

J A N U A R Y 2 0 0 2

R E P O R T T O T H E C O N G R E S S

Applying
Quality Improvement
Standards in Medicare

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MEDPAC Medicare
Payment Advisory
Commission

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Executive summary

Executive summary

Medicare has a responsibility to ensure that the care its beneficiaries receive is of high quality. Because Medicare is the single largest purchaser of health care in the country, its actions influence the care that all patients receive nationwide. Applying standards that direct the efforts providers and plans take to improve quality is one way for Medicare to help ensure that high-quality care is available.

In the Balanced Budget Act of 1997 (BBA), the Congress included a set of rigorous quality improvement standards in its requirements for the newly developed Medicare+Choice (M+C) program. Recognizing that it might be difficult for some plans to comply with all the requirements, the Congress exempted M+C organizations other than health maintenance organizations (HMOs) from several requirements.

The Congress asked MedPAC to report on the appropriate application of quality improvement standards to all types of plans in the M+C program and whether differences among plan types were warranted. The Congress also asked MedPAC to consider how quality improvement standards should be applied to all types of providers in the fee-for-service (FFS) program. Our report focuses on quality improvement standards and assumes that quality assurance standards will remain in force.

The Commission weighed several factors in considering how to apply quality improvement standards to plans and providers:

- the imperative to improve quality and the need for leadership from Medicare;
- beneficiaries' rights to high-quality care whether they choose the M+C or FFS program;
- the complexity, uncertainty, and costs of quality improvement efforts;
- the varying capacities for different plans and providers to measure and improve quality; and
- the tools Medicare has to address quality concerns.

The Commission concluded that the goal of quality improvement standards is to improve the quality of care provided to beneficiaries by stimulating quality improvement activities and that applying standards is only one way Medicare could act to reach that goal. Medicare has multiple tools to stimulate quality improvement efforts. It can:

- act as a regulator and establish standards and measures;
- act as a purchaser and reward high performance;
- act as an advisor and help plans and providers measure and improve care; and
- act as a researcher, either alone or in coordination with others such as the Agency for Healthcare Research and Quality (AHRQ), to further develop the science of quality improvement.

Medicare should use all the above tools to improve the quality of care for its beneficiaries.

Recommendation 1: The Secretary should apply appropriate quality improvement standards to plans in the Medicare+Choice program and institutional providers in the fee-for-service program, recognizing differing plan and provider capabilities. He should reward plans and providers for high quality performance and improvement.

All plans and providers must contribute to improving quality. However, each must contribute according to its individual strengths and weaknesses. Just as plans in the M+C program must establish processes and structures to measure and improve quality so should institutional providers through the conditions of participation (COPs) in the FFS program. While it would be difficult to hold individual clinicians responsible for establishing such systems, particularly if the requirements included significant data collection, clinicians could be encouraged to participate in the efforts of others.

Because few providers see enough patients in specific clinical areas to allow for meaningful comparisons, it may be more reasonable to expect M+C plans to report data publicly on organization-specific clinical measures than to expect individual providers to do so. However, quality improvement performance for institutions and clinicians could be evaluated on broader measures than those in specific clinical areas. Providers also might be expected to collect and report data that could be aggregated across settings or clinicians by the Centers for Medicare & Medicaid Services (CMS) and reported to the public.

The efforts of each type of plan or provider should be coordinated to achieve the maximum effect on the overall program. Requirements creating expectations for plans in the M+C program should be designed to stimulate and support FFS requirements and efforts and requirements for providers in the FFS program should be designed to contribute to improved quality within M+C plans.

Financial and nonfinancial rewards also should be an integral part of the application of quality improvement standards. They should be available whether the efforts are voluntary or mandatory; this will provide recognition for those who meet or exceed rigorous standards and also stimulate plans and providers to increase their voluntary efforts.

Recommendation 2: The Secretary should reduce duplication between public and private oversight efforts when applying quality improvement standards and measures.

Recognizing that one of the primary costs of quality improvement is compliance with multiple standards, including reporting on numerous performance measures, the Medicare program should use its leadership position to reduce the duplication of oversight efforts. This could be achieved by continuing CMS efforts to broaden the use of deemed status authority with private accreditors, and relying on or encouraging the development of standardized performance measures. In addition, when developing new quality improvement standards, CMS should continue to evaluate existing standards to determine the need for additional or different requirements for Medicare.

Recommendation 3: The Secretary should assist plans and providers to improve quality. He also should encourage and fund research on appropriate measures and innovative mechanisms to improve quality.

This recommendation is intended to address gaps in the ability of some plans and providers to measure and improve care and the knowledge base necessary to do so.

The CMS strategy of using expert clinicians and statisticians from quality improvement organizations (QIOs), formerly known as peer review organizations (PROs), to shore up the lack of expertise of some plans and providers should be supported and expanded. This assistance may need to be increased if more non-HMOs enter the M+C program or if CMS imposes additional quality improvement requirements on FFS providers. Assistance could take the form of data collection and analysis or advice on successful interventions. Built into this technical assistance should be an understanding that CMS will share what it learns from one provider or plan with others.

The Secretary has research resources through AHRQ and CMS and the advantage of a very large population base from which to collect data. Useful research topics include the development of measures for clinical topics where performance measures are less well-established, effective provider incentives for improving quality, and appropriate risk-adjustment techniques for publicly reported data. CMS also should evaluate efforts currently under way, such as the FFS program's QIO efforts and the impact of M+C program's Quality Assessment and Performance Improvement requirements on quality of care. ■

CHAPTER

1

Developing and using quality improvement standards

In the Balanced Budget and Refinement Act of 1999 (BBRA), the Congress directed MedPAC to report on how quality improvement standards should be applied to each type of Medicare+Choice (M+C) plan and to the Medicare fee-for-service (FFS) program. The Congress was concerned about the appropriate application of quality improvement standards to different types of plans in the M+C program and the differences in quality improvement efforts between the FFS and the M+C program. In considering how to apply standards, the Congress directed MedPAC to consider the feasibility of applying standards comparable to M+C quality improvement standards to all plans and the FFS program.

The Congress exempted private fee-for-service and non-network medical savings plans from portions of the M+C quality improvement standards in the Balanced Budget Act of 1997 (BBA). It also exempted preferred provider organizations (PPOs) in the BBRA; however, health maintenance organizations (HMOs) are still required to meet all of the standards.

The Congress also was concerned that the new level of rigor in the M+C program might create an unlevel playing field between the M+C and FFS programs. The Centers for Medicare & Medicaid Services (CMS) and individual providers are working to improve care to FFS beneficiaries in many of the same ways as the M+C program. However, CMS relies less heavily on regulatory requirements to stimulate quality improvement in FFS Medicare than it does in the M+C side of the program.

To address these issues, we identified the problems that quality improvement standards are designed to address, who is currently applying quality improvement standards, and the issues they face when applying them. We analyzed current Medicare M+C and FFS efforts and interviewed numerous plans and providers for their perspectives on quality improvement standards.¹

Through our analysis, we found that: (1) plans and providers vary widely in their ability to meet quality improvement standards, (2) private and public sector standards are often duplicative, and (3) other efforts beyond developing and applying standards are needed to stimulate quality improvement.

In developing our recommendations, the Commission was guided by the following principles:

- all Medicare beneficiaries should receive high quality health care,
- efforts to improve quality are imperative,
- Medicare should take the lead in stimulating and supporting quality improvement, and
- all plans in the M+C program and providers in the FFS program should participate in quality improvement efforts in accordance with their capabilities.

In accordance with these general principles, our recommendations outline ways in which Medicare can work to ensure that all plans and providers contribute to quality improvement, coordinate its efforts with those of other oversight agencies and purchasers, and use rewards, technical assistance, and research to further improve the quality of health care.

¹ To assist with this report, MedPAC contracted with CHPS Consulting to summarize and compare quality improvement standards of accreditors, regulators, and purchasers and to interview key representatives of plans, purchasers, providers, and oversight entities.

What is the quality problem?

Numerous studies have documented the challenges of improving the quality of care and sparked widespread debate on the best way to close the gap between what we know to be good care and the actual care delivered (IOM 2001, IOM 2000, Chassin and Galvin 1998, Jencks 2000, The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998). Described as a "chasm" in the most recent Institute of Medicine report (IOM 2001), a significant gap exists between the knowledge of specific services that lead to better outcomes and prevent medical errors and the actual care delivered to patients. For example, best practices dictate the administration of beta-blockers after heart attacks to reduce the chance of a recurrence, yet according to quality improvement organization (QIO) program data published in 2000, the median state rate of heart attack patients who were discharged without a prescription for beta-blockers was 28 percent (Jencks 2000).² Similarly, although computerized physician order entry is a technique known to have a positive impact on reducing medication errors, it is not widely used (UCSF-Stanford University Evidence-based Practice Center 2001).³

Citing shortages of medical specialists and concerns with how hospitals address medical errors, physicians are also worried about the quality of care their patients receive. In a recent survey, almost 60 percent of physicians stated that their ability to provide quality care has gotten worse in the past five years and over half were very concerned that the quality of care would decline further (Blendon et al. 2001).

Experts have speculated the gap in quality results from multiple interactive factors rooted in the intrinsic complexity of modern medical practice. These factors include:

- Patients are living longer and being treated concurrently for multiple medical problems.
- Rapid advances in medical knowledge have made it difficult for practitioners to integrate new practices into patient care. A recent study found it took an average of 17 years for newly discovered forms of treatment to become routine patient care (Balas and Boren 2000). Absent a critical mass of practitioners adopting evidence-based best practices, significant improvements in clinical care are difficult to achieve (Coye 2001).
- Current systems of care were not designed to treat the increasing number of patients with ongoing chronic conditions. Originally, the U.S. health care system focused on treating acute episodes of illness. Yet, because a growing percentage of the population are elderly and rates of chronic conditions are highest among the elderly, more patients need ongoing care for chronic medical problems (Hoffman et al. 1996). As a larger number of patients suffer from chronic conditions, coordination and continuity of care across and within settings becomes increasingly important.

² Because a desired outcome may not manifest for many years and because few clinical outcomes can be readily tracked, process measures are used as proxies for "outcomes" of care. For example, the percentage of heart attack patients who are treated with a beta-blocker upon discharge is a process measure that would be a proxy for the outcome of a reduction in subsequent myocardial infarcts.

³ Computerized physician order entry refers to a method for automating the medication ordering process which could rely on a variety of different computer-based systems. It seeks to ensure legible, complete orders and is often used in combination with clinical decision support systems that further assist physicians in making decisions regarding frequency of administration or dosages and may also provide information on drug interactions and guidelines.

Strategies to improve quality that rely on the application of standards to individual plans and providers are limited in their ability to overcome these barriers. Barring coordinated community-wide efforts, quality improvement standards applied at the institution or practitioner level can encourage only the development of systems that improve quality under the control of one provider. While greater focus on delivering the “right” care in institutions could increase the diffusion of information on best practices, it does little to ensure better coordination across settings. Similarly, because providers in health plan networks commonly contract with multiple plans, as well as serving patients on a fee-for-service basis, the effect of any one plan’s efforts on a clinician’s practice is limited. A plan in which providers are primarily dedicated to the plan’s own patient base can work more closely with practitioners to adopt new evidence-based practices and expect greater coordination across settings.

Therefore, the application of standards represents only one way to address quality concerns. Broader leadership is needed to encourage the development of the infrastructure, including information systems to measure performance and distribute information on needed improvements, and to support individual care givers’ and institutions’ efforts (IOM 2001, IOM 2000).

How are quality improvement standards currently applied?

Quality improvement standards have evolved out of quality assurance standards. (Bhatia et al. 2000) Because quality improvement standards are relatively new, the manner in which they are applied often raises concerns. Knowledge is limited on the best strategies for improving quality and on whether the benefits of quality improvement outweigh the costs. Thus, some suggest quality improvement standards need to be applied cautiously. In addition, applying quality improvement standards raises concerns about the appropriate use of the generated data. Some would like to use the information to hold entities accountable for their performance. Others suggest that use of the information should be limited to internal improvement by the organization generating the data.

Evolution of quality standards

Historically, accreditors and regulators relied on quality assurance activities to guarantee a minimal level of care. However, as better tools for measuring and improving the quality of care have emerged, accreditors have begun to expect health care organizations not only to ensure a minimum level of quality, but also to work to improve quality. Quality improvement standards build on but do not replace quality assurance standards. The BBA provisions requiring M+C organizations to demonstrate improvements in quality provide an example of this shift in philosophy.

Typically, quality improvement standards require an organization to (1) measure its performance, (2) work to improve care, and (3) demonstrate the results of its efforts to a third party. While both quality assurance and quality improvement standards require the entity to establish specific structures and processes, the goals of the structures and processes are different. Quality assurance standards are designed to ensure a minimal level of quality and to identify and potentially punish individuals within the system who may be providing sub-standard care. In contrast, quality improvement standards are designed to ensure that the entities have an effective process for continually measuring and improving the care delivered by all providers.

