MEDPAC Medicare Payment Advisory Commission

TESTIMONY

Statement of the
Medicare Payment Advisory Commission

Disease management in traditional Medicare

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Committee on Aging
U.S. Senate

Senator Craig, Senator Breaux, distinguished Committee members, I am Mark Miller, Executive Director of the Medicare Payment Advisory Commission (MedPAC). I am pleased to be here this morning to discuss the role of disease management and other forms of care coordination for Medicare beneficiaries. MedPAC is in the initial stages of a study of policy issues involved in integrating disease management programs within traditional Medicare. The Commission believes that these programs have the potential to improve care for the Medicare population but also face significant challenges that must be addressed. Today, I would like to highlight some key issues and briefly describe our work plan.

As the members of this committee are aware, a small proportion of fee-for-service beneficiaries has accounted for a disproportionate share of Medicare expenditures. Typically, the costliest 5 percent of beneficiaries account for about half of all Medicare spending each year. These beneficiaries often suffer from one or more chronic illnesses and require repeated costly hospitalizations. Health care for beneficiaries with chronic conditions has often been fragmented and poorly coordinated. Evidence-based practice guidelines are not always followed, nor are patients taught how best to care for themselves. Experts contend that effective management of beneficiaries with chronic conditions requires ongoing, coordinated care across health care settings and among various service providers.

The Commission is interested in whether the use of coordinated care programs in traditional Medicare can:

- improve the delivery and coordination of care;
- maintain and/or improve health and functioning for patients participating in these programs; and
- reduce program and beneficiary spending.

What is disease management?

The term disease management covers a wide range of activities that may affect beneficiaries' use of health care services and health status. The objectives of these programs include coordinating

care across providers, improving patients' compliance with their treatment regimens, and encouraging adherence to evidence-based treatment guidelines. Most of these programs attempt to maintain and improve patients' health status and quality of life; most programs also try to contain or reduce total health care spending. Program designs range from interventions designed to improve treatment of all individuals with a given condition to individualized case management services for people at risk for costly medical events and poor health outcomes. Program types will differ depending upon program goals, who receives the services, and who provides them.

Disease management programs usually target populations who are costly, or have the potential to become costly, and have high but modifiable, risks of adverse medical outcomes, including patients with chronic heart failure, diabetes, asthma, chronic obstructive pulmonary disease, and end-stage renal disease (ESRD). In addition, MedPAC will explore opportunities for interventions for other groups including patients: (1) who are at risk for certain conditions, such as chronic kidney disease; (2) dually eligible for Medicare and Medicaid; and (3) at the of end of life.

These programs vary in the approaches they use to identify populations, the types of service they deliver, and their service delivery models. For example:

- To identify patients, more programs are using population-based methods (identifying eligible patients prior to program implementation) instead of case-based methods (identifying “high-risk patients” based on referrals from physicians and other providers).
- Many programs offer participants periodic phone calls from program staff, personalized goal-oriented feedback on self-care; access to twenty-four-hour nurse call centers; and educational materials. In addition, some programs offer clinical information support to participants’ physicians.
- Some programs use clinical information systems that integrate information from clinical guidelines with participants’ data obtained from self-reports and claims data.
- Programs tend to be broader and more “holistic” than programs introduced in the early 1990s. Current programs are increasingly designed to help patients identify regimens, manage their symptoms, self-monitor their conditions, and comply with their treatment. Although programs may identify participants based upon a single condition, they typically assume responsibility for coordinating care for the multiple chronic conditions that a patient may have.

Work plan

We have identified four issues that must be addressed before care coordination programs can be fully integrated within the Medicare program: targeting programs to beneficiaries most likely to benefit from them; addressing the relationship between beneficiaries, physicians, and the program; aligning payments with program objectives; and measuring effectiveness of programs. Availability and timeliness of data are also concerns. We plan to focus our work on these issues using a combination of data analysis, evaluation of literature on existing disease management and care coordination programs, and interviews with stakeholders. In addition, building on the Commission's work on quality care for end-stage renal disease patients, we will consider the opportunities for providing care coordination for ESRD patients and patients with renal disease in less acute stages.

Targeting beneficiaries

Disease management and care coordination programs differ in terms of which populations are targeted, and how broadly services are available to all individuals within a defined population. Program designers face two issues: first, identifying the broad population for whom the program is intended and then identifying individuals within that population most likely to benefit from the intervention. A program that casts its net too widely may be unable to provide the level of services necessary to improve patient outcomes or achieve savings commensurate with its costs. The literature suggests that the ability of program designers to identify individuals most likely to benefit from the intervention is a crucial determinant of success.

