
Shifting the Paradigm: Monitoring Access in Medicare Managed Care

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Medicare managed care enrollment growth points to the need to develop an approach for monitoring access to care for the increasing number of beneficiaries who use these arrangements. This article describes the issues to be addressed in designing a system for monitoring managed care plan enrollees' ability to obtain needed medical care on a timely basis. We review components of the monitoring approach used for traditional fee-for-service (FFS) Medicare, including the conceptual framework, data, measures, and subgroups targeted in monitoring efforts, and discuss the adaptation of that approach for monitoring access in Medicare managed care.

INTRODUCTION

Managed care currently plays a small but growing role in the Medicare program. At the end of 1995, 10.7 percent of Medicare beneficiaries were enrolled in managed care plans (Physician Payment Review Commission, 1996). Enrollment is heavily concentrated in plans that are paid under a risk contract to deliver services in exchange for a fixed payment per enrollee.¹ Enrollment in those plans has increased more than 30 percent since 1994, and the proportion of beneficiaries who obtain medical care through capitated plans is expected to continue to increase. Such expectations are fostered both by the increasing proportion of enrollees with

managed care experience and by growth in private health plan participation in the risk program. In addition, increased beneficiary enrollment would be anticipated under policy proposals to expand the range of health care delivery alternatives available under Medicare.² Proposals to do so have been endorsed recently by both the Administration and by Congress.

The growth of managed care presents a number of challenges for Medicare policy, not the least of which is how to continue to fulfill the program's responsibility to ensure beneficiaries' access to care. In this article, we consider the implications of Medicare managed care growth for efforts to monitor beneficiaries' access. Systems currently used for monitoring access need to be revised, and data and measures suitable for monitoring will need to be developed. Ultimately, under a Medicare program that offers a wide array of health care financing and delivery options, monitoring efforts will need to be unbiased for the mode of health care delivery.

APPROACH TO MONITORING ACCESS

Ongoing monitoring efforts provide information on Medicare beneficiaries' ability to obtain medical care. Annual reports on beneficiaries' access are pro-

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¹At the end of 1995, 8.8 percent of beneficiaries were enrolled in a Medicare managed care plan under a risk contract, and 1.9 percent were enrolled in a plan paid on a reasonable-cost basis.

²For example, the Congressional Budget Office (O'Neill, 1995) projects that under the Medicare Preservation Act passed in November 1995, 17.5 percent of beneficiaries would use alternative delivery systems by 1998, and 25.3 percent would do so by 2002.

duced by both HCFA and PPRC. These monitoring efforts were mandated by Congress to track the impact of the Medicare fee schedule (MFS) and to provide information for updating the conversion factor under the process for setting Volume Performance Standards (Health Care Financing Administration, 1995b; Physician Payment Review Commission, 1995). Therefore, by design, these efforts have focused on access in FFS Medicare.

Policy interest and the availability of beneficiary-level Medicare data have supported numerous studies using a variety of methods for analyzing beneficiaries' access to care in the traditional Medicare program. In this section, we describe the dominant theoretical approach to evaluating access that has guided past studies, and the measures and data that have been used in both one-time studies and ongoing efforts to monitor access.

Conceptual Framework

Aday, Andersen, and colleagues established the conceptual framework for most subsequent analyses of access to care (Andersen and Aday, 1978; Aday and Andersen, 1981). In these researchers' view, access is a function of three categories of variables: (1) predisposing factors, such as personal resources, education, race, and age; (2) enabling factors, such as the availability of providers in a community, an individual's insurance coverage, and existence of a regular source of care; and (3) finally, an individual's need for health care, as indicated by health status and symptoms.

Using this framework, the effects of these variables on access to care can be observed through measurement of health care services utilization. Studies of access have lent support to this framework by demonstrating variation in the use of

services that could be explained by differences in health status, sociodemographic factors, and characteristics of the health care market.

