



# Health Policy Brief

SEPTEMBER 14, 2010

## **Patient-Centered Medical Homes.** A new way to deliver primary care may be more affordable and improve quality. But how widely adopted will the model be?

### WHAT'S THE ISSUE?

Patient-centered medical homes are considered by many to be among the most promising approaches to delivering higher-quality, cost-effective primary care, especially for people with chronic health conditions.

Although there is no single standard definition of a medical home, there is an agreed-upon set of principles behind the concept, and most medical homes share common elements. For example, each patient has close contact with a clinician (physician, nurse practitioner, or physician assistant) for continuing care, and that clinician takes the lead when referring the patient to specialists. Medical homes also make extensive use of electronic health records and seek active participation of the patient and his or her family.

Health care reform legislation authorizes the Department of Health and Human Services (HHS) to test medical homes among other new care-delivery models. Supporters hope patient-centered medical homes will help refocus the U.S. health care system on the benefits of primary care. This brief describes recent projects that have applied patient-centered medical home concepts, as well as concerns about widespread adoption of the model before results are definitive.

### WHAT'S THE BACKGROUND?

Around the world, evidence suggests that strong primary care systems lead to better health outcomes at lower cost. But the U.S. health system is facing a crisis in adult primary care. An estimated 65 million Americans live in officially designated primary care shortage areas. Although the nation spends more on specialist care and has more specialists per capita than any other leading industrialized country, the number of medical students entering adult primary care careers in general internal medicine and family medicine is steadily declining.

**PRIMARY CARE PROBLEMS:** There are many excellent primary care practices in the United States, but many others are poorly organized and unable to provide timely, high-quality care. A major survey shows that only 27 percent of adults in the United States can easily contact their primary care physician by telephone, obtain care or advice after hours, and schedule timely office visits. Fifty percent of all patients do not understand what their primary care physicians told them because most visits are too short to properly address their health concerns. Coordination between primary care physicians, specialists, and hospitals is often lacking, and so each of these health care providers may be unaware of the others' treatment plans.

**“Common elements include the use of a dedicated care manager, expanded access to health practitioners, and data-driven quality measurement.”**

Many experts believe that these problems can be solved using a model called the patient-centered medical home. This approach to primary care seeks to facilitate partnerships among the patient, his or her personal primary care physician and, as appropriate, the patient’s family. The medical home concept was first applied to caring for children with special health care needs, but is now being tested for other groups and the general population. Although initially focused on the role of the physician and the physician-patient relationship, the concept has evolved to emphasize team-based care and, in some cases, the development of nurse practitioner-led medical homes.

**JOINT PRINCIPLES:** In general, patient-centered medical homes combine an emphasis on prompt access to primary care and an ongoing relationship with a primary care provider or team, with adoption of health information technology (IT) and improved coordination of care. Previous efforts to improve care coordination for Medicare beneficiaries have indicated that to reduce costs, these efforts need to be part of comprehensive primary care improvement.

In 2007, four specialty groups representing primary care physicians came together to identify a set of joint principles for patient-centered medical homes at the request of health care purchasers, including large employers. These principles emphasize access to a personal physician in a trusting, healing relationship, who directs a medical team responsible for the patient’s care. Patient care should have a whole-person orientation, be coordinated across the health care system,

and be focused on quality and safety as well as provide enhanced access to care. Another principle is that payment should recognize the value that physicians and other care providers add. Exhibit 1 lists these and other common medical home principles.

Although these principles describe medical homes overall, they do not list specific elements required of a practice to be considered a patient-centered medical home. In fact, no one set of criteria exists to identify medical homes. Many state initiatives use state-specific definitions or apply the joint principles with modifications.

**“MUST-PASS” STANDARDS:** Standards developed by the National Committee for Quality Assurance (NCQA) are most often used to identify which primary care practices have achieved designation as a medical home. The NCQA standards allow for recognition as a patient-centered medical home at three different levels and include 30 elements, of which 10 are considered mandatory or “must pass” (Exhibit 2).

The must-pass elements include standards related to patient access and communication, patient tracking, care management, test and referral tracking, and performance reporting and improvement. The NCQA recognition program provides considerable flexibility. For example, recognition at the lowest level requires passing any five of the 10 mandatory elements at a 50 percent performance level. NCQA is currently updating its standards and expects to publish new guidelines in January 2011.