Our first step will be identifying populations for whom Medicare disease management programs should be targeted. Populations of interest include:

- Beneficiaries with specific medical conditions like ESRD or diabetes
- Populations at risk for certain conditions like beneficiaries with chronic kidney disease at risk for ESRD
- Beneficiaries with multiple chronic conditions
- High cost beneficiaries identified through claims data
- Beneficiaries eligible for both Medicare and Medicaid
- Beneficiaries at the end of life

Many of these populations are both large and growing. Experts predict that the number of Americans living with at least one chronic condition will rise from125 million in 2000 to 157 million by 2020. Many of these individuals will be Medicare beneficiaries. Currently, more than three quarters of all Medicare beneficiaries have at least one chronic condition, and almost one third have four or more conditions. Beneficiaries with chronic conditions account for about 80 percent of program spending.

To help explore the opportunities created by disease management interventions on these populations, we will examine the spending patterns and clinical characteristics of beneficiaries in these groups using data from the 5 percent Part A and Part B claims files for a six year period (1996-2002). This database will permit us to assess health care use for covered services throughout the continuum of care for populations of interest. The database will be updated as new claims data becomes available. It will enable us to describe the use of services by Medicare beneficiaries with one or more specific chronic conditions, and changes in their use of services over time. We hope to use the claims data to measure the use of evidence-based care practices for specific conditions. We will also be able to assess the prevalence of comorbid conditions and mental illnesses. We will link this data base with other data sources including the MCBS and the renal management information system. In addition, we expect to look at drug utilization patterns based on data for a sample of Medicare-eligible beneficiaries from a large national private plan.

Further, this data will allow us to identify the characteristics of beneficiaries with very high expenditures. We will be able to examine the stability of service use by individuals over time and look at the pattern of care for individuals in the period before they become high cost.

One population of continuing interest to MedPAC is beneficiaries with end-stage renal disease. Although they comprise only one percent of all beneficiaries, their expenditures account for about six percent of Medicare spending. Spending for beneficiaries with ESRD has increased by 33 percent over the last eleven years. Typically, this population suffers from many additional chronic conditions. For example, at least 40 percent have diabetes, and about 30 percent have congestive heart failure. They see many different providers and have the potential to benefit from disease management and care coordination services.

Although not usually targeted by current programs, beneficiaries at the end of life also might benefit from disease management interventions. Previous MedPAC analysis has shown that Medicare spending for beneficiaries in the last year of life averages six times the per capita cost for survivors, accounting for 25 percent of total Medicare program payments. Consensus has grown among experts about the components of quality end of life care. To the extent that they can be identified prospectively, these beneficiaries might benefit from coordination of services like pain management, physical symptom relief, and counseling.

Additionally, as data become available, we will construct a database that enables us to examine the Medicare and Medicaid claims for a sample of dual eligibles. This will provide us with a more complete picture of the total medical expenditures for a set of vulnerable, high cost beneficiaries, including their prescription drug utilization and expenditures. As a group this population is sicker than the average Medicare or Medicaid beneficiary and has higher average expenditures. For example, dual eligibles were 17 percent of all Medicare beneficiaries in 1999, and accounted for about 24 percent of Medicare expenditures. Similarly, they represented 19 percent of all Medicaid beneficiaries and accounted for 35 percent of Medicaid expenditures or $63 billion. Few mechanisms exist for coordination of care for these beneficiaries across both payers.

Approaches to targeting

Current commercial programs take multiple approaches to identification of individuals within a target population most likely to benefit from an intervention. Program participants can be targeted through physician referrals, self-identification, or predictive models developed by disease management organizations. Providers often use a combination of strategies.

Targeting within traditional Medicare raises policy issues. Medicare would have to address the extent to which programs would be available to beneficiaries within the target population.

- Should all beneficiaries be eligible for disease management services?
- Can Medicare provide different levels of care coordination services to beneficiaries based upon their perceived medical risk? For example, would all beneficiaries with diabetes in a given region be eligible for a diabetes disease management program, or would interventions be targeted to a subset of individuals identified as at high risk for complications?

The tradeoff here is between universality and cost effectiveness. The more narrowly a program is able to identify those individuals most likely to benefit from services, the more likely it is to achieve measurable cost savings. On the other hand, some beneficiaries not targeted as high risk would lose the value of disease management services that might help them. Many private disease management companies have attempted to deal with this problem by stratifying the population by risk and providing a different level of service to each risk segment.

Beneficiary confidentiality must also be addressed: Would target individuals be identified and contacted by the Medicare program, their physicians, or the providers of care coordination services?