Structural quality improvement standards include infrastructure and organizational requirements, such as an adequate data system and the appropriate qualifications of quality improvement personnel. Process quality improvement standards include requirements such as the organization must seek input from particular stakeholders in deciding what to measure, and that the organization must take action if a quality problem is identified.

Requiring organizations to demonstrate the results of their efforts on specified performance measures is one of the primary distinctions between quality improvement and quality assurance standards. Oversight agencies or purchasers who apply quality improvement standards usually require organizations to report their performance on specific clinical or service delivery areas. Some agencies or purchasers require organizations to show actual improvement on measures, while others simply require that organizations measure and report on their performance whether improvement has occurred or not. In contrast, compliance with quality assurance requirements usually requires providers or plans to demonstrate that processes and structures are in place to assure quality, not to show they have met specific performance measures.

Issues in quality improvement standards

Developing and applying quality improvement standards raises several issues. Although knowledge and experience with quality improvement processes is increasing, much still is unknown, except that improving quality is complex. The financial impact is also unclear. Resources are needed to measure and work to improve quality, but whether any savings results depends on the clinical areas targeted. It is also difficult to quantify and judge whether the improvement in care quality is worth the cost of the intervention.

Regardless of the lack of knowledge on how to improve quality and the financial impact of doing so, regulators, accreditors, and purchasers are moving forward with efforts to require providers and plans to measure and report on care in specific clinical areas. How these measures are chosen and their purposes are central issues in determining how to apply quality improvement standards.

Limited knowledge

Improving quality is a complicated endeavor that continues to evolve. A growing body of evidence demonstrates that certain care processes are associated with better outcomes in certain clinical areas, and well-tested measures exist in many of them. However, measures do not exist in many important clinical areas and are continually being defined, tested, and validated in others.

For example, in heart care, several clinical processes are well established to improve the outcomes of care for patients, and measures upon which information can be collected in comparative fashion across settings have been defined and are in use. However, in the area of mental health care, while some measures of good care practices exist, their relationship with the outcomes of care are less well-accepted and it is difficult to use the same measures across the different types of settings in which those with mental illness are treated.

Our capacity to compare entities' ability to improve quality is also not well advanced. Risk adjustment mechanisms to account for differences in patient populations are not well developed and will be necessary before applying many types of measures to providers and plans. Moreover, because factors beyond the control of plans or providers often affect patient outcomes, it is difficult to assign accountability. For example, measures that are affected by the extent to which patients comply with providers' treatment plans may unfairly portray or penalize providers or plans or prompt adverse selection.

The uncertainty over appropriate measures causes concerns that limited resources will be focused on clinical areas in which measures are the most developed and validated and in which providers or plans have more control. Thus, clinical areas lacking defined measures or effective improvement mechanisms may receive fewer resources, which may further jeopardize quality improvement in these realms (Starfield 1998).

Cost

Although some evidence suggests that focused quality improvement projects result in savings, more satisfied patients and safer care, little is known about the costs of the comprehensive, system, or institution-wide improvements that would have the greatest impact on clinical care (Coye 2001).

Care has improved in areas for which the National Committee for Quality Assurance (NCQA) has collected data from plans.⁴ Preliminary results from Medicare's QIO program also reveal improvement in nearly all the targeted clinical areas (Cuerdon 2001). Whether care is improving as fast as possible or whether the targeted areas are the most critical is unknown.

Quality experts classify clinical quality problems in three categories: overuse, underuse, and misuse⁵ (IOM 2001, IOM 2000, The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998). Processes that reduce or eliminate overuse of medical services should result in savings. In contrast, if the problem is one of underuse, correction would lead to provision of more medical services, and may result in higher costs, at least initially. Depending on the nature of the problem and the clinical cause or outcome, reduction of misuse of services could increase or decrease costs.

⁴ In the NCQA report, which included data from 372 health plans covering more than 63 million people, gains were seen in all key areas of care and service. For example, the average rate of patients receiving a blood level screening for cholesterol after a cardiovascular event rose from 69 percent in 1999 to 74 percent in 2000 (NCQA 2001b).

⁵ Overuse of services occurs when a health service is provided that poses substantially greater risks than potential benefits to the patients. The number of hysterectomies performed is one example of overuse. Underuse occurs when there is evidence that a patient did not receive a service or procedure whose benefits exceeded the risks. Lack of beta-blocker therapy in patients who have had heart attacks is an underuse problem. Misuse occurs when otherwise appropriate care is given to a patient in a manner that may lead to avoidable complications. Many medical errors are in the misuse category.

A key factor in determining the financial impact of quality improvements is whether the costs of initial efforts are offset by savings later on. The vast majority of the measures in the QIO program target underuse of services; therefore, at least in the short term, provision of those services are likely to increase costs. However, because providing services to a patient initially in one episode may result in preventing or reducing the need for future treatment, addressing levels of underuse may reduce costs in the long term. For example, management of chronic conditions may require more physician office visits and tests, but prevent expensive hospitalizations later on. Many of the NCQA measures also target underuse of services (primarily preventive care) and NCQA estimates that these improvements could yield an annual “productivity dividend” of \$1.4 billion for employers. This number represents an estimate of the number of sick days (amount of sick wages) avoided through better provision of care by health plans reporting data to NCQA in seven clinical areas. While these savings would not be considered a direct reduction in health care costs, employers may factor them into decisions regarding employee benefit packages.

In addition to a lack of knowledge regarding the cost of improving quality, plans and providers often cite the lack of purchaser and consumer interest in and willingness to pay for quality improvement as reasons why they are reluctant to undertake extensive quality improvement efforts. Investing the resources necessary to achieve comprehensive quality improvement may not translate initially into higher prices or increased volume for providers (Coye 2001). Another key issue is who receives any savings. Because patients switch providers, plans, and employers, and see numerous clinicians in the process of care, savings may not accrue to the party who made the initial investment.

Challenges in demonstrating results

When applying quality improvement standards, regulators, accreditors, and purchasers evaluate the structures and processes organizations establish to measure and improve care. However, they often rely more heavily on requirements that an organization demonstrate the results of its efforts. Because of this emphasis and the fact that data are sometimes used by regulators or consumers for comparisons between organizations, standards requiring entities to demonstrate the results of their efforts are the most controversial type of quality improvement standard.

In considering how to require organizations to report on performance measures, questions emerge about who should select clinical topics and measures and the appropriate use of data to compare entities. When quality improvement is an internal strategy, entities can choose clinical topics and performance measures that are relevant to their patients and the services they offer. The measures do not have to be as precise or sample sizes as large as would be necessary if the data were used to compare the organization’s performance to other entities. In addition, the internal measures are often chosen for the sole purpose of giving the entity information upon which to act. Data useful for comparison by the public or regulators may not be as useful to the provider or plan for internal improvement.

When a goal of quality improvement standards is comparison of like entities to aid decisions by purchasers or regulators, the topics are often chosen by the purchaser or oversight entity. Small sample sizes and incomplete or inaccurate data collection can render comparisons unreliable and misleading, however. This is particularly problematic for provider measurement. It is difficult to find clinical areas in which the patient population is large enough and the measures accurate enough for the statistics of individual institutions or clinicians to be meaningful for comparison.

Once measures are specified and meaningful data collected, concerns arise about whether it is appropriate to hold plans or providers accountable for demonstrating improvement. Many plans and providers argue that they should not be held accountable for results when so many of the tools for measuring and improving quality are new and their ability to influence the factors that lead to improvements in care is uncertain.

Acknowledging that problems with statistical validity persist, performance measures indicating how well organizations are doing to improve quality are being applied at both the health plan and provider level. CMS already applies measures to dialysis facilities and nursing homes and is working to develop them for home health agencies. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) is developing measures for hospitals and working with CMS and as a part of an effort by National Quality Forum (NQF)—a public-private membership organization—to identify a core set of measures for hospitals.⁶

Efforts are also ongoing to develop a set of quality measures for physicians. Two projects recently sponsored by the Commonwealth Fund may lay the groundwork for developing measures of physician quality. First, the NCQA received a grant to examine patient preferences and information requirements when choosing a physician. A second grant was awarded to the Massachusetts Health Quality Partners, Inc. to conduct a demonstration project to develop a survey instrument that will evaluate patients' experience with care received from primary care physicians (Commonwealth Fund 2001). The American Board of Internal Medicine is developing a disease-specific assessment instrument to evaluate physicians' performance which could be used in the re-certification process (Leas 2002). Finally, the American Medical Association Physician Consortium for Performance Improvement also has developed physician-specific measures in three clinical areas: adult diabetes, chronic stable coronary artery disease, and prenatal testing (AMA 2002).

Because they have the greatest capacity to measure and improve care and have fewer problems with statistical validity, tightly integrated plans, such as closed-panel HMOs are best able to measure and report on performance measures. Accreditors and regulators have found it difficult to apply quality improvement standards to less integrated plans with broad provider networks because these plans have more difficulty collecting data, particularly if it involves medical record abstraction, and less ability to influence clinician behavior.

The most frequent measures of performance used by accreditors are those that measure the clinical processes of care. However, measures of patient experience and satisfaction with care are increasingly important, as are measures that seek to quantify the overall health and functional status of enrollees or patients.⁷

⁶ Patient satisfaction or experience with care is considered another outcome of care. Some suggest that data on satisfaction may be misleading because patients' perceptions of their experiences may not be true indicators of the appropriateness of care. However, a recent study did find evidence of a positive correlation between some Health Plan Employer Data Information Set (HEDIS) measures of clinical effectiveness and perception of care measures from the consumer assessment of health plan survey (CAHPS) (Schneider et al. 2001). In addition, some quality experts contend that a well-informed and cared for patient or family member often leads to a better physical outcome.

⁷ NQF was established by a broad spectrum of stakeholders including health plans and providers, employers, federal purchasers, and beneficiary groups to implement one of the recommendations of President Clinton's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. The Commission called for a national strategy to address quality concerns, including the development of standardized measures to ensure that providers and plans were working to improve quality and to provide useful information to consumers. Counting as members all types of facilities, clinicians, health plans, purchasers (including the federal, state, and private sectors), and quality experts, and supported by several large foundations and the Department of Health and Human Services, the NQF is probably the most comprehensive effort to standardize quality measures.

Who currently applies quality improvement standards?

Many stakeholders, including private accreditors, private purchasers, and state and federal governments, play important roles in developing and applying quality improvement standards.

Private accreditors

Private accreditors develop and apply standards to all types of health plans and providers. Although quality improvement standards have historically focused on establishing structures and processes to measure and improve care, accreditors have become increasingly interested in pursuing outcome-based standards. Private accreditation standards tend to be more rigorous than regulator standards. However, because many institutional providers meet those higher standards and use their accreditation status to be “deemed” certified for participation in Medicare, the distinction between private and public standards is somewhat artificial. In this relationship, Medicare “deems” that specific types of providers have met Medicare participation requirements because they have met the standards of various private sector accreditation organizations.

For individual providers, accreditors’ standards are usually more comprehensive than are Medicare conditions of participation (COPs) or state regulation. However, regulation of M+C plans is considered by many to be as rigorous as the most well-developed private accreditation standards.⁸ The three major private accreditors (see box, p.11) differ in the specific types and components of plans and providers that they accredit. All three apply some type of quality improvement standards to HMOs and preferred provider organizations (PPOs). However, they differ in the areas in which they expect the organization to improve and whether the results of the improvement efforts must be reported to the accreditor or made public.

Private purchasers

Historically, private purchasers have tried to base their performance expectations on widely recognized indicators of quality such as accreditation by a national body. However, several leading employers are becoming more active in developing specific performance expectations. The Health Plan Employer Data and Information Set (HEDIS), jointly developed by plans and employers, is an attempt to standardize quality expectations and employer requests for information from plans. Purchasers also are working through the NQF to evaluate existing measures of hospital performance and identify a core set which could be used for quality improvement and public reporting.

Purchasers are divided in how or whether they differentiate between PPOs and HMOs. Those who develop their own expectations either require both types of plans to meet the same requirements or allow PPOs to measure and improve quality in different topic areas. For example, they might allow a PPO to emphasize service instead of clinical quality.

⁸ The BBA did authorize the use of deeming for M+C for six areas including quality improvement requirements.

Private accreditor quality improvement standards

The three major private accreditors of healthcare organizations and providers are the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), the National Committee for Quality Assurance (NCQA), and the Utilization Review Accreditation Commission (URAC)/the American Accreditation of Healthcare Commission. The three accreditation programs differ in the specific types and components of plans and providers examined (JCAHO 2001, NCQA 2001a, URAC 2001). While all three major private accreditors have quality improvement requirements for health maintenance organizations (HMOs) and preferred provider organizations (PPOs), their standards differ in the focus of improvement topics and in the requirements for reporting of results.

