

their communities. In all this work, the Center for Medicare and Medicaid Innovation should provide as much flexibility as possible to HICs, respond rapidly to their needs for federal data, and minimize any regulatory and reporting burdens not vital to ensuring cost containment and quality improvement.

For decades, the United States has seemed powerless to curb excessive health care spending and improve the quality of care. Now, the tools for achieving fundamental reform are in place, but using them requires the federal government and its private and public

partners to leave business as usual behind and to create and implement a plan that addresses the root causes of our health care crisis. Our commission believes that the establishment of HICs to transform the care of patients with multiple chronic conditions could provide such a plan. Other approaches may be equally sound. But above all else, we must act.

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1. Commission on a High Performance Health System. The performance improvement imperative: utilizing a coordinated, community-based approach to improve care and lower costs for chronically ill patients. New York: The Commonwealth Fund, April 2012.

2. Anderson G. Chronic care: making the case for ongoing care. Princeton, NJ: Robert Wood Johnson Foundation, February 2010.

3. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. *JAMA* 2002;288:1775-9.

4. Guterman S, Davis K, Schoen C, Stremikis K. Reforming provider payment: essential building block for health reform. New York: The Commonwealth Fund, March 2009.

5. Holahan J, Schoen C, McMorrow S. The potential savings from enhanced chronic care management policies. Washington, DC: Urban Institute, November 2011.

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## Sharing the Care to Improve Access to Primary Care

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Gaining prompt access to primary care is a growing concern for all American adults. In Massachusetts, average wait times for new patients to obtain an internal-medicine appointment rose by 82% in the 2 years after health insurance coverage was expanded; current wait times average 36 days for family medicine and 48 days for internal medicine.<sup>1</sup> In a 2011 national survey, 57% of patients who were sick and needed medical attention could not obtain access to care promptly, up from 53% in 2006.<sup>2</sup>

The reason for the access problem is an imbalance between demand for care and capacity to provide care. Demand is growing as the population expands, ages, and faces obesity and diabetes epidemics. Capacity is shrinking as the ratio of adult primary care clinicians (family physicians, general internists, nurse practitioners, and physician assistants) to population drops; this ratio is expected to fall by 9% between

2005 and 2020.<sup>3</sup> Even with a dramatic increase in the proportion of U.S. medical students choosing primary care careers, it would take decades to reverse this trend.

The access problem creates a serious dilemma. On the one hand, the deepening shortage of adult primary care clinicians means that panel size — the number of patients cared for by each clinician — will increase. On the other hand, average panel size is already too large, and its further growth will worsen access, compromise quality, and aggravate burnout among primary care clinicians. Clinicians with panel sizes of 2500 patients (the national average is about 2300) would have to spend 18 hours per day to provide excellent chronic and preventive care<sup>4</sup> and would require even more hours for acute care and care coordination. Adult primary care as currently organized is not a sustainable enterprise.

The problem becomes clear when we define the relationship between demand and capacity.<sup>5</sup> Capacity equals the number of clinician visits per day times the number of working days per year. Demand equals the panel size times the average number of visits per patient per year. If a clinician sees 20 patients per day and works 210 days per year, capacity is 4200 visits per year. If the panel size is 2000 and the average patient sees the clinician 3 times a year, demand is 6000 visits per year — and there's an intolerable mismatch between capacity and demand. To balance capacity and demand, panel size would need to be reduced to 1400, which would bring demand down to 4200. Panel size also needs to be risk-adjusted, because older and sicker patients require more visits per year; for a geriatric panel requiring an average of 6 visits per year, a reasonable panel size would be 700.

How can primary care respond

Examples of Standing Orders for Registered Nurses for Prescription Refills.*			
<b>Diabetes</b>			
Appointment in Past 6 Mo	Glycated Hemoglobin $\leq 7.5\%$	Normal Creatinine and Potassium for Past 6 Mo	How to Refill
Yes	Yes	Yes	3-mo supply (1 refill)
	Yes or No	No†	1-mo supply (no refill), order lab tests, schedule appointment
	No	Yes	1-mo supply (no refill), schedule appointment
No	Yes	Yes	3-mo supply (no refill), schedule appointment
	No	Yes or No†	1-mo supply (no refill), schedule appointment
<b>Hypertension</b>			
Appointment in Past 6 Mo	Systolic Blood Pressure $\leq 130/80$ mm Hg	Normal Creatinine and Potassium for Past 6 Mo	How to Refill
Yes	Yes	Yes	3-mo supply (1 refill)
	Yes or No	No†	1-mo supply (no refill), order lab tests, schedule appointment
	No	Yes	1-mo supply (no refill), schedule appointment
No	Yes	Yes	3-mo supply (no refill), schedule appointment
	No	Yes or No†	1-mo supply (no refill), schedule appointment
<b>Hyperlipidemia</b>			
Appointment in Past 6 Mo	LDL Cholesterol $\leq 100$ mg/dl for Patients with Diabetes, Cardiovascular Disease, or Both; $\leq 130$ mg/dl for Other Patients		How to Refill
Yes	Yes		3-mo supply (2 refills)
Yes or No	No†		1-mo supply (no refill), schedule appointment
No	Yes		3-mo supply (no refill), schedule appointment

\* LDL denotes low-density lipoprotein.

