

Patient Centered Medical Homes: Promising but More Evidence is Needed

SUMMARY

Patient-Centered Medical Homes (PCMH) are frequently discussed as a key part of the solution to inefficient medical care delivery in the United States. PCMHs promote coordinated, high quality health care centered around the patient's needs and have been touted by their supporters as a way to improve quality and control costs. However, many policymakers and advocates lack familiarity with the concept and early evidence is mixed. Furthermore, lack of uniformity in the design of PCMHs contributes to policymaker and consumer confusion.

While the concept is well aligned with the way patients would like to receive health care, more research is needed to determine the most effective PCMH models, the best way to transition from traditional practice into a PCMH, and to improve our methods for measuring the consumer experience.

Introduction

In its landmark 2001 report, *Crossing the Quality Chasm*, the Institute of Medicine (IOM) identified patient-centeredness as one of six aims for the health care system.

The Patient-Centered Medical Home (PCMH or simply medical home) is a way to deliver primary care that embraces this concept of patient-centeredness. PCMHs aim to incentivize a focus on primary care and coordination among providers, with the objective of placing the patient at the center of the care relationship. The end goal is to minimize care fragmentation that may result in gaps, missed services, duplication, and/or overuse and, ultimately, to improve consumers' health statuses.

The PCMH model strives to provide patients with what they say they want in health care— having a personal relationship with their doctor; feeling valued and not like a number; having the physician treat the whole person and not just certain symptoms; having adequate time to talk to the doctor and not feeling rushed; and physician bedside manner and listening skills.¹ Financial incentives are important to help build and sustain the PCMH model, reimbursing practices for new activities, and shifting the emphasis to primary and preventive care.

The PCMH has received a great deal of attention recently as a way of organizing the delivery of primary care, yet only an estimated 15% of primary care is delivered through the medical home model today.^{2,3,4} Currently, 30 states make payments supporting PCMHs in their Medicaid and CHIP programs.⁵ In 19 states, both public and private payers participate in one or more multi-payer medical home initiatives.⁶

Despite general agreement that primary care should be coordinated and patient-centered, no consensus exists on a single operational definition of the PCMHs or the investments required. To help advocates and policymakers think about a role for medical homes, this issue brief examines:

- What is a Patient Centered Medical Home and why are they needed?
- What does the evidence say about the medical home model’s ability to realize goals?
- What are the key consumer considerations?

¹ For example, see Quincy and Kleimann, *Engaging Consumers on Health Care Cost and Value Issues*, Consumers Union, October 2014; “Talking about Health Care Payment Reform with U.S. Consumers: Key Communications Findings from Focus Groups, April 2011.” *Robert Wood Johnson Foundation*; and David Schleifer et al. 2014. “Curbing Health-Care Costs: Are Citizens Ready to Wrestle with Tough Choices?” *Public Agenda and Kettering Foundation*.

² David I. Auerbach et al. estimate that in 2010 that 15% of primary care visits take place in medical homes. This calculation is based on an article by Ullrich et. al. (“Are Primary care practices ready to become patient-centered medical homes?”) that estimates that in 2008, 13.5% of practices would qualify as medical homes. David I. Auerbach et al. “Nurse-Managed Health Centers And Patient-Centered Medical Homes Could Mitigate Expected Primary Care Physician Shortage.” *Health Affairs* 32 (11): 1933-1941.

³ As of October 2010, more than 10% of primary care practices have NCQA recognition. This is a subset of all PCMHs as a medical home does not need NCQA recognition to practice as such. A primary care practice might have a different type of medical home accreditation, or could simply be recognized by a state or a payer as a medical home. Therefore, this 10% figure is a baseline for the number of medical homes because it does not take into account non-NCQA recognized PCMHs.

“The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System.” *NCQA*.

⁴ Based on conversation with Marci Nielsen, PhD, MPH, CEO of the Patient-Centered Primary Care Collaborative, on March 12, 2015.