The Joint Commission on the Accreditation of Healthcare Organizations. JCAHO accredits a wide variety of facilities and health plans. Traditionally, JCAHO's quality improvement standards emphasized structure and process. However, the commission has been attempting to integrate specific performance measures into its standards since the early 1990s.

In 1997, JCAHO began to use a system called ORYX to integrate the use of outcome and performance measures into the accreditation process. During the current phase of ORYX, JCAHO requires hospitals and long-term care, behavioral health care, and home-care organizations to choose six performance measures upon which to collect and submit data. JCAHO analyzes the data and uses the results to focus surveyor efforts. Managed care organizations, integrated delivery systems, PPOs, and managed behavioral health plans must collect and use a minimum of 30 measures internally but are not required to submit data to JCAHO for analysis. In the future, JCAHO anticipates requiring organizations to focus their measurement reporting on a core set of measures.

The National Committee for Quality Assurance. NCQA, best known for its accreditation of HMOs, also administers accreditation programs for PPOs and managed behavioral health care organizations, as well as certification programs for credential verification organizations, physicians' organizations, and utilization management contractors. NCQA produces a health plan report card with information about the quality of health plans (including HMOs, PPOs, and point-of-service (POS)) based on their performance in five key areas and overall accreditation.

NCQA requires HMOs and PPOs to collect and analyze data to measure their performance, identify opportunities for improvement, develop and implement strategies for improvement, measure the effectiveness of the interventions, and demonstrate the results of their efforts. HMOs, but not PPOs, are required to select some quality improvement projects that have a clinical focus. PPOs can limit their efforts to access and service issues. In addition, HMOs, but not PPOs, are required to collect and report on the measures from the Health Plan and Employer Data and Information Set. Both HMOs and PPOs must participate in the Consumer Assessment of Health Plans Survey to measure enrollees' experience with their care and with plan administration.

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Private accreditor quality improvement standards (continued)

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The Utilization Review Accreditation Commission/the American Accreditation of Healthcare Commission. The URAC administers a wide variety of managed care accreditation programs, including health plan, health network, credential verification organization, case management, and health utilization management. It has developed a “modular approach” that enables individual managed care organizations (MCOs) to seek accreditation under several different sets of standards that address different aspects of operations. This approach to accreditation permits MCOs to select only those categories of standards relevant to the range of services and products they offer.

URAC’s standards are less directive than those of other accreditors and do not require reporting on specific measures. However, HMOs and PPOs are expected to establish quality management programs to improve clinical and non-clinical services and to identify priorities by reviewing data and past performance. Based on the results, HMOs must choose three performance improvement projects (two of which must be clinically focused) and PPOs must choose two (one of which must be clinically focused). Both types of organizations must establish strategies to improve performance and must periodically measure improvements.

Other accreditors. In addition to the major private accreditors, other organizations also have accreditation programs. For example, the American Osteopathic Association has a healthcare facilities accreditation program (HFAP) that accredits hospitals, clinical laboratories, ambulatory care and surgical centers, physical rehabilitation facilities, behavioral health facilities, and critical access hospitals. HFAP has had deeming authority for hospitals since 1966 and also has deeming authority for clinical laboratories and critical access hospitals. It requires hospitals to have both quality assessment and improvement plans, but does not require hospitals to report on specific measures (Reuther 2002).

To ensure coordination between CMS and HFAP standards, the HFAP requirements incorporate the Medicare COPs for each type of category of facility. To ensure coordination of enforcement efforts, HFAP and the state surveyors share information on Medicare deficiencies.

Two other accrediting organizations are the Accreditation Association for Ambulatory Health Care, Inc. (AAAHC) and CARF...the Rehabilitation Accreditation Commission. The AAAHC accredits ambulatory surgery centers and has been granted deeming authority with Medicare. Because CARF accredits only rehabilitation programs, as opposed to facilities, it has been unable to achieve deemed status for Medicare rehabilitation facilities. ■

Several leading purchaser coalitions and private companies have begun to look beyond plan-level measures and are moving toward provider-based measures. For example, the Leapfrog Group, a coalition of large purchasers, created a program in which purchasers commit to working through health plans with which they contract to improve hospital performance on three processes: computerized physician order entry systems, evidence-based hospital referrals, and staffing qualifications in intensive care units (The Leapfrog Group 2002). In another example, the Business Health Care Action Group in Minneapolis establishes specific quality expectations on which provider groups must report and provides this information to employees for help in choosing among providers.

State governments

States are charged with licensing providers and insurers. States also contract with Medicare to enforce conditions of participation (COPs) for providers such as nursing homes, home health agencies, and non-accredited hospitals. In addition, most states collect data on service use, consumer satisfaction, and disenrollment for the Medicaid program.

HMOs are usually subject to the financial aspects of insurance regulation related to solvency and to quality and access requirements. Although most states have legislation that regulates HMOs, few have enacted parallel licensing statutes explicitly for PPOs. An increasing number of states are establishing some quality standards for PPOs, but they primarily address issues such as accessibility and availability of providers. However, plans that offer PPOs must meet financial and structural insurance requirements. Many states rely on the federal HMO Act as a model for their HMO requirements. It requires organizations to establish a process for measuring quality and for taking action to address the problems identified, but does not hold HMOs accountable for working to continually improve care. The recently adopted National Association of Insurance Commissioners Health Plan Accountability Model Act did include some quality improvement standards, but exempted less integrated plans such as PPOs from them.

Federal government

The federal government is a major regulator, purchaser, and researcher of health care. It influences quality through Medicare and Medicaid, the Department of Defense, the Veterans Administration, the Federal Employees Health Benefits Program, and numerous other federal programs. In addition, several federal agencies including the Agency for Healthcare Research and Quality (AHRQ), CMS, and the Health Resources and Services Administration are engaged in research on quality improvement. This unique role positions the federal government as a leader in all aspects of health care, including quality of care.

As the largest single health care purchaser, Medicare can effectively influence if not set the quality improvement agenda. As with coverage policy, private purchasers often follow Medicare's lead with respect to quality requirements. Health care experts interviewed by MedPAC believe that the Medicare program needs to use this leadership position to further stimulate quality improvement efforts. Because of its purchasing clout, ultimately the federal government may be the most effective driver in quality improvement.

To understand the context in which quality improvement standards are applied, this section discusses the Medicare program's requirements. We discuss the M+C and FFS programs separately.

Medicare+Choice program

Traditionally, regulators have established minimum quality assurance standards and relied on the private sector to drive more active efforts to improve quality. Private accreditors have included quality improvement in their standards for several years, but until the BBA, the federal government had never regulated organizations based on their capacity to improve the quality of care. By requiring M+C organizations to improve quality, the BBA raised the regulatory expectations for managed care toward the level of private accreditation standards.

The requirements put forth in the BBA have two parts. (For a more detailed description of the M+C requirements, see box, p. 16) First, M+C organizations are required to establish and use a process for improving quality: the Quality Assessment and Performance Improvement (QAPI) program. Second, they must demonstrate the results of their efforts on three sets of measures:

- two quality improvement projects annually as outlined in the QAPI requirements,
- the Medicare version of the HEDIS, and
- the Consumer Assessment of Health Plan Survey (CAHPS).

QAPI is one of four domains in the Quality Improvement System for Managed Care (QISMC), which outlines a variety of consumer protections for beneficiaries in M+C organizations. In early versions of QAPI, M+C organizations would have had to reduce the number of beneficiaries who did not receive the appropriate clinical and non-clinical care by a minimum of 10 percent in numerous areas. However, in response to industry and Congressional concern, CMS has provided greater flexibility in the requirements for the selection of topics and reduced the number of annual projects to two.⁹ In addition, CMS replaced the absolute target of 10 percent improvement with a requirement for M+C organizations to demonstrate "significant" improvement in QAPI projects. Because of the Congressional exemption from requirements to demonstrate improvement, CMS does not require non-HMOs to perform the QAPI projects.

Although the M+C program has been in place for several years, it is only recently possible to evaluate the results of the QAPI requirements. An M+C organization must initiate two projects annually, but projects are conducted on a three-year cycle. CMS recently developed the evaluation tool for the QAPI domain, and M+C organizations are expected to begin to report on their processes and projects in January 2002.

In addition to the QAPI program requirements and projects, all M+C organizations must report data in two separate formats which measure different aspects of plan performance: HEDIS and CAHPS. M+C organizations need not show improvement on these measures, although to improve their scores plans often use performance results from these measures as the basis for quality improvement projects.

⁹ The Medicare Managed Care Manual was recently revised to allow any performance improvement project approved by a private accreditation organization that includes Medicare beneficiaries in the sample and whose topic is relevant to the Medicare population to be accepted as a QAPI project.

CMS uses the HEDIS data in various ways. Summary information on plan-level performance is made available to the public. Raw scores for all plans are available to all M+C plans for comparison and internal improvement efforts and are also used by CMS surveyors to monitor plan performance and target improvement efforts. For example, CMS is using HEDIS scores on mammography from either 2000 or 2001 to establish a performance threshold and will permit plans that meet this threshold in either year to be exempt from the 2002 national project on mammography. Plans scoring at least 80 percent on the measure will be exempt from the national project for 2002.

The BBA provisions that require reporting on CAHPS and HEDIS apply to both HMOs and non-HMOs. Because CMS pays for and arranges the administration of the CAHPS survey, it is not considered to be a burden for any type of M+C plan. However, CMS is currently analyzing the extent to which non-HMOs are capable of reporting the HEDIS data.

Medicare fee-for-service program

In Medicare's FFS program, CMS has traditionally relied on quality assurance standards to assure a minimum level of quality and on the private market to drive any improvement. More recently, as it has done in the M+C program, the CMS has shifted its quality efforts for FFS Medicare from assuring a minimal level of quality to continually striving for higher quality. In contrast to the M+C program's detailed legislative and regulatory requirements, CMS relies less heavily on regulatory requirements to stimulate quality improvement in FFS Medicare.¹⁰

Quality improvement efforts in the fee-for-service program operate at two levels: the program level and the individual provider level. At the program level, CMS (as the plan administrator for the Medicare program) collects data on its providers and analyzes practice patterns to determine how well care is delivered to its beneficiaries. It then uses any influence it may have to affect the manner in which care is delivered. At the provider level, CMS uses its regulatory authority to ensure that institutions and clinicians provide high-quality services to Medicare beneficiaries.

CMS has two main tools for measuring and improving care: the QIO program, which collects and analyzes data on individual provider performance and acts to assist providers in improving care, and the conditions of participation (COPs), which are regulatory requirements for participation in the program applied to institutional providers. Similar to health plans in the M+C program, CMS must determine how best to balance the use of these tools. It can create a "high bar" for participating in its "network," thus ensuring only high-quality providers are available to Medicare beneficiaries, or it can contract with a broad network of providers and seek to influence their behavior through voluntary efforts.

Because of the need to help ensure broad access to services for beneficiaries and the importance of the Medicare program to provider viability, CMS has emphasized the latter: a broad network and voluntary efforts. However, the agency is currently moving toward placing more rigorous regulatory requirements on providers to improve quality.

¹⁰ CMS has tried, through revisions to the COPs, to apply requirements for providers to establish quality improvement programs and to begin to require several types of providers to report to surveyors on several quality indicators. However, these regulatory requirements are not tied to specific legislation, are not as prescriptive, and in the case of the COPs, have not been issued in final form.

Quality requirements in the Medicare+Choice program

To implement the quality requirements under the Balanced Budget Act of 1997 (BBA), the Centers for Medicare and Medicaid Services (CMS) uses part of the Quality Improvement System for Managed Care (QISMC) and two measurement reporting formats, the Health Plan and Employer Data and Information Set (HEDIS) and the Consumer Assessment of Health Plan Survey (CAHPS).

Quality Improvement System for Managed Care. The QISMC grew out of the Quality Assurance Reform Initiative which was originally developed to guide efforts by state Medicaid agencies to oversee the quality of care of their managed care contractors. It later evolved into a tool for creating common expectations across Medicaid and Medicare. The QISMC contains four domains. Domain 1 is used to implement the quality improvement requirements in the BBA. Domains 2–4 implement other consumer protection provisions in the BBA.

- *Domain 1: Quality Assessment and Performance Improvement Program.* This domain requires Medicare+Choice (M+C) organizations to establish and use a process for improving quality, and to demonstrate that the process was successful through documented improvements on specific projects.
- *Domain 2: Enrollee rights.* This domain includes standards in the following areas: enrollee rights to information, choosing and changing primary care givers, grievance and complaint processes, and access to and the privacy of enrollee medical information.
- *Domain 3: Health services management.* This domain includes standards for access to care, including: the size and location of provider networks, ability to obtain after-hours and emergency services, and the manner in which utilization management should be conducted.
- *Domain 4: Delegation.* This domain includes standards for how M+C organizations that contract out functions, such as carve-outs for mental health or prescription drug management should hold their contractors accountable for the M+C requirements.

