



# The patient centered medical home: moving from dialogue to implementation

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Primary care continues to suffer a loss of interest among graduates of medical school. The patient-centered medical home (PCMH) provides a potential vehicle to redefine primary care as chronic disease increases in prevalence in the United States. The model, as developed by the American Osteopathic Association, American Academy of Family Physicians, American Academy of Pediatrics, and American College of Physicians provides a organized team focused on engaging and collaborating with patients and family using evidenced-based, goal-directed therapy. Challenges for primary care include practice expansion in terms of information technology and human resources to meet the needs of patients in terms of primary and secondary prevention as well as care coordination. Payment methods to fund these changes are being explored by several states through pilot projects. Although the PCMH has shown early evidence in its ability to improve both physicians' satisfaction with practice and patients outcomes, broad implementation will not occur without payers and employers realizing the value of the PCMH and providing resources for funding the transition of primary care practices.

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The Institute of Medicine published its report *Crossing the Quality Chasm* in 1999 focusing on the gaps in delivering patient-centered care to individuals suffering from chronic disease.<sup>1</sup> The Institute of Medicine (IOM) report describes a health care system inattentive to the needs of the 50% of the adult population suffering from chronic disease. Opportunity gaps in the management of chronic disease are a central failing in our health care system. An example of this is in the management of diabetes mellitus. A recent article evaluating diabetes care found that 83.3% of people with diabetes had poor control based on the American Diabetes Association recommendations (for simultaneous blood pressure and lipid control) and were at risk for cardiovascular events.<sup>2</sup> In response to the shortfalls of disease management in the United States, several models addressing deficiencies have been developed such as the Wagner

chronic disease model,<sup>3</sup> and a number of professional organizations (representing the majority of primary care physicians) have authored a solution in the patient-centered medical home (PCMH).<sup>4</sup> This paper discusses the evidence behind quality improvement within primary care practices; the use of PCMH as a model to facilitate evidence-based, patient-focused primary care and review barriers to broad implementation of this model; and how to align payments with the desired outcome of patient-centered care.

A response to the concerns voiced in the IOM's report is found in the development of translational research, which evaluates methods of health care delivery that ensure evidenced-based practice reaches the patient.<sup>5</sup> Use of quality improvement techniques such as care coordination, team management, and patient engagement have demonstrated reductions in hospitalization for heart failure and improvement in the care of diabetic patients.<sup>6-8</sup> Meta-analysis covering 155 articles demonstrated that by reorganizing care, we can improve the clinical and financial outcomes of patients. The challenge is finding methods to effectively

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expand the scope of improvement in health care delivery through primary care practices.

The PCMH, as a concept of a patient-focused primary care practice, has developed from its origins within pediatrics as a method to better care for children with chronic disease. Through the Joint Principals of the PCMH, the American Osteopathic Association, along with other professional medical organizations, have endorsed the concept of the PCMH and provided a more detailed description.<sup>4</sup> The operational changes that would be necessary in most primary care practices to achieve the goals in this document include:

1. *Increased connectivity with the patient and the patient's family*—Expectations of more engagement and empowerment of patients with chronic disease. This would be evident in use of self-management by patients in such clinical entities as asthma or diabetes. Ultimately, this would require the practice to use information technology to enhance communication with the patient between visits and provide self-management tools and increased resources to educate and reinforce preventive behaviors at the patient level.
2. *Multidisciplinary team approach to patients with chronic disease*—This would require a team-based approach to individuals with chronic disease; this model is already in place in many intensive care units, where patient rounding is done by a team including physicians, clinical pharmacists, nursing, and others necessary to manage the acutely ill patients in this setting. In the ambulatory environment, this would require similar members within the team to focus on achieving evidenced-based goals for the patient. A shift from episodic care to anticipatory care would be necessary, as well as needing the resources that constitute the team.
3. *Integration of quality improvement strategies within the practice*—This would require the tools and training to achieve practice-based learning and systems-based care.<sup>9</sup> Tools include electronic health records and registries to identify quality opportunities within or across specific populations and track improvements after specific systematic change. Training would include competency in quality improvement techniques and population management.
4. *Care coordination across health care settings*—The practice would assume primary responsibility for tracking and assisting patients as they move across settings as a source of clinical information and coordination of care.

By combining these practice strategies within or across a number of primary care practices, organizations are reporting improvements in clinical, financial, patient-, and provider- perceived outcomes. Early results from four primary care sites suggest a reduction of spending in the range of 15 to 20% associated with the PCMH with no reduction in quality.<sup>10</sup> Geisinger Health System in Northeast Pennsylvania has published successful results in reducing readmissions and improving diabetic care.<sup>11</sup> Finally, The Group

Health Cooperative in Washington state has also published improved provider and patient satisfaction with the deployment of elements of a patient-centered medical home.<sup>12</sup> These examples provide evidence that deploying strategies to improve primary care delivery in a rigorous manner results in improvement of both quality and efficiency.

The AOA PCMH principals document provides a blueprint for the redesign of primary care practices. To encourage practices to move toward the PCMH, payment needs to align with desired outcomes and support the resources necessary for practice transformation. Payers need to move from rewarding episodic, nongoal-directed care that rewards patient throughput without regard to quality. Payers need to provide primary care practices with the payment to cover the increased overhead of information and human resources necessary to achieve the goals of patient-centered care. Payers also need to reduce the income disparity between primary care physicians and specialists so we can assure that primary care physicians will be available to provide care in the PCMH. And, finally, we need to provide the training for practice redesign and refocus to primary care physicians who have been trained to see patients, not populations.