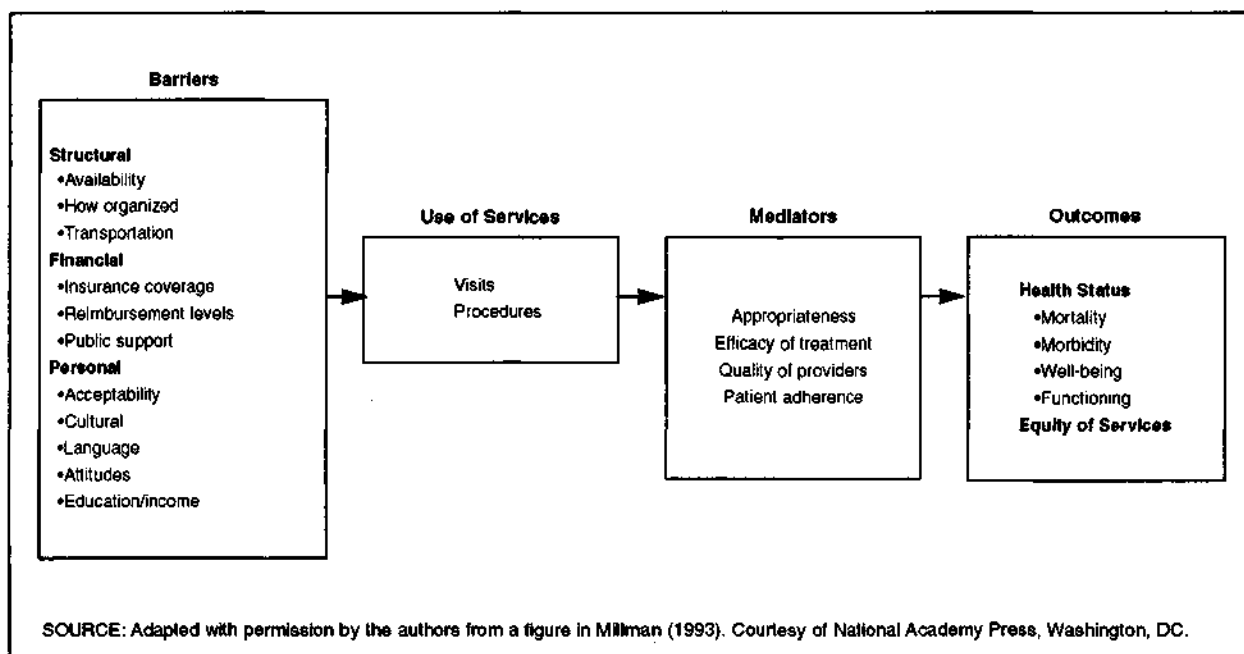
Although most studies of access focus on utilization as a measure of realized access, some studies have taken a different approach. For some researchers, access is a relatively narrow concept. For example, some equate access with having a usual source of care (e.g., Berki and Ashcraft, 1979). Others take a more expansive view of access as a multidimensional concept. Penchansky and Thomas (1981), for instance, describe the dimensions of access as availability, accessibility, accommodation, affordability, and acceptability.³

Because these definitions and frameworks were developed in the context of a system in which health care financing and delivery were largely separate systems, a distinction between the concepts of access and quality could be made. Palmer, Clark, and Lawthers (1994) describe the relationship between access and quality, noting that the former concept has traditionally been defined as entry into the health care system. Quality, by contrast, has been considered to be more driven by an individual's experience within the system. This distinction is blurred, however, where financing and delivery systems are merged.

More recently, the Aday-Andersen access definition and framework were modified and adapted by the Institute of Medicine (IOM) (Millman, 1993). The IOM model expands upon Aday and Andersen's earlier work by linking use of services to outcomes. The IOM definition of access (adopted in this article) entails

³Many of these empirical studies had normative underpinnings to their approaches. For a discussion of normative approaches to access, see the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (1983).

Figure 1
Institute of Medicine Framework for Access



“the timely use of personal health services to achieve the best possible outcomes” (Millman, 1993). The revised framework (Figure 1) helps to make the important distinction between factors that are patient-related and those more associated with the health system. Evaluation of access under this model involves both health-status outcomes and the equity of access across groups.

Viewed this way, the distinction between access as system entry and quality as processes and outcomes of care is less distinct, with a unified framework showing their interrelationship. This integration, as we discuss later, is a very important building block for conceptualizing access in an environment where cost containment is of growing concern.

Measures

Various measures have been used to monitor access in the traditional FFS Medicare program. The choice of measures has been driven by the popula-

tions studied, the access barriers, and the available data.

Population-Based Utilization Rates

Utilization rates are among the most widely used measures of access to care. Many studies implicitly assume and some explicitly state that higher utilization indicates better access. Other studies compare utilization rates for a specific service with established standards for use of that service. Either of these types of studies may entail contrasting the utilization of subgroups of beneficiaries or tracking trends in utilization over time.

Many different types of services have been assessed in studies of Medicare beneficiaries' access to care. Access to preventive services, for example, has been monitored by determining the proportion of beneficiaries receiving influenza immunizations (Health Care Financing Administration, 1995a). It is more difficult to analyze access to some other preventive or diagnostic services. For instance,

diagnostic data are needed to make valid interpretations of utilization rates for Pap smears (Physician Payment Review Commission, 1994).

Beyond preventive care, other types of utilization have been studied in evaluations of access. Broad indicators of hospital use, such as length of stay and hospital charges, have been used in some studies, while other studies have focused on utilization of surgical and procedural services. Escarce and his colleagues, for instance, documented differences in utilization of such services by race (Escarce et al., 1993). As part of its monitoring efforts, PPRC (1995) analyzed a recent decline in cataract lens replacement surgery, noting that this decline could be explained in part by depletion of the pool of Medicare beneficiaries eligible for the procedure. The shortcoming of most of these use-based measures—particularly the more aggregate ones—rests in the absence of information about the efficaciousness of the care addressed by the measures.

Measures of Appropriate Care

Measures of appropriate care go beyond utilization measures in that they compare information about the process of care that is provided or not provided to established medical standards. Application of these measures is constrained by limitations in the ability both to identify those patients in need of specific care and also to determine what care is appropriate to a given need.

It is possible, for instance, to identify the proportion of Medicare patients who fail to receive expected followup care. Researchers in one study that exemplifies this approach looked at nine medical diagnosis groups that required hospitalization and evaluated the probabili-

ty, by race, of beneficiaries' receiving appropriate followup care after hospital discharge (Moy and Hogan, 1993).