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Quality improvement in the fee-for-service program. CMS has established an infrastructure to measure and improve care for FFS beneficiaries that is similar to its requirement that M+C plans establish quality assessment and performance improvement programs. The agency also reports publicly on the results of its efforts to improve care on certain measures, similar to the M+C requirements.

The infrastructure CMS uses to measure and improve care includes data collection systems, clinical and statistical expertise, and mechanisms for providing feedback to providers. The primary tool is the QIO program, a nationwide network of organizations made up of clinicians and statisticians. Every QIO contracts with the Medicare program, but many also work with other federal, state, and private sector organizations. Every three years, CMS redesigns the scope of the QIO contract and continues to urge QIOs to help providers improve care rather than take punitive action against individual providers. CMS also uses the QIO program experience and data from local quality improvement efforts to help define priority clinical areas for the Medicare population.

Quality requirements in the Medicare+Choice program (continued)

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The Quality Assessment and Performance Improvement requirements. Domain 1 of QISMC requires M+C organizations to establish a quality assessment and performance improvement program that achieves “...significant improvements sustained over time in enrollee health, functional status and satisfaction across a broad spectrum of care and services.” It defines the structure of the program; for example, a senior official must be responsible for its administration, and employees or affiliated providers and enrollees must actively participate in the program. It also requires the M+C organization to maintain a health information system to collect and analyze the data necessary to implement its Quality Assessment and Performance Improvement (QAPI) program.

The majority of the QAPI requirements define the process the M+C organization must use to measure quality, including criteria for how to choose topics and measure improvement on two projects every year. The QAPI standards require the M+C organization to achieve “significant, sustained improvement” on those projects. Typically each project has a three-year cycle and is continued for a fourth year to measure the required “sustained” improvement. The M+C organization is allowed to choose one topic; the other is chosen by CMS. Other criteria for compliance include:

- projects must represent both clinical and non-clinical focus areas defined by CMS. Focus areas include measures in clinical areas such as care of acute or chronic conditions, high-volume or high-risk services, continuity and coordination of care, and preventive services; and in non-clinical areas such as access, and the number and types of grievances and complaints;
- projects must be significant to the Medicare population;
- the measures used must be shown to be valid and reliable;
- project improvement must be “reasonably attributable to interventions undertaken by the organization;”
- some project measures must include health or functional status indicators; and
- some project measures must include indicators that allow for comparisons with local, state, or national benchmarks.

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The QIO program measures care, works with providers to improve, and reports on the results of its efforts in six clinical areas. The current clinical topics are acute myocardial infarction, congestive heart failure, pneumonia, stroke and atrial fibrillation, diabetes, and breast cancer.

The data used to measure the quality of care in these areas are collected through a combination of claims analysis and medical record abstraction. CMS analyzes claims and funds the QIOs to perform the tedious and expensive task of abstracting clinical data from medical records. Performance on measures in all six clinical areas is then calculated at the state level and made public. Because individual providers are not required to participate in improvement projects and the QIOs are not required to work with every provider, the information is not publicly available for individual institutions or clinicians. However, the QIOs use institution-specific data to convince providers of the need for improvement.

Quality requirements in the Medicare+Choice program (continued)

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The Health Plan and Employer Data and Information Set. HEDIS data are reported by health plans and are used to measure clinical care, access and availability, and administrative performance. Included in HEDIS is the Medicare version of the Health Outcomes Survey (HOS), which is based on beneficiaries' reports of whether their health or functional status is improving.

HEDIS provides information in several areas:

- effectiveness of care, such as comprehensive diabetes care, control of high blood pressure, beta-blocker use after heart attack, cholesterol management after acute cardiovascular events, and others;
- access to or availability of care, such as adults' access to preventive health services and the availability of translation services;
- health plan stability—years in business, total membership, and practitioner turnover; and
- use of services—frequency of selected procedures, inpatient utilization of acute and non-acute care, and certain aspects of mental health service utilization.

The HOS is composed of the Short Form 36 (SF-36) survey with a few additional case-mix adjustment variables. The SF-36 includes questions for beneficiaries on health and functional status. The information is collected on the same beneficiaries for two successive years. A beneficiary's self-reported health status is classified as improved, declined, or as unchanged. The percentage of each type of respondent by plan is released publicly. Health plans are required to contract with a certified National Committee on Quality Assurance (NCQA) vendor to administer the survey.

The Consumer Assessment of Health Plans Survey. The CAHPS designed for health plans is based on beneficiaries' reports about their experience with providers and with plan administration and is designed to elicit consumers' assessment of their health plans' effectiveness with respect to service quality. It contains questions related to the ease of getting claims paid, making appointments, waiting times, getting questions answered, and information on plan policies. CMS administers CAHPS to a sample of plan beneficiaries who have been enrolled for at least six months and also to a sample of beneficiaries who disenroll from the plan. ■

The FFS program uses performance on the clinical priorities of the QIO program and the data collected directly from beneficiaries on a FFS version of CAHPS as its core quality improvement performance measures. In addition, CMS has collected data from FFS beneficiaries on several HEDIS measures. CMS hopes to use information from CAHPS and HEDIS to assist beneficiaries in comparing the quality of care in FFS Medicare and the M+C program. CMS also is working with AHRQ to develop a version of CAHPS for nursing homes.

One important distinction between the infrastructure and reporting requirements in the M+C and FFS programs is the lesser level of accountability for quality improvement in the latter. In contrast to the M+C program, the Congress has not created any requirement or expectation for CMS to improve the quality of care in FFS Medicare. At present, CMS does not require its FFS contractors—health care institutions or clinicians—to improve or even participate in improvement efforts.¹¹ However, although not required by Congress, CMS has acted through regulation to implement many of the same quality improvement efforts in FFS that Congress requires of M+C plans.

Quality improvement at the provider level. CMS has tried to use its role as a regulator to require health care institutions to measure and improve care. It proposed new COPs for hospitals and home health agencies to establish structures and processes similar to some of the QAPI requirements for measuring and improving quality. However, the new COPs have not been issued in final form.

Although designed to achieve the same goal as the QAPI requirements, CMS-proposed COPs differ from the QAPI requirements in several respects. These requirements could become more similar to the QAPI requirements when issued in final form. The proposed rules:

- allow institutions more discretion to choose priorities upon which to improve;
- are much less specific about the criteria for choosing, measuring, and demonstrating improvement and do not specify a minimum number of projects; and
- do not require public reporting of individual institutions' quality improvement efforts.

Although the quality improvement requirements proposed by CMS are not yet final, many health care institutions have already implemented the types of structures and processes that would be required by the new COPs. They have done so to meet private accreditation standards, to work effectively with the QIO program, or to fulfill internal goals for quality improvement.¹²

In addition to the lack of accountability for quality improvement, the most significant difference between quality improvement requirements in the M+C and fee-for-service programs is the extent to which the results of institutions' efforts are reported publicly. While data reported on HEDIS measures are publicly available on individual health plans in the M+C program, CMS releases a limited amount of information on specific providers. The agency does require nursing homes and home health agencies to report data generated by specific assessment instruments. Although nursing home data are not risk adjusted, they are available on specific providers to the public. Home health data are currently used only for oversight purposes. CMS has begun public release of data on three specific quality measures for dialysis facilities. No data are collected on specific hospitals, except to provide feedback to individual facilities at the local level through the QIO program.

¹¹ Health care institutions must respond to QIO data requests, but do not have to participate in improvement projects.

¹² Deeming authority, whereby organizations can use their accreditation status as a proxy for compliance with Medicare requirements, is well established in the Medicare fee-for-service program. In the BBA, Congress authorized CMS to create a deeming program for M+C plans. Deeming authority may reduce the regulatory burden and costs of complying with Medicare's requirements because many health plans already seek private accreditation. Moreover, "deeming" also may promote the standardization or uniformity of quality measures.

An important distinction between M+C organizations and FFS providers is that providers are responsible only for affecting change on the portion of care they deliver. For example, a hospital cannot be held accountable for follow-up care after discharge. If a beneficiary is discharged to a home health agency, the subsequent care is the home health agency's responsibility. This often makes quality improvement efforts difficult, because a broad look at the individual beneficiary's health requires coordination across settings. Quality problems often occur when patients are moved to a different level or setting of care.

Although clinicians have more direct ability to improve care than do institutional providers or plans, CMS does not currently require clinicians to measure or improve the quality of care or to demonstrate their performance on any specific measures. Unlike health plans and institutional providers, clinicians do not have to meet federal requirements to participate in the Medicare program. They are licensed at the state level and must simply agree to accept the Medicare payment rates to be considered Medicare participating clinicians. However, CMS does have three tools—coverage policy, the COPs for health care institutions, and the QIO program—that can affect clinician behavior, and CMS could use them in new ways to stimulate quality efforts.

CMS indirectly determines how a service will be provided by defining the circumstances under which it will be covered. In addition, the agency sometimes uses COPs for institutions to influence clinician behavior indirectly. For example, the requirement in the new patients' rights section of the hospital COPs requires a physician to perform, within an hour, a face-to-face evaluation of any patient who has been restrained. In this instance, CMS relies on hospitals to influence physicians' behavior. Clinician participation is absolutely critical for improvement to occur on the clinical priorities of the QIO program, and many clinicians are already working in cooperation with health care institutions or directly with QIOs to foster these improvements.

What are the major trends in quality improvement standards?

Our evaluation of private and public sector efforts to improve quality revealed four major trends that we took into consideration when developing strategies for how Medicare should apply quality improvement standards in the future.

Coordination of quality requirements

Plans and providers typically strive to comply with multiple sets of quality standards and performance measures applied by different oversight bodies that often are similar but not identical. This creates extra work and expense without any significant gain in quality of care. Private accreditors, purchasers, regulators, and other stakeholders have recognized these inefficiencies and are working to coordinate quality improvement requirements to reduce or minimize the burden of multiple redundant requirements. Deeming authority authorized by Medicare is one way to minimize duplication and costs of quality activities. Another way to coordinate quality requirements is to standardize the specific measures upon which data are collected.

CMS is working with private accreditors to create a deeming relationship for M+C plans and to standardize measures. It recently announced that NCQA will have deeming authority for M+C requirements and that it is still evaluating the JCAHO and the AAAHC standards. A recognition of the need to build on private sector accreditation efforts was also the reason CMS relied on NCQA-developed HEDIS measures for M+C. Private purchasers and state regulators increasingly rely on accreditation standards. Finally, the National Quality Forum was established several years ago, in part because all the major stakeholders in health care recognized the need for coordination of quality requirements through standardizing measures.

Application of quality improvement standards at the provider rather than plan level

Currently, most quality improvement standards are applied at the health plan level. However, some plans and purchasers believe quality improvement efforts might be more effective if accountability for quality were pushed downstream to provider groups and are developing strategies to do so. This trend is driven by several factors. The insurance market is moving toward more loosely-structured, broader networks which by design have less ability to influence providers. While providers, for the most part, have always had a more direct effect on care than plans, this trend heightens the need to focus improvement efforts on institutions and clinicians. Focusing on the provider also may be a more efficient way to stimulate quality. Because providers often contract with several different plans and purchasers, accountability and measurement at the provider level may lessen duplicative data collection efforts. Finally, some suggest that the provider, as a unit of analysis, is much more salient to consumers than the health plan.

Increased demand for public reporting of quality improvement data

Purchaser, accreditor, and regulator demands are increasing for public reporting of the results of quality improvement efforts. The hope is that requiring providers or plans to report on one or more performance measures to either an oversight agency or to the public will create a strong incentive for organizations to work to improve performance on specified measures. The process established to improve care for any single measure will also likely be used to address other quality concerns.

Public reporting of quality improvement data raises several concerns, however. First, the data produced must be valid and reliable. For example, performance measures may not provide a reliable and accurate picture of a plan or provider's quality of care if the sample size is relatively small or the data are not appropriately risk adjusted. Second, the accountable entity (for example, a PPO) may not have the leverage to influence provider behavior.

Performance-based compensation

Purchasers and other experts are exploring the possibility of using quality improvement data to distinguish among organizations and reward high performers. Efforts by private-sector purchasers to align financial incentives with quality improvement goals include using public reporting of quality data to steer enrollees to better plans or providers, varying cost-sharing amounts based on quality data and encouraging plans to contract only with the best performing providers. Citing the current lack of financial incentives for improving quality, providers often support such efforts. However, they also express concern when policymakers suggest creating incentives that might result in some providers receiving lower payment than others. ■

References

American Board of Internal Medicine. <http://www.abim.org/cpd/cpdhome/whatiscpd.htm>, accessed December 17, 2001.

American Medical Association. The physician consortium for performance improvement. <http://www.ama-assn.org/ama/pub/category/2946.html>, accessed January 17, 2002.

Balas EA, Boren SA. Managing clinical knowledge for health care improvement. *The Yearbook of Medical Informatics*. 2000, p. 65–70.

