ISSUE BRIEF

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TRENDS IN HEALTH CARE FINANCING

Coordinating Care for Medicare Fee-for-Service Beneficiaries: An Early Look

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This issue brief, based on a May 2004 report to Congress, presents early descriptive findings from Mathematica's evaluation of the first year of the Medicare Coordinated Care Demonstration (MCCD). The MCCD aims to improve health outcomes and reduce Medicare costs for chronically ill beneficiaries by encouraging adherence to self-care and medication regimens and improving communication among physicians. In January 2002, the Centers for Medicare & Medicaid Services (CMS) selected 15 demonstration programs to participate in the evaluation. Each program began enrolling beneficiaries between April and September 2002 and was authorized to operate for four years. CMS has since extended the end dates for 11 of the programs until 2008, when the final results of the evaluation will be complete.

Improving Care for Chronic Illness

One of Medicare's biggest long-term fiscal challenges is controlling the cost of care for beneficiaries with chronic illnesses, such as heart disease and diabetes. In 1998, 14 percent of Medicare beneficiaries accounted for more than three-quarters of all Medicare payments. Most of these beneficiaries had multiple chronic illnesses that negatively affected their quality of life. Despite the costs and complexity of their care, studies have shown that many acute health problems, and resulting costs, can be prevented if (1) patients are provided with medical care that is consistent with recommended standards; (2) patients adhere to recommended medication, diet, exercise, and self-care regimens; (3) patients have access to transportation and social support services; and (4) providers communicate better with each other and with patients. Health maintenance organizations and insurers have developed or contracted with disease management and care management programs to help inculcate these changes in patient and provider behavior in the commercial insurance sector, but no such programs exist in fee-for-service Medicare.

The MCCD demonstration was launched to test the effectiveness of coordinated care for Medicare patients. Mathematica's evaluation is examining whether the programs meet their goals of reducing costs, improving quality of care, and improving patient satisfaction with care, using a randomized design. Program features associated with the largest effects will also be assessed. This issue brief describes the interventions, first-year enrollment experiences, and preliminary findings on patient and physician satisfaction with the programs.

Programs Are Diverse

The 15 programs participating in the study are diverse. They include five commercial disease management vendors, three hospitals, three academic medical centers, an integrated health care delivery system, a hospice, a long-term care facility, and a retirement community (Table 1). The programs also vary widely in the number and types of chronic conditions they target, with six programs targeting only a single condition—congestive heart failure (CHF), coronary artery disease (CAD), or cancer; three serving

TABLE 1

PARTICIPATING DEMONSTRATION PROGRAMS

Host Organization	Type	Targeted Diagnoses
Avera Research Institute/ Avera McKennan Hospital and University Health Center	Hospital	CHF
Carle Foundation	Integrated delivery system	Heart conditions, diabetes, chronic lung disease
CenVaNet	Care coordination provider	Heart conditions, diabetes, chronic lung disease, cerebro-vascular disease
Charlestown Retirement Community	Retirement community	Heart conditions, diabetes, COPD
CorSolutions	Care coordination provider	CHF
Georgetown University Medical School	Academic institution	CHF
Health Quality Partners	Care coordination provider	Heart conditions, diabetes, asthma, hyperlipidemia or hypertension
Hospice of the Valley	Hospice	CHF, COPD, cancer, neurological conditions
Jewish Home and Hospital Lifecare System	Long-term care provider	Heart conditions, diabetes, chronic lung disease, cancer, and other conditions
Medical Care Development	Hospital consortium	CHF, heart conditions
Mercy Medical Center/ North Iowa	Hospital	CHF, chronic lung disease, liver disease, stroke, vascular disease, renal failure
QMed, Inc.	Care coordination provider	CAD
Quality Oncology, Inc.	Care coordination provider	Cancer
University of Maryland School of Medicine	Academic institution	CHF
Washington University School of Medicine	Academic institution with care coordination provider	No specific diagnoses targeted

patients with less-specific problems (for example, high-risk patients identified from administrative data by an algorithm), and the six other programs serving patients with a range of conditions. Ten programs require that patients have had a hospitalization for the target condition in the year prior to enrollment. The programs operate in 16 states (mostly in the Northeast or Midwest) and the District of Columbia; five serve beneficiaries living in sparsely populated rural areas.

Each demonstration program developed its own intervention. All of the interventions use some type of assessment tool to determine patients' care coordination needs. These tools typically examine physical, emotional, and psychological health; health history; current treatment recommendations and medications; and other factors. Care coordinators analyze gaps in care, adherence to recommendations, and patient knowledge, then develop plans to address shortcomings, working in tandem with patients. Care coordinators contact and monitor patients on an ongoing basis, primarily by telephone.

In return for providing the care coordination intervention, each program receives a negotiated monthly payment for each beneficiary who chooses to enroll and is randomized to the treatment group. Enrolled beneficiaries are randomly assigned to either the treatment group, which receives the care coordination services, or to the control group, which does not. Payments for each program are based on the estimated cost of the intervention, but have to be low enough that net savings would be generated for the target population if projected Medicare expenditures were reduced by 20 percent. Two programs have monthly fees ranging from $80 to $100, four from $100 to $200, four from $200 to $300, and five have fees exceeding $300 per month.

Programs differ widely in how they implemented their interventions, how often they contacted patients, and what links they developed with providers. All but 1 of the 15 programs stress patient education to improve adherence to medication, diet, and exercise regimens. The programs devote less attention to convincing physicians to change their practices or to improving access to support services. Six of the programs averaged 1.2 to 1.5 contacts per patient per month during the first year after enrollment. Another five averaged between 2.2 and 2.9, three averaged between 3.9 and 8.2, and the remaining program did not fully track contacts. Most contacts were by

telephone, except in one program, whose care coordinators conducted over two-thirds of their contacts in person. Patients initiated about 10 percent or less of the contacts in most programs.