Some such measures are now included in efforts to monitor beneficiaries' access (Physician Payment Review Commission, 1995). A set of 47 clinically based indicators of access to care was developed by RAND under a PPRC contract. By drawing on demographic and clinical information available in claims and enrollment databases, these indicators can be used to determine the rates at which appropriate care is provided.

Health Outcomes

Morbidity and mortality rates are commonly used outcomes indicators. But given that the consequences of inadequate or poor quality care may take years to become evident, these are not particularly useful measures for policy purposes. More timely measures of the outcomes of care can be created by identifying health conditions that could have been prevented had appropriate care been received as the need arose. These condition-specific outcomes measures may also provide better information regarding a specific health care delivery environment because they are more likely to be sensitive to care received in the short term. By contrast, the more global outcomes generally tend to be more heavily influenced by factors such as personal history and behavior, socioeconomic factors, and other factors operating independently of current health care delivery arrangements.

Sentinel health events, also known as ambulatory-care-sensitive conditions, are an extension of the public health practice of measuring standard morbidity and mortality rates. These events are defined as diseases, disabilities, and deaths that can be prevented, treated, or controlled with

access to appropriate primary care. Such events serve as indicators of potential unmet need. For example, research studies using sentinel events have examined avoidable hospital conditions as indicators of poor access to primary care (Weissman, Gatsonis, and Epstein, 1992; Bindman et al., 1995).

Some outcomes measures that can be used for monitoring access in the Medicare program have been identified. For example, the set of clinically based measures developed by RAND for PPRC included a few measures of avoidable adverse outcomes. Among these were rates of nonelective hospital admissions for specific conditions, emergency department visits related to certain diagnoses, and readmissions following an initial hospitalization (Physician Payment Review Commission, 1995).

Provider Participation Measures

Because provider availability is thought to be an enabling factor in determining access, the extent of provider participation in the Medicare program has been used as an access measure in ongoing monitoring efforts.⁴ Specific indicators that have been used include the ratio of physicians to beneficiaries, the number of physicians newly serving and ceasing to serve beneficiaries, and the concentration of patients among physicians serving beneficiaries (Physician Payment Review Commission, 1995).

Other Access Indicators

Other types of access indicators have also been used. Measures of the extent to which beneficiaries have trouble obtaining or delay seeking medical care, and the

extent to which they have a particular physician or office as a usual source of care are considered direct measures of access. Measures of barriers to care, such as language or transportation problems, aid the ability to interpret these findings. Indirect access measures include beneficiary satisfaction with various aspects of their care and their ability to obtain care. Finally, descriptive measures on supplemental insurance coverage, out-of-pocket costs for health care, waiting times for appointments, sites of care, and distance travelled to care all provide information that can be used to assess beneficiaries' access. All of these measures serve as fairly gross indicators; however, they may be sensitive to important changes in access for particular groups.

Data

In monitoring Medicare beneficiaries' access, the various types of measures already discussed can be developed predominately from three routinely generated sources of data: claims, beneficiary surveys, and enrollment files. These data have served as a foundation for measuring access to care across a number of dimensions. Other data have been generated to supplement ongoing monitoring efforts, and these have been analyzed to provide insight on access questions.

Claims

In the traditional Medicare FFS program, claims that are submitted by providers for payment supply information on services, beneficiaries, and providers. Claims data have been used to track patterns of utilization in specific areas, to develop clinically based indicators of access, and to measure the extent of provider participation in the Medicare program.

⁴In the context of Medicare access monitoring, provider participation describes the number or portion of providers actually serving Medicare beneficiaries, not merely the number who sign participating provider agreements.

Medicare has a standardized claims reporting system. Before the mid-1980s, each of 56 Medicare carriers had its own data system and coding conventions. Since then, Medicare has gradually developed a national system, first with the Part B Medicare Annual Data (BMAD) system, and now with the National Claims History File (NCHF). Since 1985, HCFA has required the use of Current Procedural Terminology codes for most physician services and has standardized the use of specialty, type of service, place of service, and modifier codes. With implementation of the MFS, the final standardization of Medicare data was achieved by eliminating most local procedure codes and by nationalizing payment policies. Data for other provider sectors are also available through the NCHF.

In addition to standardizing data elements, Medicare claims data are available in a relatively timely fashion. Under the NCHF, claims can be monitored on a flow basis, if desired.

Beneficiary Survey Data

Self-reported beneficiary data on access is routinely generated through the Medicare Current Beneficiary Survey (MCBS), a continuous survey of longitudinal design. The MCBS is a survey of about 12,000 beneficiaries sponsored by HCFA's Office of the Actuary. The MCBS was constructed to be representative of the Medicare population as a whole. The oldest-old and disabled beneficiaries under 65 years of age were oversampled to support analyses of these populations. To maintain the longitudinal panel, additional beneficiaries are added to replace those no longer in the sample because of death, emigration, or refusal to participate (Adler, 1994).

The survey and its supplements contain information on access, utilization of

services, expenditures, health insurance coverage, health status, and physical functioning as well as demographic data. The access supplement survey is conducted yearly. It provides information on beneficiary satisfaction and perceived barriers to care as well as direct measures of access, such as waiting times for appointments and out-of-pocket costs.

Enrollment Data

A third source of data for monitoring access is enrollment records. From enrollment data, a denominator file has been developed that includes information on beneficiary eligibility, location of residence, and limited sociodemographic characteristics. This file makes it possible to compare utilization and outcomes rates across some subgroups of Medicare beneficiaries.