† The standing order would delineate seriously abnormal levels that would trigger urgent clinician review.

to the growing demand for care by increasing capacity while enhancing quality and improving clinicians' work life? One answer is for physicians to share the care with an empowered health care team.

Sharing the care involves both a paradigm shift and a concrete strategy for increasing capacity. The paradigm (culture) shift transforms the practice from an "I" to a "we" mindset. Unlike the lone-doctor-with-helpers model, in which the physician assumes all responsibility, makes all decisions, and delegates tasks to team members, but the capacity to see more patients does not increase, the

"we" paradigm uses a team comprising clinicians and nonclinicians to provide care to a patient panel, with a reallocation of responsibilities, not only tasks, so that all team members contribute meaningfully to the health of their patient panel. Nonclinician team members must add capacity in order to bring demand and capacity into balance.

In most primary care practices, nonclinician team members — registered nurses (RNs), medical assistants, health educators, and others — are not empowered to share the care. These team members generally implement care ordered by the clinician. Care could

be shared in three areas: prescription refills, chronic care management, and panel management.

Prescription refills are an important and time-consuming responsibility of primary care. In most practices, clinicians must approve all prescription refills. Although nurses or medical assistants assist clinicians by contacting pharmacies on the clinicians' behalf, they do not build capacity, because clinician time is needed for the refills. In a share-the-care practice, the critical workflow change would be the use of standing orders written and approved by physicians, which empower nonclinicians to take re-

sponsibility for a care process without involving the clinician. The table provides an example of a standing order empowering RNs to assume responsibility for certain medication refills for chronic conditions.

Counseling on lifestyle issues related to chronic care and adherence to medication is another time-consuming activity that can be accomplished by nonclinicians under standing orders, thereby allowing clinicians to see extra patients and add capacity.

Panel management is an approach in which primary care practices plan evidence-based routine services for their entire patient population. A patient registry (database) is used to identify patients with gaps in care (those who are overdue for a routine preventive or chronic care service). Using standing orders, nonclinician panel managers can identify and close these gaps by ordering, for example, glycated hemoglobin tests, mammograms, and colorectal-cancer screening; for certain services, they can administer care (for example, immunizations or foot exams for patients with diabetes) — all without clinician involvement. A medical assistant could search the registry for women between 50 and 74 years of age (who are advised by the U.S. Preventive Services Task Force to have a mammogram every 2 years), contact them, and order their mammograms. With standing orders, the medical assistant could independently inform women of normal mammogram results. Clinicians would be involved only if a mammogram was abnormal or for discussions with younger women about the advisability of obtaining a mammogram. Although

physicians may be uncomfortable giving up these decisions, large health care systems that have adopted panel-management processes have seen improvements in the proportion of patients receiving evidence-based care.

Some practices empower RNs or pharmacists to provide all care — patient education, lifestyle counseling, medication titration, and medication-adherence counseling — for certain patients with uncomplicated hypertension, diabetes, or hyperlipidemia, thereby adding substantial capacity without new demands on clinicians' time.

A number of primary care practices are successfully increasing capacity without adding work for clinicians. Increasing capacity enough to ease the access problem would require instituting all the changes described above. Seventeen percent of primary care physicians' time is spent on preventive care, much of which can be reallocated to nonclinician panel managers. An additional 37% is spent on chronic care, with much of this time consumed by patient education and counseling on lifestyle and medication adherence — activities that trained nonclinicians could undertake.<sup>4</sup>

To enable practices to share the care, several barriers must be overcome. The ratio of nonclinicians to clinicians must be increased to provide nonclinicians sufficient time to assume new responsibilities. Practices must be paid for nonclinicians' services, either by extending fee-for-service payments to nonclinicians or moving to global reimbursement mechanisms. Some fee-for-service practices have increased clinicians' productivity — which also

adds capacity — by having medical assistants take on expanded roles; the additional revenues pay for a ratio of medical assistants to clinicians of 2:1 or 3:1. Several practices adopting this model have improved access to care, patient satisfaction, and clinical outcomes.

The most significant barrier is the discomfort that many physicians feel about giving up decisions regarding preventive and chronic care, which, though seemingly routine, are often complicated by patients' various coexisting conditions, preferences, and goals. Research comparing a share-the-care model with traditional practices — measuring patient outcomes, patient experience, access, and clinician work-life satisfaction — should accompany the trend toward team-based primary care.

Creating teams to share the care is not an end in itself. The purpose of this practice change is to address the national demand-capacity imbalance while enhancing quality and reducing clinician stress and burnout.

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1. Access to health care in Massachusetts: the implications of health care reform. Waltham: Massachusetts Medical Society, 2011.
  2. Why not the best? New York: The Commonwealth Fund, October 2011.
  3. Bodenheimer T, Pham HH. Primary care: current problems and proposed solutions. *Health Aff (Millwood)* 2010;29:799-805.
  4. Yarnall KSH, Østbye T, Krause KM, Pollak KI, Gradison M, Michener JL. Family physicians as team leaders: "time" to share the care. *Prev Chronic Dis* 2009;6(2):A59.
  5. Murray M, Davies M, Boushon B. Panel size: how many patients can one doctor manage? *Fam Pract Manag* 2007;14:44-51.
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