⁵ Rachel Yalowich, Barbara Wirth, and Mary Takach. Matching Patients with Their Providers: Lessons on Attribution and Enrollment from Four Multi-Payer Patient-Centered Medical Home Initiatives, State Health Policy Briefing, *National Academy for State Health Policy*, May 2014.

⁶ Ibid

What is a Patient-Centered Medical Home (PCMH)?

The PCMH is a model of health care delivery structured around primary care that emphasizes coordinated, integrated care, and the patient's care experience. The PCMH is not just a place but a model that changes how primary care is delivered.⁷ Any type of patient – healthy or chronically ill, child or adult, privately or publicly insured – can seek care from a primary care provider in a medical home.

It is important to know that there is no one model for the medical home and that dozens of differing definitions have been published.⁸ Multiple payers have PCMH demonstration projects and, while they are similar and share common goals, each payer defines the PCMH in their own way and uses different metrics to measure impact.

Despite differences, all PCMHs share important features – a principal focus on patient centeredness, primary care, and care coordination. One commonly referenced list of PCMH characteristics, from the Joint Principles of the Patient-Centered Medical Home, includes the following attributes:⁹

- **Personal physician**—each patient has an ongoing relationship with a personal physician;¹⁰
- **Physician-directed medical practice**—the personal physician leads the care team;
- **Whole person orientation**—the personal physician provides or coordinates care for all of the patient's needs;
- **Care is coordinated and/or integrated**—all elements of care are coordinated across all settings;
- **Quality and safety**—monitoring and optimizing quality and safety are key goals of the medical home;
- **Enhanced access**—care is available through open scheduling, extended hours, and non-traditional communication;
- **Payment**—the added value in PCMH care is recognized and supported.

Coordinated primary care lies at the core of the PCMH. Research shows that a strong primary care system and access to primary care physicians are associated with better health outcomes, lower mortality, and longer life expectancy.^{11,12} The

⁷ Agency for Healthcare Research and Quality, Patient-Centered Medical Home Resource Center, <http://pcmh.ahrq.gov/page/defining-pcmh>.

⁸ Rachel A. Burton et al. March 2012. "Patient-Centered Medical Home Recognition Tools: A Comparison of Ten Surveys' Content and Operational Details," *Urban Institute*.

⁹ The American Academy of Family Physicians (AAFP), the American Academy of Pediatrics (AAP), the American College of Physicians (ACP), and the American Osteopathic Association (AOA) developed the "Joint Principles for the Patient-Centered Medical Home" in 2007 to describe the characteristics of the PCMH; http://www.acponline.org/running_practice/delivery_and_payment_models/pcmh/demonstrations/jointprinc_05_17.pdf

¹⁰ All of the major accreditors also allow for nurse practitioner lead medical homes.

¹¹ Primary care can help prevent illness and death and is associated with a more equitable distribution of health. Barbara Starfield, Leiyu Shi, and James Macinko. Contribution of Primary Care to Health Systems and Health, *The Millbank Quarterly*, vol. 83, no. 3, 2005, 457-502. http://www.commonwealthfund.org/usr_doc/Starfield_Milbank.pdf

majority of PCMHs rely on electronic health records (EHR) to facilitate care integration and coordination as they can permit easy communication between providers, allow all to work from the same full medical history, and make possible the sharing of test results and other important patient information.

With these changes, the PCMH seeks to address the highly fragmented, specialist-driven care characteristic of the American healthcare system. By emphasizing patient-centeredness, good primary care and care coordination, the PCMH model aims to improve quality and population health, and create greater patient satisfaction.

This model could also lead to increased job satisfaction for primary care doctors and their teams by allowing more time for patients, allowing health professionals to practice at the top of their license, providing more support and paying for services not previously reimbursed. This, in turn, could help attract and retain providers to the primary care field, and possibly lessen the shortage of primary care providers.