Monitoring Access of Vulnerable Populations

Monitoring efforts that focused on the impact of the MFS have tracked access for groups that were thought to be at risk for problems in obtaining care because population averages could cloak access problems for these groups. In general, the vulnerable populations chosen for targeted monitoring efforts were ones that had lower incomes and that had experienced discrimination. Subgroups that have been selected for targeted monitoring efforts include black beneficiaries, beneficiaries without supplemental insurance, and beneficiaries living in poverty areas (Health Care Financing Administration, 1995b; Physician Payment Review Commission, 1995).

Analyzing access of vulnerable populations serves a secondary purpose in that these groups might be expected to be

among the first to experience any declines in access caused by MFS implementation. Such targeted monitoring efforts thus may provide an early warning to policymakers when access problems arise. Although ongoing monitoring efforts have not shown reductions in access for these groups, analyses have confirmed that these vulnerable populations continue to have poorer access than other beneficiaries. PPRC found that black beneficiaries and those who live in urban Health Professional Shortage Areas or urban poverty areas use fewer physician services and have poorer health outcomes (Physician Payment Review Commission, 1996). In addition, beneficiaries with low incomes, without supplemental insurance, or with functional disabilities that cause them to require assistance disproportionately report difficulty in obtaining medical care.

A limitation of currently used definitions of vulnerable subpopulations is that these definitions focus on broad characteristics that can be readily measured from available data. Others have defined vulnerability using clinically based or socially based criteria. For example, although her work was not specifically focused on the Medicare program, Aday (1993) theorized that those at risk for poor physical, psychological, or social health are those who have limited resources in terms of social status, social capital, and human capital. Her list of vulnerable populations includes those who are chronically ill, disabled, mentally ill, and homeless, among others. The issue of better defining vulnerable subpopulations will be a particularly important one as access-monitoring approaches are modified to reflect the evolution of the Medicare program.

NEW PARADIGM FOR CONCEPTUALIZING ACCESS

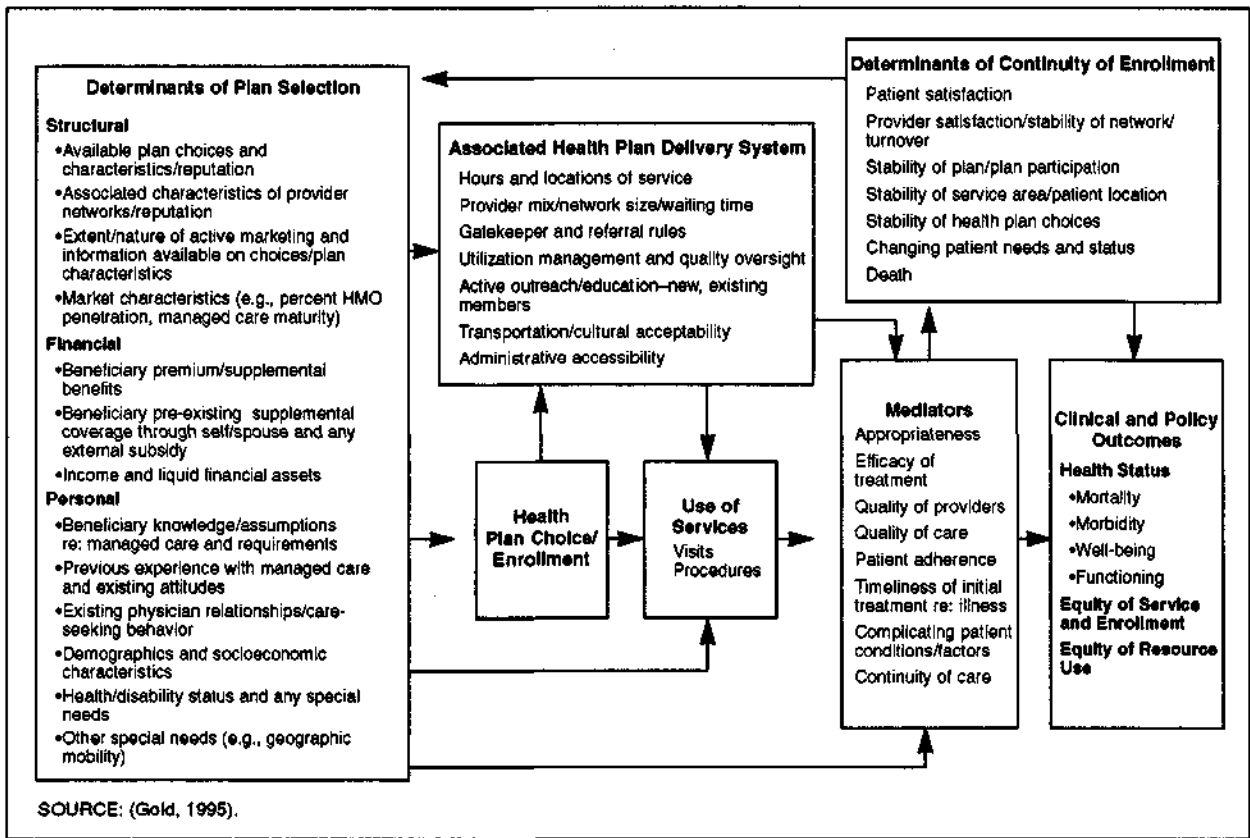
As alluded to in the previous discussions, the existing approaches for assessing access were developed in the context of an FFS system. These approaches may not adequately reflect the processes that influence care in the managed care environment. To respond to recent and ongoing changes in the Medicare program, reevaluation of the system used for monitoring beneficiary access to care is now required.

