOMMENDATIONS

3A The Secretary should require the peer review organizations to include rural populations and providers when carrying out their quality improvement activities.

***YES: 14 • NO: 0 • NOT VOTING: 1 • ABSENT: 1**

3B MedPAC reiterates its June 2000 recommendation that the Congress should require the Secretary to survey at least one-third of each facility type annually to certify compliance with the conditions of participation.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

***COMMISSIONERS' VOTING RESULTS**

CHAPTER 3

Quality of care in rural areas

In this chapter

- Quality of care delivered to rural beneficiaries
- Quality improvement and assurance in rural areas

Although ensuring that beneficiaries have access to medically necessary care of high quality is one of the primary objectives of the Medicare program, rural quality of care issues have received little attention in Medicare policymaking. MedPAC's research on the quality of care in rural areas is largely encouraging. As measured by the use of recommended services, quality of care is roughly comparable among rural counties of varying proximity to metropolitan areas, as well as between rural and metropolitan areas. However, Medicare's systems for improving and safeguarding quality could be strengthened to deal more effectively with issues in rural areas. Improving care in rural areas is not an articulated task on Medicare's current quality improvement agenda; the Secretary should include rural populations and providers when carrying out Medicare's quality improvement activities. In addition, the Secretary should address a critical problem with Medicare's system for safeguarding rural care by requiring more frequent surveying of providers to ensure the care they deliver meets minimal standards for quality and safety.

One of the primary objectives of the Medicare program is to ensure that beneficiaries have access to medically necessary care of high quality. Although the Congress recently enacted special payment programs to address the adequacy of rural health care financing and access to care, rural quality of care issues have received less attention in Medicare policymaking. Policymakers also need to consider quality issues when developing policy that affects rural health care. Delivering quality care in rural settings can be challenging, and Medicare's efforts to safeguard and improve the quality of that care could be improved. This chapter aims to assess the quality of care delivered in rural settings, discuss the implications of Medicare's systems to measure rural quality of care, and examine Medicare's programs intended to safeguard and improve rural beneficiaries' access to quality care.

In the first section, we assess rural quality of care by looking at whether beneficiaries receive certain recommended services. Use of recommended preventive, acute, and chronic care is similar for beneficiaries living in rural and metropolitan (urban) areas, but large gaps exist between the care that beneficiaries should be receiving and what they actually receive. Rural providers face challenges in furnishing certain types of high-tech procedures and therapies because of low service volumes. By virtue of their location, rural providers treat fewer patients for many types of services than do their non-rural counterparts. Opportunities exist to improve the quality of care furnished to rural and urban beneficiaries by measuring the quality of care.

In the second section, we examine how Medicare influences the quality of care in rural areas and find that quality improvement activities performed by peer review organizations do not give sufficient attention to care furnished in rural areas. Given research findings suggesting that opportunities exist for improving quality in rural areas, MedPAC recommends that the Secretary require peer review organizations to include rural populations and providers when carrying out quality improvement activities.

Next, we consider Medicare's consumer empowerment activities in the context of rural health care. Readily available data on the quality of care may be especially useful for rural beneficiaries, who may trade the convenience of obtaining care from local providers for receiving different or additional services furnished by non-local providers.

Finally, we consider issues related to Medicare's quality assurance activities, particularly in the use of performance measures in providers' conditions of participation and the frequency of surveying providers. Performance measures represent a significant opportunity to ensure the quality of care furnished to beneficiaries. Nonetheless, the Commission recognizes the burden that collecting performance data may place on small rural providers and believes that the Secretary should consider this burden when revising conditions of participation. With respect to the frequency of surveying providers to ensure they are meeting conditions of participation, we find that Medicare's efforts to survey non-accredited providers, including acute care hospitals, are lacking. MedPAC reiterates its recommendation of June 2000 that Congress require the Secretary to survey at least one-third of each facility type annually to certify compliance with the conditions of participation.

Quality of care delivered to rural beneficiaries

To address the question of whether rural beneficiaries have access to medically necessary care of high quality, the Commission reviewed available evidence on the quality of care furnished to rural beneficiaries, particularly the extent to which differences exist among rural areas based on their population size and proximity to an urban area, as well as between rural and urban areas. The Commission also considered Medicare's efforts to improve quality by measuring the care furnished to both rural and urban beneficiaries.