Bhatia AJ, Blackstock S, Nelson R, et al. Evolution of quality review programs for Medicare: quality assurance to quality improvement, *Health Care Financing Review*. Fall 2000, Vol. 22, No. 1, p. 69–74.

Blendon RJ, Schoen C, Donelan K, et al. Physicians' views on quality of care: a five-country comparison, *Health Affairs*. May/June 2001, Vol. 20, No. 3, p. 233–252.

Chassin MR. Is health care ready for six sigma quality? *The Milbank Quarterly*. 1998, Vol. 76, No. 4, p. 565–591.

Chassin MR, Galvin RW. The National Roundtable on Health Care Quality. The urgent need to improve health care quality, *Journal of the American Medical Association*. September 16, 1998, Vol. 280, No. 11, p. 1000–1005.

The Commonwealth Fund. <http://www.commonwealthfund.org/grants/>, accessed December 17, 2001.

Coye MJ. No Toyotas in health care: why medical care has not evolved to meet patients' needs, *Health Affairs*. November/December 2001, Vol. 20, No. 6, p.44–56.

Cuerdon T. Center for Medicare & Medicaid Services. E-mail communication to MedPAC. November 9, 2001.

Hoffman C, Rice D, Sung H. Persons with chronic conditions: their prevalence and cost, *Journal of the American Medical Association*. November 13, 1996, Vol. 276, No. 18, p. 1473–1479.

The Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st Century*. Washington (DC), The National Academy Press. 2001.

The Institute of Medicine. *To err is human: building a safer health system*. Washington (DC), The National Academy Press. 2000.

Jencks SF, Cuerdon T, Burwen DR, et al. Quality of medical care delivered to Medicare beneficiaries: a profile at state and national levels, *Journal of the American Medical Association*. October 4, 2000, Vol. 284, No. 13, p. 1670–1676.

Joint Commission on Accreditation of Healthcare Organizations. <http://www.jcaho.org/>, accessed December 5, 2001.

The Leapfrog Group. <http://www.leapfroggroup.org/>, accessed January 15, 2002.

Leas B, American Board of Internal Medicine. Telephone communication to MedPAC. January 3, 2002.

Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC, June 2000.

Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC June 1999.

McNeil BJ. Shattuck lecture—hidden barriers to improvement in the quality of care, *New England Journal of Medicine*. November 29, 2001, Vol. 345, No. 22, p. 1612–1620.

National Committee for Quality Assurance. <http://www.ncqa.org/>, accessed December 5, 2001a.

National Committee for Quality Assurance. The state of managed care quality. Washington (DC), NCQA. 2001b.

The President’s Advisory Commission on Consumer Protection and Quality in the Health Care Industry. Quality first: better health care for all Americans. Washington (DC), US Government Printing Office. 1998.

Reuther G, the American Osteopathic Association. Telephone communication to MedPAC. January 14, 2002.

Schneider EC, Zaslavsky AM, Landon BE. National quality monitoring of Medicare health plans: the relationship between enrollees’ reports and the quality of clinical care, *Medical Care*. 2001, Vol. 39, No.12, p. 1313–1325.

Starfield B. Quality-of-care research: internal elegance and external relevance, *Journal of the American Medical Association*. September 16, 1998, Vol. 280, No. 11, p. 1006–1008.

University of California at San Francisco (UCSF)-Stanford University Evidence-based Practice Center. Making health care safer: a critical analysis of patient safety practices. Rockville (MD), Agency for Healthcare Research and Quality (AHRQ). Evidence report/technology assessment, No. 43, AHRQ, publication number 01-E058. July 2001.

The Utilization Review Accreditation Commission (URAC)/the American Accreditation of Healthcare Commission and American Association of Preferred Provider Organizations (AAPPO). Rise to prominence: the PPO story. Washington (DC), AAPPO/URAC. April 2000.

The Utilization Review Accreditation Commission (URAC)/the American Accreditation of Healthcare Commission. <http://www.urac.org/>, accessed December 5, 2001.

CHAPTER

2

Improving quality in Medicare

R E C O M M E N D A T I O N S

- 1** The Secretary should apply appropriate quality improvement standards to plans in the Medicare+Choice program and institutional providers in the fee-for-service program, recognizing differing plan and provider capabilities. He should reward plans and providers for high quality performance and improvement.

* YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

- 2** The Secretary should reduce duplication between public and private oversight efforts when applying quality improvement standards and measures.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

- 3** The Secretary should assist plans and providers to improve quality. He also should encourage and fund research on appropriate measures and innovative mechanisms to improve quality.

YES: 16 * NO: 0 * NOT VOTING: 0 * ABSENT: 1

* COMMISSIONERS' VOTING RESULTS

Although many efforts are under way to improve quality, we have little information on their impact on the overall quality of care delivered to beneficiaries. The National Committee on Quality Assurance reports that care has improved on the Health Plan Employer Data Information Set measures upon which health plans report (NCQA 2001) and preliminary results from Medicare's quality improvement organization program also reveal improvement in nearly all the targeted clinical areas (Cuerdon 2001). This is an improvement in the knowledge base over what existed a few years ago, but similar to most analyses on the impact of improvement efforts, only focuses on specific areas of care. It is still unclear whether quality measures target the most pressing quality problems or whether the levels of improvement are appropriate.¹ In addition, although some observers have speculated that the implementation of broad quality improvement efforts may save money, developing the infrastructure to measure and improve in specific areas requires resources.

Compounding the uncertain results and cost implications of quality improvement efforts is the complexity involved in measuring performance, seeking to improve care, and demonstrating results. When choosing priorities, plans and providers must consider numerous factors: the availability of accurate measures, the difficulty of collecting reliable and valid data, the prevalence and importance of the problem compared with other quality issues, and the existence of interventions known to improve care in the area measured. Because of the complexity of measuring and improving quality, providers and plans often target resources to improve care in clinical areas in which it is easy to measure and collect data, or where oversight agencies require them to collect data, at the expense of other more intractable quality problems.

Even if an organization's performance can be measured, the most effective intervention to improve performance may not be clear. The relationship between the processes measured and the outcomes of care are more direct in some clinical areas than others. For example, some process measures for diabetes and heart conditions are well established as having an impact on patient outcomes. Process measures for mental health and end-of-life care are less established and it is often difficult to measure their relationship with patient outcomes. In addition, successful improvement usually relies on several factors: patient compliance, communication and coordination between several clinicians, benefit and coverage policy, and the availability of services in a particular region. Thus, the appropriate unit of accountability and action may be difficult to define.

Compounding the complexity of measuring and initiating action to improve quality are data validity issues that become more important if the performance of individual organizations is reported publicly. Sample sizes must be large enough to draw accurate conclusions and risk-adjusted to account for population differences. In addition, the data should be independently audited to ensure accuracy.

¹ CMS does examine the prevalence, cost, need for improvement and statistical ability to measure a specific process when determining its priorities for the QIO program.

The difficulty of the task creates a strong imperative for Medicare to exercise leadership. No other purchaser or oversight body has the capacity to affect all aspects of the care delivery system in so many ways. As the nation's single most influential purchaser, Medicare buys care from plans, institutional providers, and clinicians and can use its power as a regulator and purchaser to ensure that plans and providers work separately and together to improve quality. It also can help address the many gaps in knowledge and capacity. Medicare has multiple tools to stimulate quality improvement efforts. It can:

- act as a regulator and establish standards;
- act as a purchaser and reward high performance;
- act as an advisor and help plans and providers measure and improve care; and
- act as a researcher itself, and in coordination with others such as AHRQ, to develop the science of quality improvement.

The following recommendations provide advice on how to best apply quality improvement standards. However, we suggest that these standards be applied as part of a broader strategy to improve quality. Medicare should use all of the above tools, which complement and build on each other, to improve the quality of care for all beneficiaries.

How should Medicare acknowledge the differing capacities of plans and providers to perform quality improvement when applying quality improvement standards?

Quality improvement standards are currently applied differently to HMOs and non-HMOs in the M+C program and differently between the FFS and M+C program. In the M+C program, HMOs must demonstrate improvement on two QAPI projects, but non-HMOs do not face the same requirements. The M+C program includes quality improvement process and structural requirements, but the FFS program does not. In directing MedPAC to report on how quality improvement standards should be applied, the Congress asked MedPAC to consider the feasibility of applying M+C-like standards to all types of plans and providers in Medicare.

To evaluate the feasibility of applying standards comparable to the M+C quality improvement standards to all plans and providers in Medicare, we first identified the core components of the standards. Second, we evaluated the ability of providers and plans in the M+C and FFS programs to perform these functions, including the potential cost of compliance (see Table 2-1, p. 31).

Our evaluation:

- The core components in the M+C standards are the same as those in the quality improvement standards of other public and private oversight bodies. They require organizations to: measure their performance, improve care by influencing behavior, and demonstrate the results of their efforts on specific measures.

**TABLE
2-1****Provider and plan feasibility of complying with
Medicare+Choice-like quality improvement standards**

	Medicare+Choice HMOs	Medicare+Choice non-HMOs¹	Medicare fee-for-service program (overall)	Fee-for-service institutions (hospitals, SNFs, HHAs, etc.)	Fee-for-service clinicians
Feasibility of measuring quality	Feasible, depending on number of measures. Many already have data collection ability for accreditation and care management.	Feasibility varies by organization and measures. Barriers include: • limited data management systems • broad networks • out-of-network care Factors that remove barriers: • overlap with HMO plan networks make it easier for some non-HMOs to collect data • use of claims data	Feasible. Program infrastructure to measure quality exists in QIO program and through direct beneficiary surveys.	Feasibility varies by size and resources.	Low feasibility. It is costly for clinicians to collect and analyze data themselves.
Feasibility of improving quality	Same as above. HMOs have some ability to influence providers.	Same as above. Non-HMOs usually have less ability than HMOs to influence provider behavior.	Feasible. CMS has tools to influence provider behavior through COPs and QIOs.	Feasible. Institutions: • can affect organization and systems of care • have some influence over clinicians	Feasible. Clinicians are most able to influence clinical quality.
Feasibility of demonstrating quality improvement	Sample sizes are large enough, but the process is costly if too many measures or requirements too specific.	Sample sizes are large enough, but because medical record abstraction is more difficult, results may be less accurate.	Sample sizes are large enough on both a national and state basis.	Depends on measure. Small sample sizes of clinical measures and lack of risk adjustment limit provider-specific data.	Same as institutions, but sample sizes are even smaller.
Could the entity comply with, and be held accountable for, M+C-like requirements?	Capable of complying, but compliance can be costly.	The ability to comply varies. Underlying decision is whether to apply the same requirements to HMOs and non-HMOs. Could be held accountable if measures based on claims and/or given assistance.	Yes. Voluntary CMS efforts to measure, and improve quality and demonstrate results are currently under way in the QIO program. CMS should evaluate the effectiveness of voluntary efforts before determining the need to increase the level of accountability.	All providers could measure and improve some aspect of quality. Requirements must account for provider capacity and be coordinated with other oversight efforts. Assistance may be necessary. Results should not be publicly available by provider unless they are statistically valid.	It is burdensome for clinicians to measure their own care, but they could cooperate with program efforts. Results should not be publicly available on a clinician-specific basis unless they are statistically valid.

Note: CMS (Centers for Medicare & Medicaid Services), COPs (conditions of participation), HHA (home health agency), HMO (health maintenance organization), M+C (Medicare+Choice), QIO (quality improvement organization), SNF (skilled nursing facility), HHA (home health agency).

¹ The term “non-HMO” refers to M+C plans authorized to participate in the M+C program other than HMOs and provider-sponsored organizations. Non-HMOs include preferred provider organizations, private fee-for-service plans and non-network medical savings account plans.

Source: MedPAC analysis.

- Providers' and plans' abilities to perform the functions necessary to meet quality improvement standards vary widely. All providers and plans have some capacity to measure and improve the quality of some aspect of care. However, each plan or provider is responsible for a different aspect of care and varies in its ability to measure performance and affect a change that will improve the quality of care. The usefulness of the data generated in the process also varies. Integrated health plans, such as staff model HMOs, are more capable of measuring their performance than less integrated plan structures, such as PPOs. Providers are more able to influence change than are plans, but have a difficult time demonstrating the results of their efforts because small sample sizes call into question the validity of the resulting data.
- It is feasible to apply some level of quality improvement standards to all providers and plans in Medicare, but not standards comparable to those applied in the M+C program. The M+C quality improvement standards were designed for integrated health plans with the infrastructure to abstract data from medical records, analyze claims data and provide feedback and incentives for clinicians to change their practices. The standards require significant data collection and assume that organizations have a sufficient number of cases for the data collected and reported to provide statistically significant information. These conditions do not exist for all plans in M+C or for institutional providers or clinicians in the FFS program.