This reassessment will need to account for the growth of managed care, the growing emphasis on cost-effective delivery, and the wider range in health care delivery options likely to be made available in the Medicare program. First, the traditional access-monitoring approach must be modified to reflect features that are relevant to beneficiaries who use managed care arrangements. This will entail changes in the conceptual framework and along with it, changes in both the measures and the data used for measurement. Second, the traditional access-monitoring approach will need to be strengthened to better address growing concerns regarding efficiency and equity; this will entail more emphasis on the care provided to complement current emphasis on system entry, and will also require more refined techniques for identifying populations at risk. Third, there is a need for better risk adjusters in both cross-sectional and longitudinal analyses of access in the Medicare program.

Adapting the Framework

Existing frameworks for conceptualizing access generally fail to account for the fact that managed care plans are organized systems with both financing and delivery

Figure 2
Revised Framework for Access Accounting for Managed Care Systems



responsibilities. To revise the framework to represent the access issues that arise in managed care, it is necessary to account for the ways in which both of these responsibilities interact to affect access.

Obtaining access to care is a two-stage process in a managed care system. Individuals first select among the health plans available to them, with structural, financial, and personal characteristics influencing plan selection. People then seek care within the structure established by their plan. This structure may include unique care-delivery processes and rules for seeking care that, along with other factors not related to the specific health plan, may influence access for plan enrollees.

Given these differences, we have made preliminary modifications to the IOM conceptual framework in order to

incorporate the influence of managed care on access (Figure 2).⁵ Structural, financial, and personal variables labeled “barriers to access” in the IOM model are expanded and relabeled to account for the fact that they both determine plan selection and influence care received, and that they can have both positive and negative effects on access. The revisions also reflect the Medicare program’s specific characteristics (e.g., supplemental coverage, needs associated with an elderly and disabled population).

The revised framework shows that a beneficiary’s health plan selection situates him or her in a specific delivery system with its own attributes and procedures. These, as well as the more traditional financial and personal variables, influence the

⁵This framework was originally developed by Gold (1995).

use of services. Mediating processes between use and outcomes are broadened from the IOM framework to include other mediators such as timeliness of initial treatment. The framework shows more directly that these processes are influenced not just by the use of services but also by features of the plan. Outcomes are generally similar to the original model, but issues of equity are expanded to include enrollment.

The framework also explicitly accounts for disenrollment and the reasons it occurs. This is useful in differentiating types of disenrollment behavior, particularly when disenrollment can be voluntary or involuntary and can occur at the end of any month. The framework assumes that mediating processes determine beneficiary satisfaction, which influences continued enrollment. Provider turnover influences this, as studies have shown that patient behavior is heavily influenced by a desire to retain provider relationships. In addition, any changes in the choices available influence whether enrollees stay in the plan. Disenrollment may also result from changes in patient needs and health status. Such disenrollment, from a policy perspective, may be desirable, neutral, or problematic, depending on the circumstances and the effects of disenrollment on access to care.

In contrast to voluntary disenrollment, involuntary disenrollment is presumed to occur when plans drop out of the program or change their service areas, or when beneficiaries move or die. In either case, beneficiaries who disenroll may return to traditional Medicare or join another Medicare managed care plan. As with voluntary disenrollment, involuntary disenrollment may affect access to care, particularly insofar as continuity of care is disrupted or the ability to obtain supplemental insurance is

constrained.

Access Measures for Managed Care

Revisions in the conceptual framework for access will need to be supported by the development of new measures for monitoring access in the Medicare managed care program. Some traditional measures of access are not applicable, and those that are applicable may be insufficient to provide a complete picture of access to care in a more complex health care financing and delivery system. Therefore, additional measures are needed to assess the influence of various managed care plan processes and characteristics on access.

Traditional Measures of Access

Certain types of measures used in access monitoring in the traditional FFS Medicare program become obsolete in the managed care environment. Most importantly, many measures of service utilization, which have figured prominently in traditional access-monitoring efforts, appear to be of limited value in managed care monitoring. Because service use is expected to be lower in a system where care is effectively managed, comparing levels of utilization in the traditional Medicare program and the risk program would not provide much insight into differences in access. Similarly, monitoring aggregate trends in utilization and the use of specific services in the risk program is not likely to yield valuable information.

On the other hand, several types of traditional access measures are applicable to Medicare beneficiaries in both the FFS and the managed care programs. Measures of satisfaction with care and with the ability to obtain care, for example, can provide information for evaluating the access of all beneficiaries. Similarly, mea-

asures of the extent to which care is delayed or not obtained when believed to be needed and the rates at which beneficiaries experience trouble obtaining care are also universally relevant, as are measures of perceived barriers to care. Information on beneficiaries' waiting times for appointments and distance traveled to obtain care remains a consideration in assessing managed care access.