Rural beneficiaries' use of recommended services

Clinical quality of care is often measured by the extent to which beneficiaries receive recommended acute, chronic, and preventive services and the outcomes of that care. Many performance indicators currently used by Medicare represent minimal standards of care recommended by panels of expert clinicians, rather than optimal practice patterns, and measure the underuse of services considered clinically appropriate. Underuse of services can suggest a problem with quality, a lack of availability of services or the presence of barriers to obtaining services. Other ways to examine quality include measuring the overuse of services, such as when beneficiaries receive too many diagnostic procedures, and the misuse of services, such as when beneficiaries are prescribed multiple medications that should not be given together. Underuse, overuse, and misuse of services can result in treatment complications and inefficient use of resources.

A recent study commissioned by MedPAC assessed whether differences existed in the use of recommended services in rural and urban areas in 1998-1999 (Hogan 2001).[1] This analysis uses two types of indicators: those reflecting minimum standards of recommended care (necessary care indicators) and those representing potentially avoidable emergency or urgent care (avoidable outcome indicators). The 40 necessary care indicators measure the use of preventive care and care for acute and chronic conditions. The six avoidable outcome indicators measure the occurrence of avoidable outcomes for

1 This analysis used Medicare claims and enrollment data for calendar years 1998 and 1999. Rural counties were classified using the urban influence code county typology, developed by the Economic Research Service of the United States Department of Agriculture. Recommended care denotes care for which: 1) the benefits of care outweigh the risks, 2) the benefits to the patient are likely and substantial, and 3) physicians judged that not recommending the care would be improper. The results of this study are available upon request from MedPAC.

beneficiaries with diabetes, angina, chronic obstructive lung disease, pneumonia, congestive heart failure, or gall stones. Appendix A lists these 46 indicators.

Results suggest that the provision of recommended care and the occurrence of potentially avoidable outcomes is roughly comparable between rural and urban beneficiaries. Using an index that equally weighted each of the 46 indicators and adjusted for differences in the age-sex mix of the population, this study showed that the average proportion of beneficiaries who received necessary care ranged from 72 to 74 percent in counties with varying degrees of ruralness (Table 3-1).

TABLE 3-1

Aggregate use of recommended services by beneficiaries in 1998–1999, by location of county

Location of county (UIC)	Percentage of beneficiaries receiving recommended care
All counties	73.3
Urban, in an MSA (1, 2)	73.2
Rural	
Adjacent to an MSA and includes a town with at least 10,000 people (3, 5)	73.7
Adjacent to an MSA but does not include a town with at least 10,000 people (4, 6);	73.0
Not adjacent to an MSA but includes a town with at least 10,000 people (7)	74.0
Not adjacent to an MSA but includes a town with between 2,500 and 10,000 people (8)	71.4
Not adjacent to an MSA and does not include a town with at least 2,500 people (9)	71.5

Note: UIC (urban influence code, as defined by the U.S. Department of Agriculture), MSA (metropolitan statistical area as defined by the U.S. Office of Management and Budget). These results are based on ordinary least squares regression analyses, which estimated equally-weighted summary indices of the 46 performance indicators, adjusted for differences in the age-sex mix of the population. Differences between counties in an MSA and each rural county category are statistically significant ($p< 0.01$) due to the large number of observations present in the regression.

Source: Hogan 2001.

Beneficiaries living in remote rural counties were somewhat less likely than urban beneficiaries to receive three types of care: electrocardiograms, except during emergency room visits; timely follow-up after hospital discharge; and mammograms. In addition, some types of potentially avoidable care (multiple emergency room visits for angina, admissions for beneficiaries with pulmonary disease) were higher in remote rural counties.

The data presented in Table 3-1 may underestimate the use of recommended care. All services provided during medical encounters may not be reported in Medicare's claims system. For example, eye exams delivered as part of routine office visits would not be identified. In addition, separate professional service claims may not be generated for services delivered by interns and residents. Services for which Medicare denied payment are not included in this analysis. Finally, specific services furnished by rural health clinics are not included in this analysis. Notwithstanding, this analysis does provide a quantitative sense of what can be done to improve quality of care in both rural and urban areas.

Although some of the differences found in MedPAC's study on the use of recommended services may partly reflect real differences in the quality of care, some may also reflect barriers faced by beneficiaries in accessing services. Because the study was retrospective, it was difficult to disentangle the effect of barriers inhibiting access to care from poor quality of care. Access can be more difficult in rural areas because of economic and transportation barriers. For instance, a greater proportion of rural beneficiaries have lower annual incomes, lack private supplemental insurance, and need to travel longer distances to seek care, all of which have been linked to less frequent use of certain types of services. See Chapter 2 for an explanation of other factors affecting rural beneficiaries' access to care.