#### EXHIBIT 1

### Common Elements Of A Patient-Centered Medical Home

|   |   |
|---|---|
| Personal physician                      | Each patient has a personal physician who provides first-contact, continuous, and comprehensive care.   |
| Team practice                           | The personal physician leads a team of individuals at the practice level for ongoing care and prevention.   |
| Coordinated care                        | Care is coordinated across medical subspecialties, hospitals, home health agencies, and nursing homes, and also with the patient’s family and public and private community-based services.  |
| Health IT and analytical tools          | Care is facilitated by electronic health records and other information technologies. Analytical tools allow for patient tracking, clinical monitoring, specialist follow-up, population-based decision making, and predictive modeling. |
| Expanded access to health practitioners | Access is facilitated by open scheduling as well as expanded and after-hours access to personal physician and practice staff by telephone and through secure e-mail.  |
| Effective use of financial incentives   | Targeted financial incentives reward physicians and providers for supporting medical home features, including additional payments for achieving cost savings and measureable and continuous quality improvements.                       |

# 27%

## Have easy access

Only 27 percent of U.S. adults can easily contact their primary care physicians by telephone, obtain care or advice after hours, and schedule timely office visits.

More than 100 demonstration projects have already tested the effectiveness of the patient-centered medical home concept with a variety of approaches and populations. Thirty-one states are planning or implementing medical home pilots within Medicaid or the Children's Health Insurance Program (CHIP), and at least 12 states have developed medical home initiatives that involve multiple payers.

**MEDICARE TEST:** HHS is developing a Medicare-specific demonstration and has indicated that Medicare will participate in multipayer projects in up to six states. The Department of Veterans Affairs (VA), the nation's largest health system, has begun shifting its clinics to the medical home model; the transition is expected to be completed by 2015. The Patient Protection and Affordable Care Act emphasizes the continued interest of Congress in the medical home model.

Medical home projects differ in populations they serve, intervention approaches, payment incentives and reforms, and practice characteristics. Examples of projects are shown in Exhibit 3. Common elements include the use of a dedicated care manager, expanded access to health practitioners, and data-driven quality measurement. Adoption of health information technology, including electronic health records (EHRs), is also considered necessary for a successful medical home. Financial incentives may involve payments for services not typically reimbursed by the visit-based, fee-for-service system, such as e-mail and telephone consultations, paying a per-member monthly fee to support care coordination, and/or providing incentive payments based on performance and outcome measures.

## WHAT'S IN THE LAW?

The Affordable Care Act creates the Center for Medicare and Medicaid Innovation within the Centers for Medicare and Medicaid Services (CMS). The innovation center is charged with testing innovative payment and service delivery models to reduce the rate of growth of Medicare and Medicaid expenditures. It is also charged with preserving or enhancing the quality of care.

Among the models to be tested under the law are those that promote "broad payment and practice reform in primary care, including patient-centered medical home models for high-need applicable individuals, medical homes that address women's unique health care needs, and models that transition primary care practices away from fee-for-service based reimbursement and toward comprehensive payment or salary-based payment."

The HHS secretary is given the authority to expand the use of models like patient-centered medical homes within Medicare or Medicaid. She can do so if it's been shown that these models reduce spending or the growth in spending without reducing quality, or can improve patient care without increasing spending. This is more flexibility than has historically been given the secretary to try out new models. Prior to passage of the Affordable Care Act, most such changes required an act of Congress.

In addition, federal stimulus funding provided under the American Recovery and Reinvestment Act includes incentives to invest in EHRs. Beginning in 2011, hospitals and eligible professionals may be able to receive incentive payments under Medicare and Med-

## EXHIBIT 2

### "Must-Pass" Elements Required for Patient-Centered Medical Home Recognition

|                                       |  |
|---------------------------------------|--|
| Access and communication              | Has written standards for patient access and patient communication.<br>Uses data to show standards for patient access and communication are met.         |
| Patient tracking and registry         | Uses paper or electronic-based charting tools to organize clinical information.<br>Uses data to identify important diagnoses and conditions in practice. |
| Care management                       | Adopts and implements evidence-based guidelines for three conditions.  |
| Patient self-management support       | Actively supports patient self-management.   |
| Test tracking                         | Tracks tests and identifies abnormal results systematically.   |
| Referral tracking                     | Tracks referrals using paper-based or electronic system.   |
| Performance reporting and improvement | Measures clinical and service performance by physician or across practice.<br>Reports performance across the practice or by physician.                   |