Beneficiaries, physicians, and disease management programs

Whether disease management services are provided by physicians, health plans, or offered by an independent company, the relationship between physicians, patients, and programs varies widely. In our interviews with providers and purchasers of care coordination services, we plan to examine the way in which different physician and patient relationships with programs affect program outcomes. Some commercial programs have little direct involvement with physicians; they focus on educating patients to manage their own care. Other programs focus on coordination of care for patients with multiple physicians. Still other programs may work in collaboration with physicians, depending upon physicians to identify program participants, ensuring patient adherence to physicians' care plans, and providing physicians with periodic updates on their patients' conditions. Alternatively, some programs are organized by physicians who may hire staff to coordinate care for their patients.

Programs also have different relationships with targeted individuals. Patients decide to enroll or "opt into" some programs, or are automatically enrolled and must "opt out" of programs if they do not want to participate. The policy issue for Medicare is whether enrollment should be require beneficiary action or be automatic for targeted beneficiaries. The tradeoff here is that an "opt in" strategy maximizes the ability of beneficiaries to choose whether or not to participate in a program but is likely to miss those beneficiaries most in need of care coordination services.

Payment issues

Inclusion of disease management programs within traditional Medicare would require decisions on a wide set of payment issues. At issue would be who is paid, how the payment is set, what services are covered by the payment, and what is the role of noncovered services within a disease management benefit. The payment system should be structured to align payments with program objectives.

We plan to consider such questions as:

- What entity would provide care coordination services to Medicare beneficiaries? Services could be provided by physicians, group practices, integrated delivery systems, health plans, non-physician case managers, or disease management organizations.
- How would the basic payment be set? For example, payment could be based on a per capita fee for a specific population enrolled in a disease management plan. The payment could cover specific services like periodic phone contacts with nurses, 24-hour call centers, patient education services, condition monitoring, and supplying patient information to physicians. Alternatively, an entity like a group practice, or integrated health system could receive a bundled payment for treating a patient with a specified condition. The entity could then determine the extent to which disease management or care coordination services would enhance its ability to provide quality care efficiently. The tradeoff here is between assuring accountability for the Medicare program and maximizing flexibility for programs to determine the best mix of services for each patient.
- Should providers be at risk for achieving savings? Providers may accept risk for their performance fees or for overall service use. Currently, Medicare disease management demonstration projects are testing different risk-sharing models. Most disease management organizations do not accept risk for all medical spending and might have to partner with a health plan or insurance company under a risk-sharing model in order to

do so. Although risk sharing might be a strong inducement for efficient providers, many providers may be reluctant to participate under these arrangements.

- Should Medicare allow providers to offer non-covered services as part of a disease management program? Commercial programs often provide beneficiaries with services like home-testing kits for blood pressure and simple laboratory tests, or transportation services to ensure patients can get to their doctors' appointments. Traditionally, Medicare does not allow providers to offer additional benefits as inducements to beneficiaries, but one current Medicare disease management demonstration project does require providers to include prescription drugs within their programs. The tradeoff here is between allowing programs to provide the interventions most likely to result in improved outcomes for patients and ensuring equity between those patients enrolled in disease management programs and others who might also value the additional services.

Measurement issues

Evaluation of existing programs has been hampered by the lack of consensus over which measures should be used to determine the success of program interventions. Program results can be measured in terms of medical cost savings, return on investment for companies contracting with disease management organizations, improved quality of care, and increased worker productivity.

Most disease management organizations argue that they achieve cost savings for plan sponsors but the evidence to support this contention is mixed. Attempts to measure cost savings are complicated by the lack of a control group with which to compare outcomes, and the difficulty in defining a time frame in which measurable results should be expected. The evaluation design used by many providers depends upon comparing medical costs after a project has been implemented with benchmark costs for the same population in the prior year. As a result, evaluators may confound lower expenditures for the target population that are caused by general improvements in technology or treatment regimens for all patients with a given medical condition with savings achieved through program interventions. In addition, many disease management companies are not able to measure the impact of specific elements within their overall program.

Some disease management organizations are beginning to emphasize that their programs are designed to enhance quality of care. They argue that less attention should be given to the role of disease management in reducing health care expenditures. Within the industry, there is a general movement to define quality indicators that can be used to compare programs. Quality measurement may be particularly complicated for some conditions, for example, chronic kidney disease, for which programs may slow but cannot prevent deteriorating health status.

Lastly, disease management is a new and evolving field. Continual changes in models of care coordination make evaluation of particular interventions difficult. Negative or minimal results achieved from older models of care coordination no longer in use may obscure more positive outcomes resulting from new models of care.

To analyze these issues, we will synthesize the existing literature on effectiveness of disease management programs and interview researchers and providers of disease management services on some of the new techniques being used to measure program effectiveness. To date, analysts have found that disease management programs do show improvements in process measures of treatment, sometimes improve patient outcomes, but have not yet demonstrated consistent cost savings.