One important factor that may affect the quality of care in rural areas is the low patient service volume. A growing body of evidence shows an association between higher service volume furnished by acute-care hospitals and improved clinical outcomes of care, particularly for high-tech procedures and therapies. Most of the studies focused on high-tech surgical procedures, such as coronary artery bypass graft surgery and coronary angioplasty, rather than on other types of interventions, but these studies also assessed treatment of myocardial infarction and acquired immunodeficiency syndrome.[2] Reasons for the positive association between outcomes and volume, first proposed by Luft et al. (1979), include:

- the improved technique that results from greater experience,
- the selective referral of patients to high-volume providers, and
- treatment of sicker patients by low-volume providers.

The findings from these studies on inpatient care present a clear challenge for rural providers, because by virtue of their location in less populated areas, they treat

2 A recent review of the literature in this area showed that the more generalizable of these studies assessed the volume/outcomes relationship for coronary artery bypass graft surgery, pediatric cardiac surgery, carotid endarterectomy, abdominal aortic aneurysm repair, cancer surgery, percutaneous transluminal coronary angioplasty, acute myocardial infarction, and acquired immunodeficiency syndrome (Halm 2000).

lower volumes of patients for many types of services than do their non-rural counterparts.

Although the gap in quality of care (as measured by the use of recommended services) between rural and urban settings was less than we anticipated, MedPAC remains concerned about the discrepancy between the care both rural and urban beneficiaries should receive and the care they do receive. This gap exists for all three types of care—preventive, acute, and chronic. MedPAC's finding that an average of 73 percent of beneficiaries receive recommended services suggests the continued need to improve quality of care for all beneficiaries. Other recent studies confirm that beneficiaries do not always receive the care related to the initial evaluation, follow-up, and monitoring of medical conditions that meets professional standards. Jencks and colleagues (2000) showed that in 1997-1999, 69 percent (the median value) of beneficiaries received recommended care, as measured by 24 performance indicators related to primary and secondary disease prevention. Asch and colleagues (2000) examined the provision of 37 recommended services during 1994-1996 and found that beneficiaries received 14 of these services less than two-thirds of the time. The results of these studies show that Medicare beneficiaries, regardless of whether they reside in rural or urban areas, often do not get the care that clinical experts considered to represent minimal quality standard.

Rural beneficiaries' satisfaction with care

Although measures of the clinical quality of care consider the provision of necessary services by health care providers, satisfaction measures consider beneficiaries' perceptions and expectations. Providers are increasingly collecting and using information on patient satisfaction to improve the quality of care they deliver. This information can reflect actual differences in quality of care as well as differences in patient perceptions and expectations.

MedPAC's analysis of data from the 1999 Medicare Current Beneficiary Survey (MCBS) shows that the majority of rural and urban beneficiaries appear to be satisfied with their care. For example:

- about 94 percent of both rural and urban beneficiaries were very satisfied or satisfied with the availability of medical care,
- about 96 percent of both rural and urban beneficiaries were very satisfied or satisfied with the overall quality of care, and
- about 96 percent of both rural and urban beneficiaries were very satisfied or satisfied with the care they received from specialists.

Two aspects of satisfaction with care significantly differed between rural and urban beneficiaries—the ease of getting to a doctor and believing their physician "checks everything." About 90 percent of beneficiaries residing in rural counties containing a town with fewer than 10,000 people reported being very satisfied or satisfied with the ease of getting to a doctor, 5 percentage points lower than urban beneficiaries. This difference may reflect the transportation barriers faced by rural beneficiaries in using health care services, including a lack of alternative transportation services, such as van services and taxis. At the same time, 96 percent of beneficiaries residing in rural counties not adjacent to an MSA but including a town with more than 10,000 people reported that they strongly agreed or agreed that their physician "checks everything," 2 percentage points higher than urban beneficiaries.

Improving efforts to measure the quality of care in rural settings

Opportunities exist to improve the quality of care furnished to rural and urban beneficiaries. One component of the Health Care Financing Administration's (HCFA's) national initiative to enhance the quality of care provided to beneficiaries is promoting efforts to measure the quality of care, which the agency believes is the essential foundation for improving care (Jencks 1995). HCFA's goal is to create a system of quality indicators that support improvement across all Medicare services.

During the past decade, HCFA has initiated a number of initiatives to measure the quality of care furnished by fee-for-service providers and managed care plans. HCFA's measurement activities for traditional Medicare have focused on developing clinical performance measures to assess the care provided by particular providers (skilled nursing facilities, home health agencies, and renal dialysis facilities). The agency is extending its measurement activities to assess inpatient care nationally and state-wide for the following clinical areas: acute myocardial infarction, heart failure, stroke, and pneumonia (Jencks 2000). HCFA's measurement activities for managed care organizations requires health plans to collect information on the use of recommended services and beneficiaries' functional status and satisfaction with care.