**SOURCE** National Committee for Quality Assurance. **NOTE** The complete set of standards can be found at <http://www.ncqa.org/tabid/631/Default.aspx>

**EXHIBIT 3****Outcomes for Seven Medical Home Demonstration Projects**

| Project                                   | Description   | Key outcomes                  |                        |                                |
|---|---|-------------------------------|------------------------|--------------------------------|
|   |   | Hospitalization reduction (%) | ER visit reduction (%) | Total savings per patient (\$) |
| Colorado Medical Homes for Children       | Multi-payer effort including private insurers, Medicaid, and CHIP. Focuses on expanding access to primary care through performance-based payment to providers.                | 18                            | —                      | 169; 530 <sup>a</sup>          |
| Community Care of North Carolina          | Long-term, statewide project to better coordinate care for high-cost Medicaid patients.   | 40 <sup>e</sup>               | 16                     | 516 <sup>f</sup>               |
| Geisinger Health System                   | Initiative at practices inside and outside of the Geisinger system to improve care coordination, including a Geisinger-funded nurse care coordinator in each practice site.   | 15                            | —                      | —                              |
| Group Health Cooperative <sup>b</sup>     | Care delivery and practice management changes to support physician-led care teams in clinics with salaried staff.   | 11                            | 29                     | 71                             |
| Intermountain Health Care                 | Uses electronic health records to improve care for at-risk patients and those with chronic diseases.  | 4.8; 19.2 <sup>c</sup>        | 0; 7.3 <sup>d</sup>    | 640                            |
| North Dakota                              | Collaboration between MeritCare Health System and Blue Cross Blue Shield of North Dakota demonstrating implementation of patient-centered medical home model in a rural area. | 6                             | 24                     | 530                            |
| Vermont Blueprint for Health <sup>g</sup> | Multipayer effort that broadly incorporates community health resources.   | 11                            | 12                     | 215                            |

**SOURCE** D. Fields, E. Leshen, and K. Patel, "Driving Quality Gains and Cost Savings through Adoption of Medical Homes," *Health Affairs* 29, no. 5 (2010): 819–26. <sup>a</sup>\$169 for all patients; \$530 for patients with chronic conditions. <sup>b</sup>Change relative to control group. <sup>c</sup>4.8 percent for all patients; 19.2 percent for patients with complex illnesses. <sup>d</sup>No change for overall population; 7.3 percent for patients with complex illnesses. <sup>e</sup>Only for asthma patients. <sup>f</sup>Based on Temporary Assistance for Needy Families program savings from fiscal year 2007 (\$135 million) and Aged, Blind, and Disabled program savings from fiscal year 2008 (\$400 million). <sup>g</sup>Expected.

icaid if they make “meaningful use” of EHRs (see August 24, 2010, [Health Policy Brief on meaningful use](#)).

### WHAT'S THE DEBATE?

Patient-centered medical homes hold great promise to revitalize primary care, capitalize on investment in health IT, and encourage use of preventive care. It is hoped that these efforts will avoid duplicate or unnecessary testing and services and result in better quality care at more affordable cost. However, there are still significant questions regarding widespread adoption of this approach. Among them:

**WHAT DOES IT MEAN TO BE A PATIENT-CENTERED MEDICAL HOME?** The standards and principles used to guide medical home development allow for a wide range of models. This flexibility is considered important to avoid stifling innovation, but it means it is difficult to generalize about results when different versions of the model are tested.

One criticism of existing standards is that they are biased toward criteria that are relatively easy to measure (i.e., adoption of structural changes) but that are not sufficient to

solve all of primary care’s shortcomings. As demonstration projects continue and expand, researchers may be able to identify more precisely what elements are essential to success. They may also determine whether wide-scale adoption of those elements would lead to cost savings or quality improvements outside of the testing or demonstration environment.

### HOW WILL WE KNOW WHETHER THEY WORK?

Most CMS demonstrations undergo formal assessments to determine the impact, particularly on health care spending. Observers have raised concerns that CMS’ typical approach to developing and evaluating demonstrations has been too time-consuming and rigid. Some experts have recommended that the agency adopt “rapid-cycle improvement” techniques to produce more timely results, and they expect new CMS Administrator Don Berwick to pursue such improvements. The Affordable Care Act relaxes a previous requirement that new models being tested not cost any more in federal funds than existing arrangements, and also gives CMS some additional resources to carry out the tests. The question now is whether the agency will adopt a more flexible and responsive approach to evaluating medical home demonstrations.