As noted previously, both the shift to managed care and the related emphasis on cost-effectiveness increase the value of focusing on measures of access that reflect quality and outcomes of care as well as system entry. Under the traditional framework, the major barriers to access were viewed as stemming from financial and structural (e.g., provider supply and participation) factors that limited system entry. Thus, access and quality were considered relatively independently.

With philosophies and cost constraints changing, the emphasis in access monitoring needs to be shifted to reflect the broader range of factors that determine access under a managed care model. Measures of access also will need to be more closely linked and broadened to include measures that take into account efficacy and cost-effectiveness of care as measured through process of care and outcomes indicators. Balancing these two perspectives—ease of obtaining care and quality of care—is not easy and may be among the more controversial elements of a refined access-monitoring system. This may be true particularly in the transition from the current conceptualization of access, which may be biased toward the features of the FFS environment in which it was conceived.

The use of clinically based measures of access appears particularly promising as a way to monitor access in all types of health care financing and delivery models in

which information on service use and enrollment demographics is available. These types of measures can be used to determine whether appropriate care is provided and when avoidable outcomes occur. These indicators have been tested in the traditional Medicare program using claims data and could be applied to Medicare managed care access monitoring if encounter data were to be developed.⁶

New Access Measures

Access measures that account for relevant aspects of the Medicare managed care program and the participating plans will be needed to supplement applicable measures used in traditional FFS access monitoring. Many types of access measures reflect beneficiaries' experiences and perceptions. Use of these measures will require development of beneficiary survey data. Other measures draw on administrative data to provide objective assessments of access to care.

A new area in which access measures are needed is beneficiaries' understanding of managed care. Because a direct determinant of managed care enrollees' access to care is their ability to comply with the processes established by the plan, measures of ability to do so could provide important information on determinants of access. Measures in this category could include those to assess beneficiaries' understanding of their plans' primary-care gatekeeper arrangements and restrictions on use of non-network providers, and of their rights to appeal plan decisions not to provide or pay for a medical service. One challenge in developing such measures is to account for ways in which managed care

⁶Indicators of this type have been used in the Medicare managed care program in several studies using data collected for research purposes. Examples of such studies include Retchin and Brown (1990) and Riley et al. (1994).

plans might legitimately differ, such as in the offering of a point-of-service option that covers beneficiary use of non-network providers under some circumstances. As the types of health plans available to beneficiaries expand, these measures might become more difficult to interpret.

Process-of-care measures are also needed for understanding access in managed care systems. Because the processes developed by a managed care plan for the provision of health care will directly determine beneficiaries' access, measures of these processes and their perceived effects can be used in evaluating access. Processes of interest include those for selecting a primary-care provider, making an appointment, obtaining a referral to a specialist, and obtaining care when traveling outside of a plan's service area. The new-enrollee orientation process and the process for appealing a plan decision could also affect access. Finally, managed care plans may develop activities to promote access, such as new-enrollee risk assessment, case management, or distribution of materials promoting preventive care. Specific measures to address these processes include the extent to which they are perceived to facilitate or impede a beneficiary's ability to obtain care and the nature of any problems experienced. These types of measures may be very useful from a policy perspective in that the access problems they are designed to identify could be addressed through targeted interventions.

Another type of beneficiary-oriented measure used in access measurement is the satisfaction measure. Traditionally used measures of satisfaction will need to be supplemented for evaluating access in Medicare managed care. Beyond issues of satisfaction with care and with the ability to obtain care, measures of a beneficiary's satisfaction with the health plan and its fea-

tures can also serve to assess access indirectly. For example, measures of beneficiary satisfaction with choice of primary-care providers and specialists could provide useful information, as could measures of satisfaction with the value of the benefits received, given the premium charged. These types of measures may be particularly useful in identifying the source of any access problems indicated by other measures.

In addition to these beneficiary-oriented access measures, some types of measures may be used to characterize the managed care plans participating in the Medicare program. In terms of access to providers, traditional provider participation rates may need to be replaced with measures of the geographical proximity of the provider panel, their willingness to take on new Medicare patients, and provider turnover rates.⁷ New access measures may need to be created to reflect the plan's role in influencing access. For example, measures of plans' telephone arrangements, such as average time waiting on the telephone to make an appointment, and the rates at which enrollees terminate their telephone calls to their plans because of delays in plan response could be calculated. Other measures could also be developed to assess a health plan's capacity to ensure access for enrollees. Research on plan characteristics or practices that influence access to care for enrollees in general or for vulnerable groups in particular may provide the insight needed to develop such measures.

As shown in our revised conceptual framework, the opportunity for Medicare beneficiaries to change health care financing and delivery modes presents a new

⁷The most recent version (2.5) of the Health Plan Employer Data and Information Set (National Committee for Quality Assurance, 1995), commonly known as HEDIS, includes the number and percent of primary-care physicians accepting new patients among its measures of access and satisfaction.

type of access consideration. A number of measures will be needed to capture the effects of managed care enrollment, disenrollment, and plan-switching on access to care. First, the rates at which each type of change occurs within groups of beneficiaries and over time are of interest, as such rates could provide an indication of changes in access to care. Distinction between voluntary and involuntary disenrollments must be made and information on the reasons underlying beneficiaries' decisions to change their enrollment status will be needed.⁸ In addition, analysts will need to examine the effects of changing enrollment on access. For example, measures of changes in usual source of care or primary-care provider that are associated with the change in enrollment status could be important, as could measures of disenrolling beneficiaries' ability to obtain supplemental insurance coverage.