## Current state of primary care

Although many practitioners believe they are providing patient-centered care currently, there is ample evidence that the model we are using is not achieving desired results. We know that 19.6% of all Medicare beneficiaries hospitalized will be readmitted within 30 days of discharge.<sup>13</sup> A major contributor to this disturbing trend is that 50% of these Medicare patients were not seen by a physician between discharge and readmission. The perceived cause of these missed opportunities is that the current care delivery is fragmented and focused on episodes of care as opposed to the care continuum. The delivery system is aligned with the payment system in terms of episodic care. An example of this is Medicare's current payment systems using two methods of reimbursing hospital (Part B) and physician (Part A) care. These systems are uncoordinated and provide no incentive for the transition between inpatient and outpatient care, resulting in poorly coordinated care and contributing to the 19.6% readmission rate.

In recognition of the problems payment systems present, a number of states have developed multipayer initiatives aimed at reforming primary care reimbursement. The focus of these initiatives is to provide enhanced payment to primary care practices interested in redesign and developing the information and human resources necessary to achieve PCMH status. Payment models currently being developed and deployed work around the current fee for service system with enhanced payment for chronic disease management on a per-member, per-month basis. Payers, acknowledging the problems with the current system, are interested in support-

ing practice redesign and development of enhanced resources necessary to achieve the PCMH. Currently, these initiatives are rewarding practices for achieving National Committee for Quality Assurance (NCQA) accreditation using the Physician Practice Connections®–Patient-Centered Medical Home™.<sup>14</sup> NCQA accreditation provides a structural evaluation of practices resources around patient engagement, quality improvement, and care coordination. Future models will most likely focus on demonstrated value by improved process and outcomes of care as evidenced by measures similar to those found in the AOA Clinical Assessment Program.<sup>4</sup>

## Pushing the PCMH forward

Several states have taken on a convening role between payers and primary care practices in the form of multipayer demonstration projects. Vermont, Rhode Island, Pennsylvania, and Ohio have developed or are developing payment systems that encourage the formation of primary care PCMHs. The plans for practice payment involve traditional fee-for-service and enhanced payment for care coordination of patients with chronic disease using per-member, per-month calculation. The increased payments are intended to help engage practices in the transformation to the PCMH through accreditation by NCQA and reimburse practices for time spent at learning collaboratives.

The impact of these payments on a primary care practice can vary depending on payer mix, prevalence of individuals with chronic disease, and the number of payers providing revenue to the practice engaged in the multipayer initiative. The costs incurred with most models involve physician time spent learning the necessary elements of practice transformation, accreditation costs, and increased or reorganized patient contact with the physician or other health care professionals within the practice.

In Pennsylvania, the state initiative has been successful in engaging more than 700 primary care physicians in the PCMH, with the goal of achieving NCQA accreditation. Estimates of total patients cared for in these practices approaches 1 million. In addition to the facilitation of practice transformation, the Pennsylvania project has chosen diabetes as a clinical focus for improvement and supports a registry collecting data on process and outcomes of diabetic care from practices.<sup>15</sup>

In Ohio, the state's Health Care Cost and Quality Council currently has two task forces evaluating how to implement and reimburse the PCMH. Building on models from other states, the groups are evaluating how to get commercial payers, Medicaid, and organizations representing state employees to align payment around the PCMH. The solutions look similar to other states in terms of standard fee for service with enhanced payment per member per month for practices engaged in building a PCMH. A measure of success in the state will be the number of payers engaged in supporting practice transformation.

## How will we define success?

The evaluation of PCMH initiatives around the country follow a framework developed by Donabedian<sup>16</sup> and include the following measures.

1. *Structure*: Aspects of a practice such as information technology, patient-centered systems of scheduling, communications, education, and follow-up. Examples of structural evaluations can be found in the NCQA's PPC-PCMH. Because of concerns about the effort necessary to achieve NCQA certification and the associations between certification and improved patient outcomes, other entities are also developing criteria for structural review.
2. *Process*: Evidence-based measures of the interaction between a PCMH and the patients it cares for. This can include such things as the number of diabetic, hypertensive patients without contraindication, on an ACE inhibitor or the percent of diabetic patients with an ophthalmologic examination.
3. *Outcomes*: Intermediate clinical outcomes include such things as the percent of hypertensive patients with blood pressure control. Patient-perceived access to the practice as determined by survey. Financial outcome measures such as emergency department use in asthmatic patients.

Within each of these state initiatives, there is a general acknowledgement by payers that practices will need time to build the competencies and resources to provide a PCMH, and they are looking at structural measures before process and outcome measures. With the long-term goal of creating high-quality and efficient primary care practices, payers will be eventually looking at financial outcomes to justify the increased cost for this type of care.

The evaluation of PCMH marks a movement in primary care from the model of adopting evidence-based practices to the incorporation of practice measures to define high-quality efficient care.

The PCMH concept has a great deal of promise to patients in terms of improved quality and care coordination, to primary care physicians in terms of enhanced prestige and payment, and to payers in terms of enhanced efficiency.

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