As Medicare's quality measurement system continues to evolve, several issues related to rural health care delivery should be addressed. First, performance measures that assess the delivery of health care in rural areas should reflect the types of care that are furnished in these areas. Second, quality measurement systems should take into account the low volume of services furnished by small rural and urban providers to ensure the validity of the results. In addition, to the extent possible, performance data should be adjusted for factors (such as age and comorbidities) known to affect them. Without adjustment, data may not reflect the actual performance of providers who treat relatively more patients with lower health and socioeconomic statuses. Finally, when imposing new data collection and reporting requirements, Medicare should consider that small providers in both rural and urban areas are less likely to have technological support for monitoring and tracking patient care and the resources to acquire automated information management systems, a key tool in quality measurement systems.

MedPAC is continuing to study issues surrounding Medicare's efforts to measure quality of care. The Commission is currently examining issues about Medicare's application of standards for measuring, assuring, and improving care among Medicare+Choice (M+C) and fee-for-service providers. A report on the Commission's findings will be published in December 2001, as required by the Balanced Budget Refinement Act of 1999.

Quality improvement and assurance in rural areas

Like other purchasers and health plans, Medicare employs a variety of strategies to influence quality. The program's quality assurance (QA) activities help to ensure that health care providers have the capacity to furnish safe care of adequate quality. HCFA establishes health and safety standards for providers and suppliers that furnish care to Medicare beneficiaries and enforces these standards through its survey and certification efforts. Two recent additions to Medicare's quality systems include its quality improvement (QI) and consumer empowerment activities. Quality improvement—also known as continuous quality improvement or total quality management—has been adopted for use in many industries and has recently begun to influence health care industry practices (Shortell et al. 1998). Medicare's QI activities aim to improve the average quality of care furnished to beneficiaries by helping providers assess their performances, make changes, reassess quality, and strive for continuous improvements. Medicare's consumer empowerment activities provide beneficiaries with information to help them make more informed choices about health plans and providers. Consumer empowerment activities aim to improve beneficiaries' satisfaction with and increase the value of the health care they obtain.

Strengthening quality improvement activities

Quality improvement efforts are based on the notion that improving the average quality of care furnished by providers is an important goal that can be attained in a blame-free environment. In 1992, HCFA initiated the Health Care Quality Improvement Program, under which Medicare's contractors, the peer review organizations (PROs), worked with participating providers to evaluate and improve practice patterns. The program has evolved over successive three-year contracting cycles from a relatively decentralized program under which each state-based PRO chose quality improvement targets, measures, and measurement methods to the current system, which requires the PROs to use nationally standardized measures and methods to assess and improve care provided in six clinical priority areas determined by HCFA. Medicare does not require that hospitals, physicians, or any other providers or health plans participate in the PROs' QI efforts. Instead, providers may choose to participate because of an interest in evaluating and improving the quality of care furnished and because participation may be used to satisfy requirements of purchasers, state regulatory authorities, or accrediting bodies.

As currently designed and operated, Medicare's efforts to improve quality of care may not be as effective as they could be in addressing the quality of health care in rural areas. The system is designed such that the PROs have incentives to focus their attention on large (usually urban) providers.

Under the current contract (the so-called sixth scope of work), the PROs are responsible for completing three tasks to improve the quality of care for Medicare beneficiaries: national quality improvement projects, local quality improvement projects, and quality improvement projects with M+C plans. PROs must meet the performance standards for each of the tasks to be eligible for the noncompetitive renewal of their contracts.

The task on national quality improvement requires the PROs to pursue QI activities in six clinical areas—acute myocardial infarction, breast cancer, diabetes, heart failure, pneumonia, and stroke. The Secretary selected these clinical areas based on their public health importance and the feasibility of measuring and improving quality. The PROs must analyze practice patterns, furnish providers with performance data and benchmark points of comparison, and use interventions such as education, training, and outreach to improve a state's average quality of care scores by a specified amount over the contract cycle. HCFA evaluates the success of each PRO's national QI activities by measuring the organization's combined improvement on the 22 performance indicators (Table 3-2) on a statewide basis.

The second task in the PROs' current scope of work requires them to perform three types of local QI projects within their state:

- projects designed to reduce disparities between the care furnished to beneficiaries who are members of a targeted disadvantaged group and all other beneficiaries residing in the state;[3]
- projects in settings other than acute-care hospitals, such as nursing homes, dialysis facilities, home health agencies, or physicians' offices; and
- projects in response to local interests and needs.

HCFA evaluates the success of the PROs' local efforts quantitatively and qualitatively. For projects that use well-developed methods and quality indicators, the agency uses the indicators to determine the extent to which quality improved. Other projects are evaluated by measuring the amount of knowledge gained through the experience of the project.