Efforts to enhance patient-provider communications generally focus on teaching beneficiaries how to obtain information from their physicians. Programs feel that they have little leverage over physicians, and that most of their patients' physicians already follow practice guidelines. As a result, only five programs give providers practice guidelines or reports reviewing deviations from guidelines.

All programs recognize the importance of integrating their efforts with those of their beneficiaries' physicians, and all but one either had existing links between care coordinators and physicians or have made a conscious effort to create these types of bonds.

Recruiting Patients Was Challenging

Finding and convincing beneficiaries to enroll has been harder than expected for most of the programs—only four met the evaluation's target enrollment of 686 per program for the first year (although two additional programs enrolled over 600 beneficiaries). Six programs enrolled fewer than half their own targeted number of patients for the first year, citing initial overestimates of the number of eligible patients from their referral sources, physicians' failure to encourage their patients to enroll, high patient refusal rates, and limited care coordinator time to both recruit patients and serve those already enrolled. The programs that were most successful in enrolling patients had a close relationship with physicians before the demonstration started and access to databases (such as clinic or hospital records) to identify potentially eligible patients.

Most Have Serious Chronic Illnesses

Overall, more than 10,000 beneficiaries enrolled in the study over the first year of program operations. CAD was the most common condition enrollees had been treated for in the prior two years (61 percent), followed by CHF (46 percent), diabetes (41 percent), cancer (27 percent), stroke (25 percent), chronic obstructive pulmonary disease (COPD—9 percent), and dementia (9 percent). Three programs drew a high proportion of beneficiaries who were older than age 85 or younger beneficiaries with disabilities (Table 2). Compared with all Medicare beneficiaries, study participants had substantially more education and higher incomes. Most programs enrolled relatively few black or Hispanic patients, those younger than age 65, and those also enrolled in Medicaid.

TABLE 2

CHARACTERISTICS OF FIRST-YEAR ENROLLEES

Characteristic	Number of Programs
Age <65 (disabled) or 85+	
<20 percent	7
20 to 30 percent	5
>30 percent	3
Proportion Nonwhite or Hispanic	
<10 percent	7
10 to 40 percent	4
>40 percent	4
Average Monthly Medicare Payments in the Past Year	
<$600	3
$600 to $2,000	6
>$2,000	6
Average Annualized Number of Hospitalizations in Past Two Years	
<1	7
1 to 1.9	5
2 to 2.5	3

Source: Analysis of Medicare National Claims History File, Standard Analytic File, and Enrollment Database.

Most of the programs succeeded in enrolling patients with serious chronic illnesses, but a few enrolled relatively healthy patients. Medicare expenditures averaged more than $2,000 per month during the year before enrollment for first-year enrollees in six programs, but less than $600 per month for three other programs (Table 2). By comparison, the average Medicare expenditure for noninstitutionalized beneficiaries nationally was $505 per month in 2002. (Programs with low-cost enrollees are likely to have difficulty achieving large enough savings to offset the cost of their interventions.) In half of the programs, enrollees had an average of one or more hospitalizations per year during the two years before enrollment. (Three programs averaged two or more hospitalizations per patient per year.)

Early Results Show Satisfaction

Early survey data on small samples of beneficiaries and physicians suggest that the programs are popular with both groups. The programs have pleased beneficiaries and increased their understanding of their diseases and overall satisfaction with care. However, programs have not led to statistically significant increases in self-reported adherence to medication, diet, and exercise regimens (Table 3).

Physicians were also satisfied with the programs, thought they improved care, and would recommend them. Interviews with 112 physicians of patients in the 8 programs first surveyed revealed that physicians felt the programs brought about appropriate changes in their office routines. They rated care coordinators' clinical judgment and competence highly; 95 percent found the reports coordinators sent them to be very or somewhat helpful; and 92 percent rarely or never disagreed with the care coordinators. Over half said that they had changed their treatment of one or more patients as a result of the care coordination intervention.

Potential for Improving Patients' Lives

No estimates of the programs' impact on Medicare costs and quality of care are available at this time, but the preliminary findings here suggest that effects might be observed when the data become available. Physicians have been responding favorably to the programs—an important factor, because care coordination programs are unlikely to succeed without significant cooperation and reinforcement from physicians.

The absence of statistically significant effects on beneficiary adherence measures does not necessarily imply that programs are not having any effect on behavior. Relative to the control group, program beneficiaries reported better access to information and appointments, better communication among their providers, and greater understanding of their health conditions. Behavioral change usually takes time; some changes will occur only after beneficiaries experience an adverse event.

TABLE 3

PATIENTS' SELF-REPORTED ADHERENCE TO MEDICATION, DIET, AND EXERCISE REGIMENS

	Treatment Group	Control Group
Did not miss doses of medication for target condition in the past week	90%	90%
Ate a healthy diet most or all of the time in the past four weeks	72%	68%
Exercised regularly	65%	63%

Sample size: medication—1,202; diet—1,098; exercise—1,445.
Source: 2003 patient survey.

Interviews with care coordinators suggest that their interventions may be making important improvements in the lives of some beneficiaries. If enough beneficiaries have positive experiences, the demonstration may significantly lessen their need for expensive hospital stays, reduce their Medicare costs, and improve their well-being.

A second report to Congress, scheduled for spring 2006, will estimate each demonstration program's effect on Medicare costs and services during the first year after enrollment for patients enrolling during the first 12 months. A report scheduled for mid-2007 will present results for the full four years of the demonstration.

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