The ability to contract with plans and providers that have varying capacities to measure and improve quality should be seen as a strength of the Medicare program. Institutional providers' influence over the quality of care in acute settings complements plans' ability to improve the delivery of preventive services and coordinate care across settings. Plans' capacity to collect data and create a statistically valid sample could be used to assist providers in measuring their own performances.

Quality improvement standards represent a powerful tool for improving quality. The challenge for Medicare is to harness and build on the unique resources of each provider or plan without placing an undue burden on any or all of them.

RECOMMENDATION 1

The Secretary should apply appropriate quality improvement standards to plans in the Medicare+Choice program and institutional providers in the fee-for-service program, recognizing differing plan and provider capabilities. He should reward plans and providers for high quality performance and improvement.

All plans and providers should contribute to the goal of improving quality. Just as quality improvement standards are applied through contracting requirements to M+C plans, CMS should also apply them to FFS institutional providers through the COPs.² However, each must contribute in a way that recognizes the strengths and weaknesses of organizations and providers.

² We note that CMS has included such standards in several proposed conditions of participation and suggest these requirements be included in the final rules.

The application of standards to both sides of the program may make each program's efforts more effective. Requirements creating expectations for HMOs can stimulate provider activity, and requirements on providers may contribute to improved quality within M+C organizations. Stimulating provider activity is particularly important given the lesser abilities of non-HMOs to measure and improve care.

In addition, rewarding plans and providers that reach a high level of performance or improve significantly should be an integral part of a quality improvement strategy. Rewards should be available whether the efforts are voluntary or result from mandatory requirements. Because of the uncertainty and complexity of applying standards, creating incentives is a way to stimulate further improvement and recognize those who invest more resources in improving quality.

Applying quality improvement standards flexibly

CMS should design its own standards in a way that recognizes the differing responsibilities and capacities of its contractors. This approach balances Medicare's goal of providing high-quality care to beneficiaries with the need to ensure access to sufficient numbers and types of plans and providers.

Applying standards that do not recognize the differing responsibilities and capacities of plans and providers could:

- increase the cost of services for Medicare,
- cause providers or plans to leave or not enter the program,
- reduce resources for other priority areas,
- ensure that only HMO-like structures are available to beneficiaries in the M+C program, and
- cause harm to providers or plans if data are misleading.

Strategies for applying quality improvement strategies in the Medicare+Choice program

Plans vary in their ability to measure performance in accordance with M+C standards.³ Collecting data on all HEDIS measures and in a manner sufficient to meet the requirements for QAPI projects requires M+C organizations to have or establish sophisticated capacities for data collection and analysis. In addition, intervening in and being accountable for improvements in care requires data systems and clinical and statistical expertise. These technical difficulties are compounded for all plans by the number of areas in which data must be collected, including over 20 HEDIS measures and 2 new QAPI projects annually.

³ Even though many have questioned the ability of non-HMOs to meet M+C standards, limited experience exists within the M+C program to inform the discussion. Currently, only two PPOs and one private fee-for-service plan participate in the M+C program. The private fee-for-service plan joined in 2000. The largest PPO was part of a demonstration project that began before the enactment of the BBA and had difficulty meeting the HEDIS data collection requirements.

Although more integrated plans and those that are already accredited may have developed this capacity, non-HMOs and even less-integrated HMOs may be less able to collect the necessary data and design and implement effective interventions.⁴ Three factors, in particular, limit the ability of some plans to measure and improve care: (1) broad networks, (2) the lack of a requirement for enrollees to choose a primary care physician, and (3) the ability for enrollees to seek out-of-network care. These structural characteristics provide beneficiaries a broad choice of providers, but make it difficult for plans to obtain information on quality from medical records. They also make it difficult to know how and where to focus efforts to influence clinician behavior.

Non-HMOs can collect information on care delivery through claims data. Claims provide a more limited source of information than medical records, but they can be used for measuring performance and are readily accessible. Many of the HEDIS measures upon which all M+C organizations must collect data rely heavily on claims.

The limited ability to collect data from medical records also raises concerns about the appropriate use of information generated from non-HMO efforts. Because plans' abilities to measure and improve care vary, some plan data may be more valid than those of others. Releasing the data for comparisons of plans could be misleading unless the data collection efforts are uniform.

Recognizing these limitations, the commission believes much of the focus on non-HMOs should be at the provider level. Because the locus of responsibility for care management in non-HMOs remains, for the most part, with individual providers and patients, CMS could use its ability to work directly with providers through the fee-for-service program to stimulate quality improvement in non-HMOs. At the same time, working through the structure of the non-HMO may make CMS fee-for-service efforts more effective.

This could be done in several ways. First, non-HMOs could encourage their network providers to participate in the QIO improvement projects. Second, medical management of the non-HMO could act as the interface between individuals or groups of physicians to provide feedback and suggest strategies for improvement. QIOs could do the work of reviewing cases and claims, and plans' medical management could disseminate reports and meet with group medical directors.

Currently, non-HMOs are required to collect data from both claims and medical records for purposes of reporting on HEDIS measures. It may be appropriate to limit non-HMO HEDIS data collection efforts to those measures that rely on information from claims. Requiring non-HMOs to analyze and report on measures derived only from claims data acknowledges the difficulty they have obtaining information from medical records, but requires that they use information sources available to them.

⁴ Health plans fall on a continuum, ranging from highly integrated and managed systems of care to entities that essentially serve a payment function. In particular, distinctions between PPOs and HMOs have become blurred as hybrid or blended structures are created to better address the needs of consumers (see Appendix A).

While limiting data collection efforts to information from claims may address the limited ability of non-HMO plans to collect data from medical records, it does not address their limited ability to work with and influence providers. However, because their claims databases are valuable sources of information on care patterns, it is still useful for the information to be reported. The information allows the program to track broad patterns of care delivery and potentially allows CMS to follow up through the QIO program with specific providers or provider groups with strategies for improving care.

Because it is difficult for non-HMOs to influence provider behavior, the current exemption from “demonstrating improvement” on the two QAPI projects is appropriate. However, plan structures are evolving and the distinctions between non-HMOs and HMOs are increasingly blurred. (See Appendix A for further discussion of the differing types and characteristics of PPOs and HMOs.) The exemption and any other regulatory distinction that develops may need to be re-examined if techniques for managing care in less integrated structures improve.

Strategies for applying quality improvement standards in the fee-for-service program

The fee-for-service Medicare program can be thought of as operating on two levels: as a plan and as a provider. At the plan level, CMS can act as a plan administrator to measure and improve care for all beneficiaries. At the provider level, the agency encourages individual institutions and clinicians to take responsibility for delivering services of high quality to beneficiaries.

Can CMS, as the plan administrator for fee-for-service Medicare, measure and improve quality and be held accountable for the results of its efforts? It certainly has the infrastructure to measure quality of care. In fact, CMS has one of the best systems for medical record abstraction in the country: the QIO program. However, Medicare also provides beneficiaries the broadest network of providers in the country, which may limit its ability to focus improvement efforts.

As a large and important payer for health services, CMS can have a powerful influence on provider behavior. When the agency establishes new requirements, providers pay attention and work to comply. Some suggest that the importance of Medicare as a payer increases providers’ willingness to work with the QIOs even though they are not required to do so.

On the other hand, CMS has little ability to influence provider behavior. The agency rarely terminates provider contracts and has difficulty communicating policy changes to its numerous contractors. In addition, it has a limited budget to monitor provider compliance with its complex quality improvement standards.

On a national and state basis, the Medicare program has enough cases in specific clinical areas to create valid and reliable data upon which to evaluate how well care is being delivered to segments of the Medicare population. However, the extent to which the efforts of QIOs influence provider behavior is unknown. The QIOs reach only a subset of providers and beneficiaries, and the quality of care is influenced by many other forces.

The voluntary approach of the QIO program is currently the primary tool CMS uses for quality in FFS. The Congress has never established quality improvement expectations for the FFS program, and CMS does not require providers to participate in QIO quality improvement projects. CMS is currently evaluating whether and to what extent improvement has occurred in its clinical priority areas. One positive outcome of the voluntary approach for providers is the shift away from the traditional punitive approach of the QIO program. This shift has led to the establishment of numerous partnerships and coalitions across the country directed at improving care.

How well can institutions and clinicians measure, improve, and demonstrate the results of their quality improvement efforts? The ability of individual health care organizations and clinicians to measure the quality of the care they deliver varies by setting, size, and the type and number of requirements. Large hospitals may have the resources to measure and improve care, but smaller hospitals and home health agencies may not. Large group practices may have the capacity, but individual clinician offices probably do not.

Providers' ability to measure their performance also varies by the type and number of measurement requirements. If criteria and methods for measuring care were defined as rigorously in FFS as they are in the M+C regulations, the statistical and clinical expertise of many institutional providers would be insufficient to meet the standards. Providers often lack the analytic skills and the personnel to perform and demonstrate the results of their efforts on a large number of projects.

Because institutional providers control the organization of services and operate at close proximity to clinicians, they probably have more influence than plans over clinician behavior. However, tension between facility administrators and clinicians often exists, and in some regions clinicians are in great demand. Because institutions do not want to exacerbate tensions or lose clinicians, they are often reluctant to press clinicians to change their practices. In addition, many non-hospital settings experience high rates of staff turnover, making it difficult to implement quality improvement efforts. Although institutional providers may experience some difficulty engaging clinicians, clinicians are better able than institutional providers to influence the manner in which care is delivered and are essential for any quality improvement effort to succeed.

It is difficult to use data collected on clinical measures to report publicly on the results of institutions' and clinicians' efforts to improve care. Very few institutions treat enough patients in specific clinical areas to create a large enough sample to draw meaningful conclusions about the quality of care in the institution. In addition, some providers see more complex patients with co-morbidities. Without adequate risk adjustment, some institutions or clinicians could appear to have poorer outcomes simply because they see sicker patients.

Recognizing these limitations the Commission believes that it is possible to require institutional providers to establish and be held accountable for measuring and working to improve care. The Commission supports CMS's efforts to include quality improvement requirements in the conditions of participation of all types of institutional providers. However, to reflect differing abilities, Medicare standards for institutional providers should allow organizations to:

- determine how to establish processes for measuring and improving quality without having to adhere to overly specific CMS criteria,

- choose their own priority measurement areas or work to improve on a parsimonious set of CMS-chosen measures, and
- report publicly only data that are valid and reliable measures of the organization's performance.

In addition to these criteria for establishing standards, CMS should consider strategies to improve data validity and develop reasonable quality improvement expectations for providers with limited resources (in particular, clinicians). Requiring clinicians to establish processes and structures to measure and improve quality and to report data on specific performance measures would place a significant burden on small practitioners' offices. However, CMS may want to consider ways to stimulate clinician participation in the QIO and M+C plan efforts. For example, clinicians could be required to make clinical data available to either health plans or the QIOs to measure their performance. Research is under way to develop clinician-specific measures. It may be appropriate in the future to use these measures for purposes of accountability or beneficiary choice.

Two other strategies for applying quality improvement standards could address the data validity issues inherent in clinical care measures. First, collecting the data once at the provider level, and then combining it with other provider data for plan or regional performance measurement would ensure that each provider had information upon which it could act to improve as well as provide data that would be accurate enough to release publicly. Provider-specific data would only be used for internal quality improvement purposes. The data from the larger, combined sample could be used for public comparisons either by regions or by plan. This strategy recognizes that providers often contract with numerous plans and that their actions often have the most effect on the quality of care. While data would not be used to hold providers accountable, it could reveal national or state trends in progress in particular clinical areas or be used to distinguish between plans.

CMS also should explore ways to evaluate care in institutions by using broad process measures. For example, hospitals could report on whether and how they had established safe practices to control infection. Preventing infection affects a much broader patient base than many current measures such as whether heart attack patients were discharged on beta-blockers. Another example of a broad measure affecting all patients would be patient perception of the quality of their care.

Another approach currently under discussion that would enhance the validity of provider-specific data is combining several process measures for a specific disease category. The QIO program uses several measures of clinical processes that are associated with good heart care. They could be combined, presumably increasing the sample size and statistical validity of the measure to develop a hospital-specific measure on heart care.

These strategies can complement one another. Examining care in specific clinical areas may uncover broader system problems that could become the focus of improvement efforts. Conversely, examining a broad system problem may highlight problems in specific clinical areas.

Rewarding performance

Given the uncertainty about the most effective strategies for applying quality improvement standards, standards should be applied in a broader context that includes rewards for high performance and improvement. Many believe that the best motivation for improving quality comes from the provider or plan itself. Because standards generally rely on external motivation and negative incentives such as “if you do not comply you cannot participate in Medicare” rewarding providers for their efforts may be a more potent stimulus for improving quality.

This approach also may address the concern that applying quality improvement standards differently to distinct plan and provider types could create an unfair market disadvantage for those required to comply with more rigorous standards. Creating rewards for either level of performance or effort may lessen any market disadvantage. This type of strategy may also be used to reward providers who voluntarily work with the QIO program.

