

improve the quality of care, M+C and private insurers have developed alternative payment systems that put the provider of disease management organizations at full or partial risk for the cost of care.

Concerning dual eligibles, integration across the continuum of primary, acute, and long-term care services for vulnerable populations has gained attention in recent years as an approach that could produce both cost efficiencies and more appropriate decisions on the settings in which care is delivered.

### C. Disease Management

The level of interest in and knowledge about disease management is growing dramatically. The Institute of Medicine's report, entitled "Crossing the Quality Chasm," highlights the challenge of managing chronic conditions within a system that was designed to treat acute illness. Major national organizations such as the Disease Management Association of America (DMAA) have been formed to advance the practice of disease management, and the National Committee for Quality Assurance (NCQA) has established standards for disease management programs.

Early efforts at disease management occurred mainly in managed care settings, as the plan and the providers had clear incentives to manage care and the patients were enrolled and "locked into" a delivery system. More recently, a variety of health care organizations including physician group practices, private insurers, commercial firms, and academic medical centers, have developed programs designed to address the challenges inherent in managing chronic illnesses within the context of a FFS system oriented around episodic care. The most obvious of these systems are called PSOs.

The NDMA, NCQA, and other organizations such as the National Pharmaceutical Council have put forward definitions of disease management that contain certain common elements. These definitions view disease management as an approach to delivering health care to persons with chronic illnesses that aims to improve patient outcomes while containing health care costs. These programs tend to target persons whose primary health problem is a specific disease, although certain comorbid conditions are usually addressed as well. Patients with a similar level of severity of a disease tend to face similar problems and therefore receive similar treatment plans. These disease management interventions tend to be highly structured and emphasize the use

of standard protocols and clinical guidelines.

Certain common features are found in all of these definitions:

- Identification of patients and matching the intervention with need.
- Use of evidence-based practice guidelines.
- Supporting adherence to the plan of care.
- Supporting adherence to evidence-based medical practice guidelines by providing medical treatment guidelines to physicians and other providers, reporting on the patient's progress in compliance with protocols, and providing support services to assist the physician in monitoring the patient.
- Services designed to enhance patient self-management and adherence to their treatment plan. Examples of these services are patient education, monitoring and reminders, and behavior modification programs aimed at encouraging lifestyle changes.
- Routine reporting/feedback loop (may include communication with patient, physician, health plan and ancillary providers, and practice profiling).
- Communication and collaboration among providers and between the patient and providers. Related services include team conferences, collaborative practice patterns, and routine reporting and feedback loops. In addition, care managers are often used to relay communication and to coordinate care across providers and between face-to-face encounters with chronically ill patients. Programs that address comorbid conditions extend their communication efforts to include all of the patient's providers and the entire spectrum of care.
- Collection and analysis of process and outcomes measures.

In addition to these standard features, programs may include use of information technology such as specialized software, data registries, automated decision support tools, and callback systems. Although disease management services usually do not include actual treatment of the patient's condition, many disease management programs augment the services provided in the traditional FFS system by adding such services as comprehensive geriatric assessment, social services, preventive services, transportation, including prevention services and necessary prescription drugs and outpatient medications. The interventions provided go beyond those services generally covered under the Medicare FFS program.

In our recent study aimed at investigating and benchmarking case

management and disease management efforts, the suggestion was made that case and disease management organizations provide services aimed at addressing one or more of the following goals: improving patient self-care, improving physician prescribing and treatment practices, improving communication and coordination, and arranging and providing for services. Programs vary in their relative focus on these areas. Some disease management programs may emphasize improving physician use of recommended clinical guidelines, others may focus on providing case managers to support and educate the patient and enhance communication, and others may emphasize access to additional services.

### D. CMS Demonstrations of Management of Chronic Diseases

We have made three awards pursuant to section 121 of the Medicare, Medicaid, and Benefits Improvement and Protection Act (BIPA)(Pub. L. 106–554, enacted on December 21, 2000) that directs us to conduct a demonstration project for the Medicare FFS population to determine the impact on costs and health outcomes of applying disease management services. Demonstration sites plan to start enrollment in the spring of 2003. Under this BIPA demonstration, services will be supplemented with coverage for prescription drugs provided to beneficiaries with advanced-stage congestive heart failure, diabetes, or coronary heart disease. A key feature of the demonstration is that the selected organizations must guarantee either through reinsurance or some other means, net savings to the Medicare program.

In the past, we have conducted several demonstrations of case management for chronic illnesses, including the national channeling demonstration and the Alzheimer's Disease demonstration. The evaluations of these demonstrations found that none of them showed sufficient savings to cover the additional costs of case management.

There are several possible reasons for the lack of positive results. First, the most appropriate individuals were not always targeted and enrolled into the demonstration. In many cases, the sites enrolled patients with less severe, and therefore less costly conditions, making it more difficult to achieve cost savings by avoiding normal utilization patterns of acute or long-term medical care. The disease management demonstration Web site [www.cms.hhs.gov/healthplans/research/DMDemo.asp](http://www.cms.hhs.gov/healthplans/research/DMDemo.asp) contains