3 Targeted groups include African-Americans, Hispanics, American Indians and Alaskan Natives, Asians and Pacific Islanders, and Medicare beneficiaries who are dually eligible for Medicaid benefits.

TABLE 3-2

National health improvement clinical topics and performance indicators for the peer review organizations

Clinical topic	Performance indicator
Acute myocardial infarction (inpatient)	Early administration of aspirin
	Aspirin at discharge
	Early administration of beta blockers
	Beta blockers at discharge
	ACE inhibitor for low left ventricular ejection fraction at discharge
	Time to initial reperfusion
	Smoking cessation counseling during hospitalization
Heart failure (inpatient)	Appropriate use of ACE inhibitors at discharge
Pneumonia (inpatient)	Influenza vaccination or appropriate screening
	Pneumococcal vaccination or appropriate screening
	Blood culture before antibiotics are administered
	Appropriate initial empiric antibiotic selection
	Initial antibiotic dose within eight hours of hospital arrival
Pneumonia (outpatient)	Influenza immunization
	Pneumococcal immunization
Stroke (inpatient)	Antithrombotic at discharge (acute stroke or transient ischemic attack)
	Warfarin at discharge (atrial fibrillation)
	Avoidance of sublingual nifedipine (acute stroke)
Diabetes (outpatient)	Biennial retinal exam by an eye professional
	Annual hemoglobin A1C testing
	Biennial testing of lipid profile
Breast cancer (outpatient)	Biennial screening mammography

Note: ACE (angiotensin converting enzyme). The above performance measures are used by the peer review organizations in the national quality improvement activities set forth in their sixth scope of work. Data sources for the performance indicators listed above include: 1) hospital medical records for acute myocardial infarction, congestive heart failure, pneumonia, and stroke inpatient measures; 2) Medicare claims data for breast cancer and diabetes measures; and 3) the Cener for Disease Control and Prevention's Behavioral Risk Factor Surveillance System for pneumonia outpatient measures.

Source: HCFA 2001

The third task in the PROs' current scope of work requires them to assist managed care plans that want to develop QI programs required as part of the Quality Improvement System for Managed Care. HCFA evaluates the success of the PROs' managed care efforts by assessing changes in statewide baselines over time and by evaluating the amount of knowledge gained through the experience of the project.

The current contract does not preclude the PROs from working with small rural and small urban providers, but it does not explicitly encourage them. PROs face incentives to target their national quality improvement efforts to large (usually urban) providers, which offer the largest potential for pay-off in terms of improving statewide average performances if improvement programs are successful. Urban providers tend to be more accessible, thereby reducing labor and travel costs for PRO staff. Although the PROs must perform local QI projects, the current contract does not provide any incentives for them to include rural beneficiaries or providers. Rural beneficiaries are not included as one of the disadvantaged population groups in the current scope of work, nor should they be. Doing so might detract attention from groups that have received demonstrably poorer care compared with rural populations. The PROs may include rural providers in their local projects for improving care in settings other than acute-care hospitals or in response to local interests and needs, but they are not required to do so. In contrast to their current contract, the PROs' previous contract (fifth scope of work) enabled them to focus more attention on local and state quality issues and populations because their performance was evaluated based on the number of projects completed during the contract period.

RECOMMENDATION 3A

The Secretary should require the peer review organizations to include rural populations and providers when carrying out their quality improvement activities.

Although MedPAC recommends that PROs include a spectrum of rural beneficiaries and providers in their QI efforts, it is not the Commission's intent to shift the direction of national quality improvement activities now articulated in the Health Care Quality Improvement Program. Instead, MedPAC believes PROs should be encouraged to consider rural settings under the next scope of work, because rural providers have fewer incentives to perform QI than do large urban providers and previous QI activities improved the quality of care among certain rural providers.

Rural providers face less market pressure to improve performance because they are less likely to participate in managed care plans or be part of purchasing coalitions' efforts to address quality. Small rural providers are also less likely to have their own information systems for measuring and improving quality than larger providers, and often have fewer resources to devote to QI. For these reasons, the QI activities of the PROs could augment the limited internal resources of small rural providers.

Further, several efforts under the PROs' previous contract did succeed in improving the quality of care among certain rural providers. For example:

- The proportion of "ideal candidates" with a confirmed acute myocardial infarction who received thrombolytics or percutaneous transluminal coronary angioplasty within 12 hours of hospital arrival increased to 59 percent from 44 percent for small rural hospitals in Oklahoma (AHQA 2001).
- The proportion of "ideal candidates" with a confirmed acute myocardial infarction who received daily aspirin during hospitalization increased to 84 percent from 78 percent for small rural hospitals in Oklahoma (AHQA 2001).
- Pneumococcal vaccination rates for residents of long-term care facilities in four rural Western states rose to 75 percent from 40 percent (Stevenson et al. 2000).
- The proportion of ideal acute myocardial infarction candidates in Iowa who were prescribed aspirin at discharge increased to 80 percent from 63 percent (AHQA 2001).