Data for Monitoring Purposes

Data for monitoring access in Medicare managed care are currently limited. Most notable is the lack of systematic, national-level data on managed care enrollees' use of services and their satisfaction with the ability to obtain care through their plans. As previously discussed, claims data and beneficiary survey data have served as the foundation for most efforts to monitor access; therefore, their lack in the Medicare managed care program has implications for the current ability to monitor the access of these enrollees. Other types of data are available that pertain exclusively to Medicare managed care enrollees, however, that could serve in an access-monitoring system geared toward these beneficiaries.

⁸For example, some beneficiaries may change their health plan to retain their usual source of care in cases where their primary-care physician leaves a plan.

Utilization Data

The Medicare program does not now collect information on the use of services by enrollees in the risk-contracting plans. Unlike FFS providers under the traditional Medicare program, the risk-contracting plans are paid a fixed amount regardless of service use by their enrollees. Therefore, any information on utilization, costs of care, and patient case mix is developed by the plans only as in-house management tools or in response to purchasers' demands for information about costs and performance. Plans vary not only in whether they develop such data but also in the completeness and accuracy of their data-collection efforts.

Previous attempts at collecting such encounter data have been disappointing. Of 27 health maintenance organizations and competitive medical plans that participated in a Medicare risk-contracting demonstration lasting from 1980 to 1985, only two could provide even partial encounter data for ambulatory services (Langwell and Hadley, 1990). Eight years after the creation of the Arizona Health Care Cost Containment System, only one-half of the managed care organizations could satisfy HCFA's standards for encounter data (McCall et al., 1993).

Data on Medicare managed care enrollees' utilization may be available in the future, however. Through various demonstration projects, HCFA will be testing plans' ability to provide encounter data to support program monitoring efforts.

Survey Data

Survey data that document enrollees' access-related experiences and satisfaction with their managed care plans are also now limited. Although some Medicare managed care enrollee survey data are avail-

able, these are not ideal for use in measuring the access to care of these beneficiaries. The MCBS, for example, includes only a small number of Medicare managed care enrollees in its sample, which limits the ability to analyze access issues by subgroups of the enrolled population.⁹ More importantly, the items used in the MCBS were not developed specifically for evaluating the access of beneficiaries in managed care settings. Although some traditional survey measures of access can be used for beneficiaries across all delivery models, other items are less meaningful for beneficiaries enrolled in managed care plans. In response to changes in the Medicare program, HCFA at present plans to supplement the MCBS sample and questionnaire beginning with the fall 1996 round. These changes are designed to facilitate comparisons of Medicare FFS and managed care enrollees.

To test the feasibility of using a beneficiary survey for monitoring access in the Medicare managed care program, PPRC has contracted with MPR to develop and field a survey of Medicare risk-contract plan enrollees and disenrollees. Four groups were distinguished for survey sampling and questionnaire design purposes: new enrollees, continuous enrollees, disenrollees (who returned to FFS Medicare), and plan switchers (who disenrolled from one risk plan and joined another). The project entails both the examination of sampling issues and the development and testing of measures that reflect the influence of Medicare managed care on beneficiary access. Insight gained in these areas may inform future efforts to supplement or revise the MCBS.

⁹The tenth round of the MCBS, administered in 1994, contained approximately 860 managed care enrollees.

Other Data for Access Monitoring

A system for monitoring access will need to rely on data from a variety of sources in order to obtain a multidimensional perspective. Additional types of data that are not applicable to the traditional Medicare FFS program are available or could be developed.

Information on the characteristics and processes of the private health plans that serve Medicare beneficiaries could be used in an access monitoring system. Data on health plan premiums, enrollment size, service area, and benefits are now available. Descriptive information on the composition of plan networks could also be analyzed and monitored over time, although analyses would be complicated by factors such as group contracting arrangements. Such information could be supplemented by plan-level survey data on activities, practices, or characteristics that may influence enrollees' access to care.

Administrative data on plan enrollment and disenrollment could be used as a component of an access-monitoring system. Available information about enrollees and disenrollees includes demographic variables, Medicaid status, and Medicare managed care plan history. These data permit monitoring of trends in rates of enrollment and disenrollment by subgroups of the beneficiary population and by subgroups of the Medicare managed care plan population. The value of using plan-level disenrollment rates together with plan-level beneficiary survey data for evaluating access to care has been demonstrated in a study by the Office of Inspector General of the U.S. Department of Health and Human Services (1995).

Data on beneficiary appeals of plan decisions might also serve as a component

of a Medicare managed care access monitoring approach.¹⁰ Changes in the rates of appeals or the types of appeals filed by beneficiaries could indicate changes in access to care generally or for specific services.

Vulnerable Groups

As is true in traditional monitoring, identification of vulnerable groups for targeted monitoring efforts will continue to be important. Certain groups of beneficiaries may, on average, be more susceptible to difficulties obtaining access to care in the managed care environment.