Performance could be rewarded when plans or providers:

- *Meet or exceed an established benchmark.* For example, if CMS determines that 85 percent of women receiving mammograms in a given year is the target level of performance, plans that meet or exceed that level could be rewarded.
- *Demonstrate exceptional improvement.* For example, CMS could set a goal of 10 percent improvement on a specific clinical topic and reward those who improve 20 or 30 percent. This would ensure that rewards were available for plans or providers who show great improvement over a low initial score on a measure, but are still not able to meet or exceed the benchmark level.

Three ways to reward providers or plans for their quality improvement are:

- *Financial incentives.* CMS or the Congress could base a percentage of an organization’s payment on its performance on quality measures. Because this would increase the need for comparative data, it would be a difficult strategy to implement. Another less cumbersome approach might be simply to base the decision to pay the full amount on whether the provider reported the requested data and cooperated with program efforts to improve care.
- *Minimizing oversight.* This strategy involves identifying some type of regulatory requirement that could be lifted if an organization demonstrated a high level of performance. This would presumably save the organization resources. CMS is implementing one form of this strategy in the M+C program by allowing plans that have reached a certain level of performance on a measure to opt out of the national priority project on that topic for one year. Another strategy would be to exempt organizations that consistently perform well on certain indicators or through accreditation and surveys from some of the regulatory oversight applied to others who perform less well.
- *Incentives to increase volume.* Making information public on plans’ efforts to improve, or on their high performance on certain measures, is one way to reward those who work to improve quality. It presumes that beneficiaries will use the publicly available information on providers and plans in their region to make choices. Plans that do well or are seen as more committed to quality improvement should expect a higher volume of patients or enrollees. This may provide value to M+C plans and act as a stimulus for institutions or clinicians to work with the QIOs.

Some private-sector purchasers provide employees a mix of cost and quality information in an attempt to steer employees to the best providers or plans. The employer or administrator of benefits collects quality information on a network or group of providers or on various health plans and gives a higher subsidy to employees who choose higher-quality organizations. It would be difficult without legislation for Medicare to vary the costs of the benefit for beneficiaries, but CMS could, at a minimum, provide cost and quality information to the beneficiaries.

Some policymakers have suggested that another way Medicare could steer beneficiaries to high-quality providers is through disease management programs. In the private sector, such programs often require patients with certain conditions to be treated by a limited number of providers who are especially qualified to treat their condition. This strategy would not eliminate providers from participating in Medicare, but would result in a higher volume of patients for those that may have more expertise in a particular treatment modality or condition.

How should the Secretary work to improve coordination between private and public sector oversight efforts?

Plans and providers must comply with multiple sets of quality standards and measures from different oversight bodies. These standards and measures are often similar but not identical, which creates extra work without any significant gain. Therefore, coordination with other oversight and purchaser standards may help to lower the costs of applying M+C-like or any quality improvement standards. By coordinating its efforts with the private sector, Medicare can also learn from and build on the experiences of other purchasers and accreditors.

RECOMMENDATION 2

The Secretary should reduce duplication between public and private oversight efforts when applying quality improvement standards and measures.

Redundant requirements add costs to the program and take resources away from other quality efforts. In addition to lowering costs, coordinating oversight efforts may have other positive effects. If plans and providers know that their efforts for other purchasers and accreditors will help them meet Medicare standards, they will be more likely to seek accreditation or to perform other quality improvement projects. In addition, by creating a more unified, less diffuse approach to quality improvement, efforts to improve quality may be more effective.

Relying on accreditor standards also would create efficiencies for the Medicare program by lessening the workload for state surveyors. In addition, private accreditors usually require organizations to be re-accredited periodically and update their standards regularly, which is difficult for Medicare. This helps to ensure that quality improvement standards evolve as the field progresses.

Strategies for coordinating efforts

Strategies for coordinating efforts between the public and private sector would affect the M+C and fee-for-service programs differently. In the M+C program, the time it has taken to establish a deeming relationship and the number of measures upon which data must be collected has created duplication. In the fee-for-service program, the ability for institutions to use private accreditation status to meet the process and structure requirements in the COPs is well established. However, the lack of standardization in the specific measures upon which organizations are required to report (or soon will be) across oversight agencies and purchasers is of concern. It is important to note that Medicare, although the single largest purchaser, cannot ensure coordination of oversight efforts on its own. Private purchasers also develop their own requirements for plans and providers, and may or may not build on the efforts of accreditors or Medicare.

Medicare+Choice program

Currently, CMS applies its own structural and process requirements to M+C organizations through QAPI. These requirements differ somewhat from accreditor standards. M+C organizations must establish slightly different and sometimes conflicting processes to meet each set of standards and must prepare for surveys multiple times, which requires significant staff resources. While this may change as CMS begins to allow plans to use NCQA, and potentially other accreditors', standards as a means of complying with the M+C requirements, currently plans are duplicating efforts.

Duplicative effort is also an issue in the choice of performance measures for CMS, because they require extra time to collect, analyze and report data. CMS was involved in the development of the Medicare version of HEDIS. Many thought that because of this collaboration CMS would rely on the Medicare version of HEDIS for their M+C reporting requirements. However, CMS chose to require plans to report on both the Medicare version of HEDIS and two additional QAPI projects every year. Reporting on HEDIS requires a significant number and type of data collection efforts. It is unclear whether the extra work required to report on both HEDIS and QAPI measures results in improved quality.

CMS did (and continues to) take steps to lessen this burden and move to greater consistency with private accreditors' standards. As noted previously, the agency has been evaluating several accreditors' standards to determine whether they are stringent enough to qualify for deemed status and recently announced that NCQA will be granted deeming authority.⁵ Allowing one or more of these sets of private accreditation standards to be sufficient to deem a plan to have met all of the QAPI requirements, may diminish concerns about duplication of effort.

⁵ The statute did not allow accreditation to suffice for all M+C requirements, but only for quality assurance, access to services, provider participation rules, information on advance directives, anti-discrimination, and confidentiality and accuracy of beneficiary records. However, there are other statutory requirements left for CMS to enforce, such as enrollment processes and grievance and marketing procedures. It may be appropriate for the government to maintain oversight over these other functions. However, plans must then interact with two oversight bodies instead of one. As of the writing of this report, CMS has informed us that NCQA will be granted deeming authority for all six areas. The other two applications from JCAHO and the AAAHC are still under review.

CMS has also tried to coordinate with the private sector in their use of HEDIS measures. For the most part, the Medicare version of HEDIS is a subset of the private sector version. In an effort to ensure consistency across the two versions, CMS relies on NCQA for the data specifications of Medicare HEDIS. NCQA also accredits organizations that audit M+C HEDIS data.

In addition, CMS encourages M+C organizations to use a HEDIS measure to satisfy their self-designated QAPI project. Using a HEDIS measure to satisfy the QAPI project requirement lessens the burden of these standards for two reasons: the M+C organization performs one less data collection effort, and is not required to justify why it chose and defined the specifications for the measure. CMS also chose a HEDIS measure screening for breast cancer as one of its initial national projects.

CMS could increase its efforts to reduce duplication by:

- *Evaluating the need for additional standards.* The Commission recognizes that Medicare has a responsibility to ensure that its beneficiaries receive high-quality care and does not believe that CMS should abdicate this responsibility. However, given the fact that many M+C plans are already accredited and the cost of measuring care on numerous dimensions can be high, the agency should perform a careful analysis of the need for different or additional Medicare standards. CMS should consider whether its standards offer enough extra value to be worth the extra effort of requiring plans to seek compliance with multiple sets of standards. This analysis may become possible after January 2002, when the results from the first QAPI projects are available.
- *Relying on a deeming relationship as often and as broadly as possible.* For the reasons stated above, the public sector should rely on private accreditation standards and processes as often as possible. CMS should continue to work with private accreditors to make it possible for plans to demonstrate their commitment to quality improvement without duplicating efforts.

In determining whether an accreditor's standards and processes are sufficiently rigorous to allow a deemed status relationship, CMS should base its evaluation on the overall level of protection afforded the beneficiary from either compliance with the accreditor's standards or compliance with specific CMS requirements. This is the approach CMS takes in the FFS program. Plans and accreditors have voiced concern that CMS may decide to grant deemed status to plans only for specific accreditation standards. This approach would require health plans to go through both the entire accreditation process as well as evaluation by CMS for specific quality improvement requirements, as opposed to one overall certification process by an accreditor or CMS. While this approach may alleviate some duplication, it could also further complicate the compliance process and potentially add to the costs.

- *Reducing the number of measures.* Determining whether plans' infrastructures and efforts are sufficient should not be based on the number of areas measured, but the relative importance of the selected topics to their beneficiary members. Because data collection and analysis is an expensive part of compliance with quality improvement standards, CMS should evaluate the need for measures currently included in data collection efforts. If CMS determines that fewer measures would suffice, it could limit data collection to HEDIS measures and not require two additional QAPI projects, or conversely, rely on measurement and improvement on two QAPI projects and not require HEDIS data collection. Additionally, CMS could reduce the number of HEDIS measures upon which plans must collect data.

Fee-for-service program

In the FFS program, much of the potential for duplication between the private and public sectors has been alleviated by the historic deeming relationship between CMS and private accreditors for institutional providers. However, as accreditors, purchasers and CMS are increasingly requiring providers to report their performance on specific measures, standardizing these measures is critical to reducing duplicative efforts. Institutional providers and individual practitioners collect the data for many clinical quality measurement efforts. Data in the same clinical area may be collected in slightly different ways or in different clinical areas for the same goal. This lack of coordination on the part of purchasers and public and private oversight agencies creates extra costs for providers without any clear gain in improved quality. In fact, many providers argue that resources are taken away from efforts to improve care in other higher-priority areas.

Some efforts are already under way to coordinate current or potential Medicare measurement requirements with other oversight bodies' and purchasers' measures. CMS is working with the JCAHO to ensure that the QIO measures are defined as similarly as possible with the soon-to-be required JCAHO core measures for hospitals. In addition, CMS has been a strong supporter of the NQF efforts to identify measures that could be supported by a broad group of stakeholders. CMS should continue its efforts to standardize measures and should enhance these efforts by:

- *Evaluating the need for additional Medicare-specific standards and measures.* As in the M+C program, when CMS designs standards for quality improvement in FFS it should evaluate whether the standards duplicate ones that an organization may have already met, or whether different standards are really necessary to increase the organization's ability to improve quality.

If it is not possible to ensure that oversight agencies and purchasers use performance measures in a way that permits one-time data collection, CMS should consider whether requiring two data collection efforts is worth the additional resources.

- *Coordinating efforts across the M+C and fee-for-service programs.* Many of the measures on which M+C plans collect data rely on provider-level information. This places a burden on providers that could be lessened if the measures for the M+C and FFS programs were the same, or at least better coordinated. For example, measures could be in the same clinical area, so that efforts to improve for one part of the program would help the organization meet requirements for the other side of the program.

Are there other ways that Medicare could help stimulate quality improvement?

The science of quality improvement continues to evolve, and the ability of plans and providers to improve quality varies widely. Therefore, it is critical that Medicare not only stimulate direct efforts to improve quality through the application of standards and the creation of incentives, but also help develop and provide tools for those who are working to improve quality of care.

Our analysis of the ability of different types of plans and providers to meet quality improvement standards reveals some significant gaps in our health care system's ability to measure and improve the quality of care. Loose networks have great difficulty collecting data other than claims data, do not often have the expertise to analyze the data, and do not have strong mechanisms in place to influence clinicians' behavior. Small institutional providers also need help with these tasks. Ironically, the provider most able to affect clinical quality—the clinician—has the least ability to measure quality of care.

Many plans and providers and the recent IOM report cite the lack of information systems capable of collecting and analyzing data as a key barrier to the ability to measure and improve care. In particular, without a computerized patient record, it could be difficult to implement quality improvement on a broad scale.

In addition to gaps in capabilities, there are many gaps in knowledge about effective quality improvement efforts. One of the biggest gaps in knowledge is how to effect change. In discussions with MedPAC, plans with a sophisticated ability to measure care on important clinical measures, the QIOs, hospital personnel, and even clinicians questioned their own knowledge and ability to improve care. They said it is hard, slow work and that more needs to be learned about effective mechanisms from those who have succeeded in improving quality. Other gaps include measures in less-studied clinical areas and the means to achieve appropriate risk adjustment.

RECOMMENDATION 3

The Secretary should assist plans and providers to improve quality. He also should encourage and fund research on appropriate measures and innovative mechanisms to improve quality.

The CMS strategy of using expert clinicians and statisticians of the QIOs to shore up the lack of expertise in some plans and providers should be supported and expanded. This assistance may need to be increased if more non-HMOs enter the M+C program or if CMS imposes additional quality improvement requirements on FFS providers. Institutional provider reporting on core measure sets—a goal of JCAHO, the NQF and CMS—will also create new data collection and analysis burdens for providers for which they may need assistance. They may require technical assistance to collect and analyze data, or advice on successful interventions. The QIO program can also provide individual providers with feedback on how their performance compares to other similar providers in the same region.

