EDITORIAL

Physicians in Supporting Roles in Chronic Disease Care: The CareMore Model

The ultimate goal of U.S. health care is to ensure the best possible health of all Americans. Accordingly, the care provided needs to be of high quality, user friendly, and efficient. Geriatrics has been a leader in attempting to develop new models of care that meet these principles and can be broadly diffused.[1] These models have usually been developed in academic settings and rigorously evaluated, and their developers have struggled to find avenues for dissemination. Simultaneously, and usually independently, there has been a substantial amount of innovation in practice settings, particularly those receiving capitated payments, where performance on these metrics is tightly linked to viability. In most of these nonacademic healthcare delivery systems, traditional randomized clinical trial designs to evaluate effectiveness are too rigid, too expensive, and take too long to achieve results. Nor are there any incentives for these organizations to publish or disseminate their innovations. Nevertheless, some of the models of care that have been implemented provide important lessons for the future of healthcare delivery. One such model is CareMore, developed in Southern California.

Upon entering the CareMore Care Center in Downey, California, there is nothing particularly striking. It is a renovated bank building with high ceilings and a packed waiting room, typical of many urban multispecialty practices, but this is not a medical practice, per se. All of these patients have their own primary care physicians (PCPs), and there are few physicians on site. Nurse practitioners are using several examining rooms to see patients, but the real action is going on in many rooms filled with computer monitors and phone banks staffed by nurse practitioners and medical assistants. These members of the team are proactively and intensely managing chronic illnesses of CareMore's Medicare Advantage beneficiaries.

If this seems like the wrong way to deliver health care, consider CareMore's remarkable performance on quality, cost, and patient satisfaction. CareMore seniors with diabetes mellitus have an average glycosylated hemoglobin level of 7.08, and the amputation rate is 78% less than the national average for people with diabetes mellitus with wounds. Hospitalizations for end-stage renal disease are 42% less than the national average. Thirty-day rehospitalization rates are 13.6%, compared with 20% in the overall Medicare population.[2] The average length of hospital stay is 3.0 days. Overall, CareMore has estimated that payers' risk-adjusted total per capita health spending is 15% below the regional average.[3] On the 2009 annual Consumer Assessment of Healthcare Providers and Systems, CareMore scored 8.81 out of 10; the national average was 8.47, and the California state average was 8.57.

CareMore is a for-profit, privately held corporation that offers several special needs plans in addition to more-traditional Medicare Advantage Part C coverage. It insures 43,000 members, 20% of whom have Medicare and Medicaid. The average age of CareMore members is 72, 45% are Hispanic, 34% have diabetes mellitus, 40% have hypertension, and 50% have an annual income of $30,000 or less.

The CareMore model is a remarkable departure from the practice of medicine that developed in the 20th century. It is team based, evidence based, information technology based, and high touch. Yet contrary to the concept of the team being built around the PCP, the PCP is only one of many components of CareMore's healthcare delivery model.

Although CareMore's services have been added incrementally, the philosophy of providing high quality at lower cost has been persistent. A component of its mission statement relates directly to cost: to "protect precious financial resources of seniors and the Medicare Program through innovative methods of managing chronic disease, frailty, and end of life." In keeping with this philosophy, CareMore members have no copayments or deductibles. Nevertheless, CareMore remains highly profitable.

How do they do it? According to a senior official, "CareMore has not tried to change or work through the conventional system but has built a new model that recognizes the increased demands of the chronically ill." This model focuses on intensive management of frail and chronically ill members ($\sim$ 15% of members), who account for 70% of medical costs, as well as close monitoring of nonfrail members and aggressive management of chronic conditions to delay the onset of frailty.

Once seniors enroll in CareMore, they are encouraged (80% do so) to have a 1-hour Healthy Start visit at a CareMore Care Center (there are 11 in Southern California) with a medical assistant and nurse practitioner or locum tenens physician. During this visit, the member receives point-of-care laboratory testing; an inventory of diseases and conditions is obtained; screening is performed for conditions such as dementia, depression, and falls; medications

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are reviewed and switches to generics made, if possible; and Healthcare Effectiveness Data and Information Set (HEDIS) measures are completed. In addition, components needed for accurate hierarchical condition coding are assessed. A new Healthy Journey program will repeat this evaluation yearly. Based on the findings of these visits, members are triaged to team-based chronic disease care management programs for heart failure, end-stage renal disease, chronic kidney disease, chronic obstructive pulmonary disease, hypertension, mental health disorders, anticoagulation, diabetes mellitus and wound care, falls, palliative care, and hospice.