To add rural health care to the list of required performance improvements in the PROs' next (seventh) scope of work, which is currently in development, the Secretary could include rural health care delivery as one of the local QI projects. Alternatively, the Secretary could add a separate rural health care delivery task.

It will be important for the Secretary to set forth objectives in the PROs' next scope of work to guide them in performing QI projects in rural settings. Specifically, the Secretary will need to consider whether rural health care QI efforts should focus on national clinical topics (described in Table 3-2) or whether individual PROs should develop and implement rural QI projects, based on the notion that the organizations are best able to work with local providers to identify specific quality concerns. Many of the national indicators are applicable to rural health care delivery, as they focus on several conditions relatively common among rural beneficiaries—acute myocardial infarction, diabetes, and pneumonia—and several processes of care commonly furnished in rural settings. The PROs' local projects to reduce racial and ethnic disparities in health require them to use the nationally standardized quality indicators. In contrast, the PROs' local projects to improve quality in non–acute-care hospital settings allow them to focus on clinical topics and use quality indicators other than those articulated in Medicare's national QI efforts.

When designing QI efforts for rural settings, the PROs also will need to consider issues specific to rural settings, including the lower patient volume and limited staff and resources. Low volume leads to less precision in QI measurement results because results can be swayed by even a few extreme cases. Results of quality measurement for rural providers could appear more dire or more positive in statistical calculations than may actually be the case. In addition, small rural providers often lack the resources to devote staff time to quality improvement and are less likely to have staff that focus exclusively on such work. Lack of an automated information infrastructure means that collecting data is more time and labor intensive.

By creating payment policies targeting rural providers, such as the Medicare Rural Hospital Flexibility Program, the Congress has demonstrated its interest in ensuring that rural beneficiaries have local access to certain inpatient and ambulatory services. In addition to ensuring access, Medicare needs to continue efforts to improve the quality of care for rural beneficiaries. The gap between the care that beneficiaries should receive and the care they do receive creates substantial opportunities for the PROs to improve quality in both rural and urban settings. Although it would be more efficient to focus QI activities on large urban providers (because such providers treat a greater proportion of beneficiaries than do rural providers), such an approach would not be equitable. As a public program, Medicare should seek to ensure high–quality care for all beneficiaries, regardless of where they live.

Finally, depending on the approach decided upon by the Secretary, the PROs may require additional funding to meet their new responsibilities without detracting from other QI efforts. MedPAC's recommendation is not meant to divert funds from QI efforts in urban areas to efforts in rural areas. Therefore, when developing the next scope of work for the PROs, the Secretary will need to evaluate the budget impact of different alternatives for including rural populations and providers in PRO activities.

Improving consumer empowerment activities

Medicare is increasingly releasing information about the performance of managed care and fee-for-service providers to beneficiaries. In the late 1990s, HCFA established its "Medicare Compare" site on the World Wide Web, which offers basic comparative information on the Medicare program, managed care options, and the quality of care furnished by skilled nursing facilities. In 2000, the site was expanded to include information about the quality of care furnished by dialysis facilities. Information is not yet available for other providers, such as acute-care hospitals, home health agencies, and physicians.

The assumption surrounding the release of performance data is that consumers will use the information to choose providers that furnish high-quality care, and the collective effect of those choices will give providers an incentive to improve care (Hibbard et al. 2000). Information may be especially useful for rural beneficiaries who may in some cases trade off the convenience of obtaining care from local providers to receive different or additional services furnished by non-local providers. MedPAC's recent analysis of acute-care hospital services shows that beneficiaries residing in rural counties are more likely to use hospitals outside their county of residence compared with beneficiaries residing in metropolitan counties.

According to Buczko (1994), rural beneficiaries who use non-local hospitals do so primarily to seek specialized services.

Although evidence is growing that consumers want more information about providers' performance, it appears that the release of performance information has had only a limited impact on consumer decision making (Marshall et al. 2000). The primary audience for publicly available performance data tends to be the providers being measured, rather than consumers (Goldfield et al. 1999). Reasons for consumers' lack of interest in and use of performance data include difficulty understanding the information, lack of trust in the data, problems with timely access to the information, and lack of choice. In addition, evidence suggests that consumers rate anecdotal evidence from family and friends more highly than they do systematic empirical evidence.