Some of the same groups that have been identified as vulnerable in FFS Medicare may also be at risk for access problems in Medicare managed care. As already discussed, these groups include black beneficiaries and those who live in urban Health Professional Shortage Areas or urban poverty areas. Beneficiaries in these groups could continue to be at risk to the extent that the underlying reasons for their vulnerability are unaffected by the managed care delivery system; for example, where access problems stem from a lack of transportation. On the other hand, access for beneficiaries in these vulnerable groups may in some cases be improved. This would be true, for instance, where vulnerability stemmed from financial barriers to access that could be reduced in a managed care plan, depending on the premium and cost-sharing arrangements.

In addition to the groups already identified, two general categories of beneficiaries may be particularly at risk for access problems under managed care delivery systems. The first group is those who may not receive adequate care from health plans responding inappropriately to

cost-containment incentives. Beneficiaries with a chronic medical condition who need resource-intensive care on an ongoing basis could be included in this category, as could beneficiaries with certain medical conditions that require specialized care. The second group is those who have difficulty navigating systems of care, whether because of medical, psychological, economic, sociological, or other factors. Beneficiaries who already have difficulties obtaining care under the FFS system may find that managed care systems pose additional challenges.

Because beneficiaries in the groups that may be particularly vulnerable under managed care may be difficult to identify in advance, proxies for beneficiaries in these categories will need to be identified for targeted monitoring efforts. For example, the study of access in Medicare risk-contracting plans being conducted by MPR for PPRC will analyze the access to care of disabled beneficiaries and those over age 85 as proxy categories for beneficiaries in these vulnerable groups.

ISSUES FOR MONITORING ACCESS

Beyond the fundamental question of how best to monitor access for beneficiaries in managed care plans, the growth in managed care enrollment raises a number of additional issues that will need to be addressed in designing a monitoring approach.

Implications for Traditional Access Monitoring

The increasing availability and use of managed care arrangements in the Medicare program must be taken into account in traditional program-monitoring approaches. The majority of beneficiaries obtain their health care through

¹⁰These data are collected and have been analyzed by HCFA's contractor, Network Design Group, Inc. (Richardson, Phillips, and Conley, 1993).

Medicare's traditional FFS program and are expected to continue to do so for the near future. But the fact that most beneficiaries have the option to use other arrangements and that an increasing number choose to do so has implications for the ability to interpret the traditional measures and trends in utilization now used in monitoring access.

Beneficiaries' selection among alternative health plans may result in differences in the demographic and health-status characteristics of the underlying enrollment populations. These differences are likely to be reflected in any access-measurement efforts unless adequate adjustments that reflect underlying population differences can be made. Identification of appropriate risk adjusters will be important for interpreting trends in access as the pool of enrolled beneficiaries changes over time. Development of adjusters for outcomes and other types of measures is still at an early stage, however, and specific adjusters are not widely agreed upon. (For a discussion of the methodological issues, see Iezzoni [1994].) It is likely that the importance of making adjustments to measures will vary for different measures, assuming that some types are more sensitive to underlying characteristics of the population.

Implications of Expanding Plan Options

Policy proposals to expand the range of health-plan options that are available to Medicare beneficiaries also would have implications for access-monitoring approaches. Medicare restructuring proposals developed by Congress and by the Administration would open up the Medicare program to a wider variety of health plans. The Seven-Year Balanced Budget Reconciliation Act (passed by

Congress in November 1995 and vetoed by the President), for example, would have expanded options under Medicare to include medical savings accounts, provider-sponsored organizations, preferred provider organizations, and so-called unrestricted FFS health plans, which would place no constraints on utilization or provider choice. These options could range widely in terms of benefits provided (beyond the basic Medicare benefits package), cost-sharing arrangements, lock-in requirements, provider incentives, and care-management strategies. Wide variation would be expected both across plan types and within categories of plans.

Monitoring access to care under a restructured program would be challenged by limitations in both measures and data. Increased diversity in health-plan options would mean that only those access measures that are unbiased for health care delivery model would be useful for monitoring at the program level. For example, measures of the extent to which beneficiaries fail to obtain or delay obtaining necessary medical care could continue to serve as an indicator of access problems. Access measures dependent on the delivery model or plan characteristics, such as those designed to assess the effects of cost-sharing arrangements, out-of-network restrictions, or the specialist referral process, on the other hand, would not be universally applicable or interpretable at the program level. Such indicators might instead be used selectively at the level of plan-specific monitoring.

The availability of data that are of uniform type and quality will greatly determine the ability to undertake access-monitoring efforts. Under a Medicare program restructured to provide a wider variety of health-plan options to beneficiaries, baseline access-monitoring efforts may need to rely primarily on beneficiary survey data in

the absence of uniform information on service utilization. As more beneficiaries use alternatives to traditional FFS Medicare, the question of whether the program's ability to protect beneficiaries' access to appropriate care is compromised by the absence of these data will need to be resolved.

Conclusion

Our examination of the issues to be addressed in devising an access-monitoring system for Medicare managed care has shown that significant challenges remain to be addressed. Further work will be needed to identify access measures, data, and groups for targeted monitoring efforts.

Even as steps are taken toward developing the framework and methods for monitoring access in Medicare managed care, the program continues its evolution and rapid growth. Because of the need to use measures unbiased for health care delivery mode in programwide monitoring, identifying the source of access problems and potential policy solutions could become increasingly difficult in a program of diverse plan options. As diversification occurs, more analytic work will be needed to develop access measures that are universally relevant, and increased efforts to ensure the comparability of data will be necessary.

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