Built into any assistance should be an understanding that CMS will share what it learns from one provider or plan with others. Currently, plans and providers are often left on their own when designing and implementing quality improvement projects. This makes it difficult for those without an established infrastructure to improve quality. While it would not be useful for CMS to dictate how to perform quality improvement, CMS could, along with other agencies such as AHRQ, distribute information on best practices in quality improvement. Funding and research are useful, but it is critical that an explicit mechanism be developed to share knowledge.

Although it is unclear who should take responsibility for the cost of designing and implementing an information infrastructure, information is a basic component of a broad quality improvement strategy. The recent IOM report recommends that this responsibility be a shared public/private partnership. As Medicare beneficiaries are significant users of the health system, the Secretary should consider the resources within the Department of Health and Human Services to determine how to best contribute to the development of such an infrastructure.

Additional research and assistance is also critical to advance performance assessment, particularly in areas where less is known and on conditions that are important to the Medicare population. The Secretary has enormous research resources through AHRQ and CMS and the advantage of a very large population base upon which to collect data. He also has many efforts under way that should be studied. The Medicare program, through both the quality-improvement efforts in the FFS QIO program and the M+C QAPI requirements, provides a natural laboratory for determining what works best and could lead the country in stimulating quality improvement.

Research could be done in several areas:

- *Projects that plans or providers might perform in response to incentives.* If the Secretary were to establish rewards for plans or providers that achieve high performance or improvement (as in Recommendation 1), these efforts should be studied to come up with a list of “best practices” that could be shared more broadly. For example, research could be done on successful motivation techniques for providers, mechanisms to maintain high performance over time, improving measures to more accurately evaluate health care processes, and improving measures to create a more direct relationship between the process measured and the outcomes of care.
- *The experience under the QAPI projects of the M+C program and the QIO program’s work with providers.* CMS will evaluate the QAPI projects after plans report on their results in January 2002. Results from QIOs’ work with providers should be available within the next six months on a national and state basis in each clinical area. CMS should evaluate each program’s successes and failures to understand how and why improvements were or were not achieved and identify ways in which the two programs could learn from each other.
- *The identification of appropriate risk-adjustment methods for publicly-reported data on institutional providers.* CMS could study the data collected from various providers to risk-adjust measures. This would be particularly useful for the current nursing home and home health initiatives, in which CMS is hoping to use data on indicators of quality for surveyor evaluation and public comparisons. Without adequate risk adjustment, analyses of these data could lead to public misperceptions about care delivered in specific institutions.
- *The identification of process measures relevant to outcomes of care in clinical areas and settings where quality improvement measures are less well-established or less is known about effective improvement.* For example, two serious medical issues for beneficiaries are depression and end-of-life care. More research is needed to identify performance measures that can be compared across settings and are associated with good outcomes to ensure the highest-quality care is available to these beneficiaries. ■

References

Cuerdon T. Center for Medicare and Medicaid Services. E-mail communication to MedPAC. November 9, 2001.

Docteur E. Measuring the quality of care in different settings, Health Care Financing Review. Spring 2001, Vol. 22, No. 3, p. 1–12.

The Institute of Medicine. Crossing the quality chasm: a new health system for the 21st Century. Washington (DC), The National Academy Press. 2001.

Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC. June 2000.

Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC. June 1999.

National Committee for Quality Assurance. The state of managed care quality. Washington (DC), NCQA. 2001.

A P P E N D I X

A

Types and characteristics of HMOs and PPOs

In today's health care market, health plans fall on a continuum ranging from highly integrated and managed systems of care to entities that essentially serve a payment function (Wagner 2001). Managed indemnity plans which provide minimal management functions such as precertification of elective admissions, are at one extreme. At the other are closed-panel or staff model health maintenance organizations (HMOs). Between the two extremes are a variety of plan structures including service plans, preferred provider organizations (PPOs), point-of-service (POS) options, and open-panel HMOs (independent practice associations). These organizations vary in their degree of control and accountability, complexity, the amount of operational overhead, and their potential for controlling cost and quality.

Recently, the distinctions between managed care plans and traditional forms of health insurance have become blurred, as hybrid or blended structures have been created to better address the needs and desires of consumers. In particular, there is a significant overlap between characteristics of HMOs and PPOs. To provide more choice to consumers, HMOs that historically used a specified panel of providers now offer POS plans, which allow consumers to seek care from nonparticipating providers, usually at a reduced coverage level. Thus, POS plans combine both HMO and indemnity product characteristics. In a similar manner, certain PPOs that historically were noted for unrestricted access to providers have adopted more managed care characteristics and activities such as case management and gatekeeper functions. The following section discusses the different types of HMOs and PPOs.

Health maintenance organizations

HMOs provide both financing and delivery of health care services for a defined population (enrollees). Thus, an HMO functions as both a health insurer and a health provider. As a provider, an HMO must ensure access to and quality of health care services for its enrollees. There are several major categories of HMOs:

- *Staff model HMO.* In this case, physicians employed by the HMO care for its enrollees. Physicians earn a salary and may receive bonuses or incentives based on their performance. Physicians are usually based in outpatient facilities owned by the HMO that often operate basic support services such as laboratory and radiology departments. Inpatient, nonphysician care is usually provided by facilities in the community, which contract with the HMO. Although staff model HMOs employ physicians in most common specialties, they will often contract with selected subspecialists for health services infrequently required by their enrollees. A staff model HMO exerts control over its physicians, which allows it to better manage the use of services and the quality of care. However, the cost of developing an infrastructure to manage care and quality is high for a staff model HMO, and enrollees have a limited number of practitioners to choose from.

- *Group model HMO.* In this model, an HMO contracts with multi-specialty physician groups that provide care to its enrollees. There are two types of group model HMOs: the captive group and the independent group. In the former, the physician group exists to treat the HMO's enrollees.¹ In the latter, an independent multi-specialty group contracts with the HMO to provide care to its beneficiaries. Physicians may see non-HMO patients concurrently. Both the staff model and group model are "closed-panel" HMOs because physicians must be part of the group practice to care for the HMO's enrollees. The group model facilitates utilization management but limits beneficiary choice of providers.
- *Network model HMO.* In this model, the HMO contracts with more than one multi-physician practice or specialty group, which increases geographic access and affords its enrollees greater provider choice. Conditions of participation are dictated by the contract. Network models may be either closed or open panel. In some cases, the network is limited to primary care providers who are compensated on an all-inclusive and capitated basis. In a primary care network model, the physician may be financially responsible or at risk for referrals to non-group specialists.
- *Independent practice association model HMO.* The independent practice association (IPA) is a distinct legal entity, consisting of an association of independent physician practitioners. An HMO contracts with an IPA to provide physician services to its enrollees. Physicians maintain their own offices and continue to treat non-HMO patients. In general, IPA model HMOs are open panel, with broad participation of primary care, specialty and subspecialty physicians. IPAs are of various sizes and can be communitywide or hospital based. In addition, IPAs can be independently established by community physicians or created by an HMO through recruitment of local practitioners. In the second instance, the HMO may require an exclusive contract with the IPA. IPAs are compensated on an all-inclusive capitated basis by the HMO. Subsequently, the IPA compensates its physicians either on a fee-for-service basis or a combination fee-for-service and primary care capitation system. Hence, the HMO transfers financial risk to the IPA. Although the IPA model HMO provides greater choice of physician provider than the staff or group model, utilization management is more difficult because practitioners retain their independence.
- *Direct contract model HMO.* In this type, HMOs contract directly with individual physicians, both primary care providers and specialists, to provide services to their members. As a result, physicians are usually available for beneficiaries to choose from. Physicians are compensated on a fee-for-service basis or a primary care capitation scale. Unlike the IPA model, a direct contract model HMO retains financial risk for providing physician services. Similar to the IPA model, in which physicians remain independent practitioners, utilization management is more difficult in a direct contract model HMO.
- *Mixed model HMO.* As the name implies, a mixed model HMO incorporates and combines features from other types of HMOs. For example, a closed-panel HMO may add an open-panel option to its health plan.
- *Open access HMO.* Open access HMOs are similar to PPOs in that they do not employ a gatekeeper to manage access to or utilization of services. In this model, there is no requirement to see a "gatekeeper" or primary care physician before being referred to a specialist. Frequently, physicians share the financial risk of medical costs in an open access HMO.

¹ An example of a captive group HMO is the Kaiser Foundation Health Plan, where the Permanente Medical Groups provide all physician services for (and only to) Kaiser's enrollees.

- *Self-insured or experience-rated HMO.* In this model, an employer's rate for health services provided by an HMO is based on a fixed monthly payment to cover administrative services and profit; as well as a variable payment based on actual or incurred health care expenses. Some states preclude this type of arrangement.
- *Specialty HMO.* Specialty HMOs provide select aspects of health care such as mental health services, dental care, and vision/eye services.

Preferred provider organizations

Although the PPO concept has existed for a long time, PPOs have recently become the nation's most popular health care delivery system. A desire for greater flexibility and individual choice propelled PPOs to their current preeminent position in the managed care marketplace. PPO is a term used to describe a variety of different structural arrangements that vary in the degree of integration of their clinical components and, hence, the ability to manage care. All PPOs share a common characteristic: a network of health care providers who have agreed to provide care to patients for a contractually established reimbursement rate. In this regard, PPOs are similar to open-panel HMOs (network, IPA, direct contract, and open access).

There are three general categories of PPOs (American Accreditation Health Care Commission/URAC 2000): lease-type PPO network, managed PPO network (non-risk PPO), and integrated PPO plan (risk PPO). Within each category, there are many variations. In addition, PPOs often blend different aspects of two or more types, creating hybrid or mixed model entities, which in some instances closely resemble HMOs with expanded networks. The general distinctions between the three major types of PPOs are as follows:

- *Lease-type PPO network.* Also referred to as a rental or brokerage PPO, this type "rents" its network of providers to another network or insurer/purchaser but does not sell directly to patients. This model emphasizes expanded provider access and negotiated discounted fee-for-service prices. Traditionally, lease-type PPO networks do not "manage" care to any significant extent.
- *Managed PPO network (non-risk PPO).* In this category, the PPO contracts with a payer such as an insurance company, self-insured employer or third-party administrator. The primary objective of this type of entity is to negotiate significant discounts for health care services from its network providers. In addition, as its name suggests, this type of PPO may perform managed care and/or insurance activities such as payment of claims, utilization management, plan administration, and quality assurance activities. In general, this type of PPO does not directly enroll patients and has limited, if any, contact with them.
- *Integrated PPO plan (risk PPO).* An integrated PPO plan directly enrolls individuals into a health benefits program. It provides similar services as a managed PPO network. In addition, an integrated PPO plan may indirectly bear the financial risk for its enrollees' medical care by partnering with another entity that has an indemnity license. An HMO or insurer may offer an integrated PPO's network in a similar manner as an HMO-sponsored point-of-service plan. ■

References

The Utilization Review Accreditation Commission (URAC)/the American Accreditation of Healthcare Commission and the American Association of Preferred Provider Organizations (AAPPO). Rise to prominence: the PPO story. Washington (DC), AAPPO/URAC. April 2000.

Wagner ER, Chapter 2, Types of managed care organizations. In Essentials of managed care, fourth edition. (Kongstvedt PR, editor) Gaithersburg (MD), Aspen Publishers, Inc. 2001.

A P P E N D I X

B

**Commissioners' voting
on recommendations**

Commissioners' voting on recommendations

In the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA), the Congress required MedPAC to call for individual Commissioner votes on each recommendation, and to document the voting record in its report. The information below satisfies that mandate.

Recommendation 1

The Secretary should apply appropriate quality improvement standards to plans in the Medicare+Choice program and institutional providers in the fee-for-service program, recognizing differing plan and provider capabilities. He should reward plans and providers for high quality performance and improvement.

Yes: Braun, Burke, DeBusk, Feezor, Hackbarth, Loop, Muller, Nelson, Newhouse, Newport, Raphael, Reischauer, Rowe, Smith, Stowers, Wakefield
Absent: Rosenblatt

Recommendation 2

The Secretary should reduce duplication between public and private oversight efforts when applying quality improvement standards and measures.

Yes: Braun, Burke, DeBusk, Feezor, Hackbarth, Loop, Muller, Nelson, Newhouse, Newport, Raphael, Reischauer, Rowe, Smith, Stowers, Wakefield
Absent: Rosenblatt

Recommendation 3

The Secretary should assist plans and providers to improve quality. He also should encourage and fund research on appropriate measures and innovative mechanisms to improve quality.

Yes: Braun, Burke, DeBusk, Feezor, Hackbarth, Loop, Muller, Nelson, Newhouse, Newport, Raphael, Reischauer, Rowe, Smith, Stowers, Wakefield
Absent: Rosenblatt

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