Medicare policymakers must have reasonable expectations for both short- and long-term success of the informed choice initiative in Medicare. The initiative promises to improve beneficiaries' satisfaction with their care by informing choice and fostering appropriate decision-making, but empowering beneficiaries as value-based health care consumers is a long-term goal. In the short term, significant obstacles include limits in beneficiaries' knowledge of relevant health care concepts, unfamiliarity with alternatives in health care delivery, and uncertainty about how to use comparative information in making health care decisions. These problems may subside as beneficiaries with more experience making health care decisions enter the program.

The Commission has previously recognized the importance of furnishing information on quality of care to help beneficiaries compare providers in traditional Medicare and M+C enrollment options. Specifically, MedPAC has recommended that the Secretary develop and disseminate consumer-oriented information on quality of care to help beneficiaries compare enrollment options and providers (MedPAC 1999). Such information should include both geographic information on the quality of care furnished to beneficiaries enrolled in traditional Medicare and provider-specific information on the quality of care furnished by health care facilities and practitioners participating in the M+C program.

When publishing facility-specific information, HCFA should take steps to ensure the validity of the information reported and the comparisons made between providers. As mentioned previously, these steps include accounting for the low volume of services furnished by small providers in rural and urban settings in calculating measurement results and adjusting data for factors (such as age and comorbidities) known to affect them.

Ensuring quality of care in rural areas

Quality assurance—which aims to ensure that health care providers have the capacity to furnish safe care of good quality—is another component of Medicare's system to influence quality. Medicare's QA for institutional providers is essentially a regulatory process that involves establishing conditions of participation through a rulemaking process and assessing provider compliance with those conditions.[4] Conditions of participation consist primarily of structural requirements believed to ensure the capacity of providers to safely furnish high-quality health care; however, most requirements do not have a firm basis in evidence from health services research and have not been updated with changes in medical practices and technologies (MedPAC 2000). Compliance with conditions of participation is assessed either through a survey and certification process conducted by state agencies under contract to HCFA, or through a private accreditation process that HCFA has determined to be equivalent to its own.[5]

Last year, MedPAC reviewed Medicare's system for safeguarding and ensuring health care quality and found problems with the participation standards, the process for certifying compliance with those standards, the ability of HCFA to enforce compliance, Medicare's deeming arrangements, and the limited information available to consumers on certification findings (MedPAC 2000). The Commission set forth a series of recommendations to the Congress and the Secretary to address these problems by updating standards more frequently, funding the system adequately, strengthening sanctions, and making other changes. In addition, the Commission considered the use of facility-specific performance measures in Medicare's QA program and concluded that they represent significant opportunities to improve the program but need to be used appropriately.

Additional assessment of the system in the context of rural health care suggests that it is particularly ineffective in assuring that the care rural beneficiaries receive meets minimum standards for quality and safety. To assure that rural beneficiaries obtain high-quality care, policymakers must take steps to address weaknesses of the current system.

Collecting performance data from institutional providers

Medicare's participation requirements, like those of other public and private oversight bodies, are beginning to move away from structural proxies for quality toward requirements to measure processes and outcomes of care and to improve quality. As part of its effort to set performance standards, HCFA already requires certain providers—including home health agencies, long-term care

4 Program regulations distinguish health care providers from health care suppliers. The former are generally subject to conditions of participation (sometimes called requirements) and the latter to conditions of coverage. In this chapter, the term "provider" is used to refer both to providers (such as hospitals) and suppliers (such as renal dialysis facilities).

5 Because the hospital accreditation program of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) is specified in law as satisfying Medicare and Medicaid participation standards, JCAHO's status is not dependent upon HCFA's assessment of its accreditation standards and compliance assessment methods.

facilities, and dialysis facilities—to collect performance data. The agency is considering modifying the program's conditions of participation to require reporting of standardized indicators, attainment of specified (minimum) performance levels, and improvement in specified aspects of performance. HCFA is also considering using performance measures to determine the appropriate frequency of site inspections, target specific quality concerns in the course of inspections, and monitor quality at facilities between inspections.

Small health care providers in both rural and urban areas face a number of challenges in collecting performance data. Because of resource constraints created by the scale of their operations, small providers may not be able to invest in systems to support quality measurement. Staffing shortages due to difficulties in recruitment and retention also affect the ability of small providers to measure quality or collect data for quality measurement. In addition, independent of resource limitations, low service volume makes quality measurement less precise.

Because of challenges faced by some small providers in collecting performance data, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requirements for performance measurement for acute-care hospitals, behavioral health care providers, and home health providers vary based on service volume. For example, JCAHO considers average daily census and the number of outpatient visits per month in its performance measurement requirements for acute-care hospitals.[6] In contrast, performance measurement requirements for long-term care facilities do not differ based on service volume.