# 100+

## Demonstration projects

The number of projects that have already tested the effectiveness of the patient-centered medical home concept with a variety of approaches and populations.

**“Supporters hope patient-centered medical homes will help refocus the U.S. health care system on the benefits of primary care.”**

**ARE PATIENTS AND PHYSICIANS READY?** Wide-scale adoption of the patient-centered medical home model would represent a fundamental change from the current system of delivering patient care. Although it is hoped that medical homes will improve health care by improving quality and reducing costs, the most immediate impact will be on primary care physicians and the patients they treat.

Recent studies have found the transition to medical homes can bring major changes for physicians and patients. Physicians involved in a medical home initiative by Group Health, a system in Washington State and northern Idaho, saw fewer patients; the number of patients for which each physician was responsible dropped by 20 percent. The physicians also experienced lower measures of burnout compared to control groups. Despite this direct personal benefit, Group Health found that some physicians had difficulty making the shift to the collaborative work culture required in the medical home setting. Some observers suggest that changes in medical education might be needed to help prepare physicians to practice in medical homes, including an emphasis on communication skills.

As for patients, they are often unaware that they are in a medical home setting and are unclear what that means. A test of medical homes carried out from 2006 to 2008 and known as the TransforMED National Demonstration Project found that patient satisfaction actually declined with the patient-centered medical homes transition. In part, this appeared to be due to patients not understanding the medical home concept, and feeling disoriented in the new system.

One element of confusion appears to be the name “medical home,” which is commonly used in statutory language, but which for patients can have a negative connotation of institutionalized care. As a result, the term *patient-centered medical home* might be changed. For example, HHS is now using the term *advanced primary care practices* to identify medical homes in its multipayer demonstration.

**ARE THEY FOR EVERYBODY?** This approach may make more sense for chronically ill, elderly persons and less sense for young, healthy persons for whom it may not be cost-effective. But if medical homes become widely adopted, how will patients be assigned and how will assignment changes be handled? Some observers suggest that medical homes may be most successful when incorporated into an integrat-

ed health care delivery system—one of many models currently used in the United States to deliver care. Patient-centered medical homes are often described as being essential to another innovative model, the accountable care organization (see August 13, 2010, [Health Policy Brief on accountable care organizations](#)).

**DO WE HAVE THE NECESSARY POLITICAL AND FINANCIAL RESOURCES?** Early experience suggests that moving to a patient-centered medical home approach takes substantial time and considerable upfront investment. The evaluation of the TransforMED demonstration project found that “it will take much more time than anyone imagined to transform into a [patient-centered medical home],” and will also require substantial motivation by physicians and patients, leadership by health systems, and other resources.

The VA has already incorporated elements of the medical home into its primary care operations: electronic health records and team-based care. It expects to spend \$250 million over the next five years to transition its clinics into patient-centered medical homes. Most private, large group practices in the United States, however, have not yet adopted components of a medical home infrastructure. Exactly what is needed and how long it will take remains unclear.

**CHANGING THE PAYMENT MODEL:** Proponents of patient-centered medical homes anticipate that the model will change the way the federal government pays for primary care services. For example, the Geisinger Proven-Health Navigator project reduced hospital admissions and readmissions for Medicare Advantage patients by 18 percent and 36 percent, respectively. Group Health estimates that it generated a return of \$1.50 for every \$1 invested in its medical home demonstration. However, it is uncertain if and when similar savings would be obtained from broad adoption of the medical home model across the U.S. health care system.

The current fee-for-service and procedure-based payment systems that dominate much of U.S. health care benefit doctors and specialist physicians. An alternative is to shift payment to a so-called shared savings, incentive-pay approach. Such a payment reform would provide primary care practices with more money if they were able to improve quality of care and reduce health care costs by helping to avoid unnecessary emergency department visits and hospital admissions. This is why some experts

# \$1.50

## Return on \$1 investment

Group Health generated a return of \$1.50 for every \$1 invested in its medical home demonstration project.

### About Health Policy Briefs

Written by

#### Amanda Cassidy

Principal  
Meitheal Health Policy  
(Cassidy previously worked for the Centers for Medicare and Medicaid Services, in the Office of Legislation and the Center for Medicare Management.)