Although corporate physicians have important roles in selecting the protocols used to manage these conditions (usually based on national guidelines such as those from the American Diabetes Association and American College of Cardiology), the nurse practitioners and medical assistants implement the protocols. The nurse practitioners also become the primary care providers for preventive services. CareMore patients' PCPs continue to follow them, but the chronic conditions listed above are temporarily or permanently comanaged centrally through CareMore. In addition, CareMore hospitalists (termed extensivists) provide inpatient care and postdischarge follow-up care in the Care Centers and follow patients in skilled nursing facilities as needed. At these follow-up visits, patients are enrolled in condition-specific management programs. Postdischarge follow-ups also include telephone calls from nurses, the frequency of which specified complexity criteria determine, and may include home visits. Regular updates are sent to primary care providers in periodic summary reports.

At the heart of the system is a highly developed information technology system that includes two proprietary products (an electronic health record and a wireless remote system for monitoring patients in their homes) and an in-house developed program, Patient Quick View, which integrates pharmacy, laboratory, and utilization data. Patient Quick View, which the patients' primary care providers can access, facilitates the aggressive monitoring of care and utilization and displays patient progress over time.

CareMore also uses a remote monitoring technology system for patients with hypertension, heart failure, and diabetes mellitus. For those with hypertension, this includes twice-a-day blood pressure readings and adjustments until the patient is stabilized, usually within 6 months. Patients with heart failure are weighed daily for life. Nurse practitioners monitor all patients who use these remote monitoring programs and are alerted to changes and out-of-range results. When patients fail to weigh themselves or to have blood pressure checks, medical assistants call them to find out why. After certain conditions (e.g., hypertension) are stabilized, patients are discharged from the chronic disease programs back to their PCPs, but are rechecked at regular intervals and re-enter into the programs as needed.

In addition to the standard programs, CareMore offers a variety of nontraditional services, including no-cost transportation services to CareMore Care Centers, free membership in "Nifty after Fifty" fitness centers for 3 months (to be expanded to 12 months for Special Needs Plan patients), podiatry, house calls by physicians and nurse practitioners, an Intervention Team that goes to patients' homes to investigate nonclinical problems, caregiver support, respite care, and a high-intensity management program (Mezzanine Physician) for the 2% of members who have been categorized as the frailest.

What is the role of PCPs? Practically speaking, it is managing acute illnesses that do not require hospitalization and referring patients to CareMore programs and specialists. PCPs also diagnose and manage undifferentiated and unusual illnesses, including coordinating care with specialists, and performing preventive tests and procedures when appropriate.

Approximately 700 PCPs contract with CareMore, with an average of fewer than 75 patients per physician. They are involved in a revenue sharing system and are also paid to ensure that HEDIS measures are completed. Some also serve on a PCP Advisory Group. CareMore constantly evaluates the specialists that they can refer to, and those who are not judicious in the use of procedures and tests are dropped. CareMore has also responded to the problem of nonparticipating or high-use consultants by hiring its own cardiologists, pulmonologists, and a dermatologist, as well as mental health providers. In conjunction with the specialists that CareMore employs, a culture of conservative management has been adopted. This has translated into more-efficient provision of medical care. Senior CareMore officials state that, for its members, the generous benefits package for its members more than offsets the downside of less choice of physicians.

One of the major obstacles to diffusion of this model has been physician resistance. By not participating as PCPs or consultants, physicians can effectively block implementation. In California, where physicians are socialized to managed care thinking, this has been less of a problem. However, in other markets such as Las Vegas, physician resistance has led to delays in full implementation of the model. Much of this resistance has been reduced over time as physicians become accustomed to the model and their patients relate positive experiences.

If Medicare is looking to provide a medical home for its beneficiaries, CareMore provides a palace, providing far more at much lower cost. Nevertheless, this innovative model raises a number of questions. The average age is relatively young for a Medicare population. How well does this model work for patients in their late 80s and 90s? How well does it work for patients who have multiple conditions that may have competing recommended care?[4] Are these patients better served by more active involvement and team leadership by a PCP? Does the emphasis on specialists who practice conservative management result in less access to the newest technology? Finally, this promising initial experience warrants a more-intensive evaluation of the quality of care provided by CareMore to better gauge the value provided.

The effect of the CareMore model on the number of primary care and specialist physicians needed and their roles is uncertain. The initial CareMore experience suggests that comparable or better care can be provided with fewer physicians. If this model is widely implemented, projected physicians shortages[5] may have far less of an effect on health care. Similar to other disruptive innovations, the CareMore model will generate a groundswell of opposition

to the notion that physicians do not need to be at the helm of chronic disease management. However, when forced to compete on quality, satisfaction, and cost, the CareMore model may emerge as the dominant model for healthcare delivery for seniors with chronic diseases. CareMore has set the bar for performance standards that emerging physician-centered medical homes will need to meet if Medicare and other payers pursuing value-based purchasing are to support them.

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David B. Reuben, MD
Division of Geriatrics
Department of Medicine
David Geffen School of Medicine
University of California at Los Angeles
Los Angeles, California

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