Despite the difficulties faced by small providers in collecting performance data, the Commission reiterates its belief that performance measurement can help ensure high-quality care for beneficiaries (MedPAC 2000). Nonetheless, when incorporating performance measures in Medicare's QA requirements, the Secretary should consider the burden associated with collecting data and take steps to ensure that required items have an explicit rationale and are needed for quality assurance. In addition, performance measures should reflect the types of care delivered in rural settings. Finally, when carrying out these activities, the Secretary should seek input and assistance from experts in rural and urban health care.

Increasing the frequency of surveying institutional providers

Medicare sets participation standards for health care providers to ensure minimum standards for the quality and safety of care furnished to beneficiaries. Compliance with these conditions of participation occurs through the so-called survey and certification program, by which state agencies conduct on-site inspections of health care providers. In addition, the Secretary deems compliant with Medicare's standards providers who are certified by certain private accrediting bodies without having to submit to additional review. State survey and certification programs, which are partially funded by the Department of Health and Human Services, are the default quality oversight mechanism for unaccredited hospitals, as well as for other types of providers for which deemed status is unavailable or has not been attained.

Under current funding and legal requirements, most facilities are surveyed infrequently. Each year HCFA directs state survey agencies to conduct certification surveys on about 15 percent of non-hospital, non-long-term care facilities, which means an individual facility is surveyed once every 7.5 years (MacTaggart 1999).[7] Only long-term care facilities and home health agencies are surveyed on a more regular basis due to legal mandates requiring them to be surveyed yearly and every three years, respectively.

The infrequent surveying of institutional providers affects rural providers disproportionately. Rural providers are more likely to use the survey and certification program and less likely to be accredited compared with urban providers. As of 1996, less than 60 percent of rural hospitals were accredited by JCAHO (Brasure et al. 1999). In contrast, the vast majority of urban providers are accredited. As mentioned earlier, rural providers have fewer incentives to seek accreditation because purchasers and managed care plans have less ability to be selective in rural areas. In addition, rural hospitals do not pursue accreditation because of the costs associated with the process, which include the fees to the oversight body and the costs of preparing for the on-site inspection.

In our June 2000 report to the Congress, MedPAC recommended more frequent surveys of all institutional providers. The Commission repeats its recommendation here specifically to address concerns about infrequent surveys of rural institutional providers.

RECOMMENDATION 3B

MedPAC reiterates its June 2000 recommendation that the Congress should require the Secretary to survey at least one-third of each facility type annually to certify compliance with the conditions of participation.

Increasing the frequency of inspections would require adequate levels of funding for the Secretary to carry out these

6 JCAHO's current performance requirements for hospitals are as follows: 1) Hospitals having an average daily census of 10 or more and/or an average of 150 or more monthly outpatient visits need to collect and transmit information on 6 inpatient performance measures to JCAHO on a quarterly basis; 2) Hospitals having an average daily census of less than 10 and an average of 150 or more outpatient visits per month need to collect and transmit information on 6 ambulatory or inpatient performance measures to JCAHO on a quarterly basis; 3) Hospitals having an average daily census of less than 10 and an average of 150 or less outpatient visits per month are required to collect information on 6 performance measures, but are not required to transmit the data to JCAHO on a regular basis; rather, the data are reviewed during on-site surveys (JCAHO 2001).

7 These facilities include non-accredited hospitals, renal dialysis facilities, hospices, ambulatory surgical centers, rural health clinics, physical therapy providers, portable x-ray providers, and comprehensive outpatient rehabilitation facilities (HCFA 1998).

activities. MedPAC has previously recommended that the Secretary request, and the Congress appropriate, adequate levels of funding for survey and certification activities to enable HCFA and state survey agencies to increase the frequency of inspections and take other steps to strengthen the quality oversight process (MedPAC 2000). Others also believe that funding for state survey and certification responsibilities has been inadequate for years (Morris 1999).

Currently, HCFA seeks and obtains funds for its survey and certification activities through the normal appropriations process. In our June 2000 report to the Congress, MedPAC considered alternate methods to fund HCFA's survey and certification activities, such as direct funding through the Medicare trust funds and user fees from entities seeking Medicare certification. The Commission concluded that the appropriations process is the most straightforward way to assure greater survey frequency. Switching the funding method for these responsibilities merely avoids addressing previous inadequate funding levels.

Finally, although current funding levels are problematic, MedPAC is also concerned about the underlying substance of the standards and the process for applying those standards. Specifically, in our June 2000 report, the Commission identified problems with and made recommendations about the content of current participation standards, the ability of HCFA to enforce compliance, and Medicare's deeming arrangements. ■

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