Implementation and data issues

Disease management programs require timely and accurate data. Data are needed to target individuals for disease management services, track use and cost of health care services, measure outcomes for enrolled patients, and measure quality of care. Most available data sources are limited. Administrative claims data are often not timely enough for this purpose and diagnosis information may not be complete. Few programs have access to lab results. Self-reports by beneficiaries, currently used by many disease management programs, are more timely but also limited in their utility. Some vendors are developing technologies to enhance beneficiary ability to measure and report key variables from their homes. For example, programs targeted to heart disease and diabetes sometimes provide home-testing kits so that patients may monitor their weight, and blood pressure from home.

Prescription drug claims processed by pharmacy benefit managers are the most timely data available to disease management organizations and an important indicator of physician adherence to clinical guidelines and patient compliance. Disease management providers argue that while care management is more than drug management, it is impossible to manage care without managing drug utilization. However, in the absence of a prescription drug benefit, pharmacy data are not available for all Medicare beneficiaries. Even when pharmacy data are available, it is not always possible to know the condition for which a particular medication has been prescribed without additional information on the patient.

Clinical guidelines are another important source of information and the basis for most care coordination interventions. All disease management programs rely upon clinical guidelines developed by medical specialty societies. The development of guidelines for specific conditions varies as does the frequency with which guidelines are updated. In addition, there are fewer clinical guidelines for treatment of beneficiaries with multiple chronic conditions.

Other design questions include:

- Should the number of care coordination programs within a geographic area be limited? This is an issue raised by physicians who are concerned that they may receive frequent and possibly conflicting communications from disease management organizations about their patients. In general, the relationship among disease management organizations, physicians, and beneficiaries is an area that requires more investigation.
- Should beneficiaries targeted for a disease management intervention be required to opt out of the program if they do not want to participate or should enrollment require a

positive decision by beneficiaries to opt in? The tradeoff here is that an "opt in" strategy maximizes the ability of beneficiaries to choose whether or not to participate in a program but is likely to miss those beneficiaries most in need of care coordination services.

- Should beneficiaries who enroll in a disease management program be required to maintain enrollment for a specified minimum period of time? Many current programs accept responsibility for all members of a specified population with a given condition. It is up to the organization to reach the population, induce participation, and provide different levels of intervention depending upon the needs of the patients.
- Are some beneficiaries not suitable for disease management services, for example the cognitively impaired?
- If disease management programs are available for multiple chronic conditions, what rules will be used to determine in which program beneficiaries with multiple conditions should be enrolled? Most current programs target individuals on the basis of one condition but then manage the full range of medical conditions faced by the individual. The creation of a hierarchy of conditions will be essential in order to integrate disease management within the Medicare program.

Coordinated care services for Medicare beneficiaries with chronic kidney disease

MedPAC has a particular interest in examining the use of coordinated care services for beneficiaries with chronic kidney disease. This condition can be classified into five stages, ranging from decreased kidney function to permanent kidney failure —end-stage renal disease—requiring either maintenance dialysis or a kidney transplant to survive.

Researchers estimate that at least 40 percent of beneficiaries in the late stages of chronic kidney disease do not receive adequate renal care in the year before they develop permanent kidney failure. The impetus behind identifying these beneficiaries and providing coordinated care to them is the opportunity to delay the onset of permanent kidney failure and to improve their outcomes and lower health care spending once they develop permanent kidney failure. These programs focus on:

- treating beneficiaries' chronic kidney disease and its complications, such as anemia and bone disease,
- managing beneficiaries comorbid conditions, such as diabetes and chronic hypertension,
- educating beneficiaries about the different renal treatment options, such as home dialysis, and
- referring beneficiaries to renal replacement therapy in a timely fashion.

MedPAC is also interested in exploring the benefits of coordinated care for beneficiaries with permanent kidney failure who require dialysis for all the reasons we have already discussed:

- They are costly. Dialysis beneficiaries have higher expected Medicare costs than other beneficiaries. Although representing less than 1 percent of all beneficiaries, they account for about 6 percent of all Medicare spending. Most recent estimates show that dialysis beneficiaries cost the Medicare program about $58,000 per year.

- These beneficiaries often have other chronic hypertension, diabetes, and congestive heart failure, needing care from multiple providers.

- The number of beneficiaries needing dialysis will continue to grow. The prevalence of end-stage renal disease increased from 806 per million population in 1993 to 1,311 per million population in 2000. During this same period, the prevalence of end-stage renal disease patients with diabetes doubled, from 210 to 456 per million population.

- Medicare's payment for outpatient dialysis does not promote the optimal provision of coordinated dialysis care because of the content and size of the prospective payment bundle. MedPAC has recommended broadening the payment bundle to include commonly used drugs and other services that are currently excluded from it.

MedPAC recognizes that the development of Medicare policies to address the needs of a growing population with multiple chronic conditions is an ongoing task. We plan to present the results of our initial work in our June 2004 Report to Congress.