Editorial review by

#### Thomas S. Bodenheimer

Adjunct Professor  
Codirector  
Center for Excellence in Primary Care  
University of California, San Francisco

#### Paul Grundy

Global Director  
Healthcare Transformation  
International Business Machines

#### Susan Dentzer

Editor-in-Chief  
*Health Affairs*

#### Ted Agres

Senior Editor  
*Health Affairs*

Health Policy Briefs are produced under a partnership of *Health Affairs* and the Robert Wood Johnson Foundation.

Cite as:

"Patient-Centered Medical Homes," *Health Affairs*, September 14, 2010.

Sign up for free policy briefs at:  
[www.healthaffairs.org/healthpolicybriefs](http://www.healthaffairs.org/healthpolicybriefs)

argue that in addition to adopting the patient-centered medical home model, payment reform will have to be put in place before the benefits can be captured fully.

### WHAT'S NEXT?

HHS, states, and other payers and providers continue to show significant interest in and experimentation with the patient-centered medical home concept. CMS recently released a solicitation for its Multi-Payer Advanced Primary Care Initiative to identify states that have or are planning to implement projects in which Medicare could participate. CMS expects to select up to six states for this project; awards will be announced in fall 2010 and projects will be fully operational in early 2011.

After selecting sites for the multipayer project, CMS has indicated it will proceed with two other patient-centered medical home

projects: an advanced primary care practice demonstration for federally qualified health centers, followed by a Medicare medical home demonstration that has been under development since 2007. CMS may also use its new innovation resources to undertake additional projects.

The VA will study the patient-centered medical home at five demonstration sites. The sites are geographically diverse and will enable the VA to evaluate use of the model with different patient populations including patients in rural settings, those without a history of regular medical care, and those with serious mental illness and dementia. As demonstration projects continue with Medicare, the VA, and in other environments, the patient-centered medical home model will continue to evolve.

### RESOURCES

Berenson, Robert A., Terry Hammons, David N. Gans, Stephen Zuckerman, Katie Merrell, William S. Underwood, et al., "[A House is Not a Home: Keeping Patients at the Center of Practice Redesign](#)," *Health Affairs* 27, no. 5 (2008): 1219–30.

Bodenheimer, Thomas, and Hoangmai H. Pham, "[Primary Care: Current Problems and Proposed Solutions](#)," *Health Affairs* 29, no. 5 (2010): 799–805.

Centers for Medicare and Medicaid Services, "[Multi-payer Advanced Primary Care Practice \(MAPCP\) Demonstration Fact Sheet](#)," June 30, 2010.

Crabtree, Benjamin, Paul A. Nutting, William L. Miller, Kurt C. Stange, Elizabeth E. Stewart, and Carlos Roberto Jaén, "[Summary of the National Demonstration Project and Recommendations for the Patient-Centered Medical Home](#)," *Annals of Family Medicine* 8, Suppl 1 (2010): s80–90.

Fields, Daniel, Elizabeth Leshen, and Kavita Patel, "[Driving Quality Gains and Cost Savings Through Adoption of Medical Homes](#)," *Health Affairs* 29, no. 5 (2010): 819–26.

Grundy, Paul, Kay R. Hagan, Jennie Chin Hansen, and Kevin Grumbach, "[The Multi-Stakeholder Movement for Primary Care Renewal and Reform](#)," *Health Affairs* 29, no. 5 (2010): 791–8.

Meyer, Harris, "[Group Health's Move to the Medical Home: For Doctors, It's Often a Hard Journey](#)," *Health Affairs* 29, no. 5 (2010): 844–51.

Patient-Centered Primary Care Collaborative, "[Joint Principles of the Patient-Centered Medical Home](#)," February 2007.

Paulus, Ronald, Karen Davis, and Glenn D. Steele, "[Continuous Innovation in Health Care: Implications of the Geisinger Experience](#)," *Health Affairs* 27, no. 5 (2008): 1235–45.

Reid, Robert J., Katie Coleman, Eric A. Johnson, Paul A. Fishman, Clarissa Hsu, Michael P. Soman, et al., "[The Group Health Medical Home at Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout for Providers](#)," *Health Affairs* 29, no. 5 (2010): 835–43.

Rittenhouse, Diane R., Lawrence P. Casalino, Robin R. Gillies, Stephen M. Shortell, and Bernard Lau, "[Measuring the Medical Home Infrastructure in Large Medical Groups](#)," *Health Affairs* 27, no. 5 (2008): 1246–58.