The goal of the PCMH is to achieve the Triple Aim of better patient experience, improved population health, and lower cost of health care. Cost savings are also frequently, but not always, articulated as a goal. Savings may result from improved health statuses, less reliance on specialists and hospitalizations, and avoiding duplication and overuse of services. As discussed below, the jury is out on whether cost savings can be achieved through PCMHs.

Provision of Financial Incentives Key to PCMH Sustainability

In many ways, PCMHs are similar to excellent traditional primary care.

In many ways, PCMHs are similar to excellent traditional primary care. The medical home identifies the best primary care practices and tries to reproduce them in a systematic way by aligning financial incentives to encourage overlooked, but important aspects of primary care. Financial incentives are crucial to the success and sustainability of the PCMH model and play an important role in the potential success of the medical home model.

Ideally, providers in PCMHs are reimbursed for activities that are not paid for in a traditional primary care setting, such as care coordination services, patient communication, telephone and email encounters, population health management, and quality improvement. Many PCMH models also include supplemental payments determined by the size of the patient population that support non-traditional primary care services, such as having a health behavior specialist, social worker, and/or pharmacist on staff. If providers and practices

¹² People with a regular primary care physician are more likely to receive recommended preventative care services and timely care for problems before they become more serious. Having a primary care doctor is associated with fewer preventable emergency room visits and fewer hospital admissions, and also greater adherence to physician recommendations. Mortality rates are lower in areas with more primary care. Melina Abrams, Rachel Nuzum, Stephanie Mika, and Georgette Lawlor. Realizing Health Reform's Potential: How the Affordable Care Act Will Strengthen Primary Care and Benefit Patients, Providers, and Payers, *The Commonwealth Fund*, January, 2011. http://www.commonwealthfund.org/~media/Files/Publications/Issue%20Brief/2011/Jan/1466_Abrams_how_ACA_will_strengthen_primary_care_reform_brief_v3.pdf

are not adequately reimbursed for these new and additional services, it will be difficult to encourage practices to make the transition to this model and to sustain those that already practice this way.

There are different payment models for the PCMH, but most include a per member per month (PMPM) payment care management fee (or a capitated payment for the practice population) layered on top of a traditional fee-for-service model.^{13,14} Some PCMH payment models include bonus payments for providers who meet certain quality, utilization, and/or cost benchmarks.^{15, 16} Because PCMHs are primarily a delivery system model, not a payment model, they are compatible with a wide variety of provider network models: HMO, PPO, POS, or EPO.¹⁷

Consumers who see providers within medical homes can generally seek care anywhere. Unless they are in an HMO, patients are never locked into certain provider or practice groups. Because of this, the accuracy of patient assignment and attribution of care outcomes to particular physicians can have significant implications for quality measurement and for the evaluation of PCMH effectiveness. There are also significant financial implications for both payers and practices as the supplemental payments a PCMH receives depend on the assigned population size, and bonus payments may depend on quality, cost, and utilization metrics.¹⁸ Ensuring that these measures are accurate and attributed to the correct population is crucial to the success of the PCMH model.

Why are PCMHs Needed?

In its report, *Crossing the Quality Chasm*, the Institute of Medicine (IOM) issued an urgent call for fundamental change to close the health care quality gap. The IOM found that our nation's health care system was:

“poorly organized to meet the challenges at hand. The delivery of care often is overly complex and uncoordinated, requiring steps and patient “handoffs” that slow down care and decrease rather than improve safety. These cumbersome processes waste resources; leave unaccountable voids in coverage; lead to loss of information; and fail to build on the strengths

¹³ Merrell Katie et. al. Structuring Payment For Medical Homes, *Health Affairs*, 29, no.5(2010): 852-858.

¹⁴ Suzanne Delbanco. The Payment Reform Landscape: Payment For Non-Visit Functions And The Medical Home, *HealthAffairs Blog*, May, 2014.

¹⁵ Merrell Katie et. al. Structuring Payment For Medical Homes, *Health Affairs*, 29, no.5(2010): 852-858.

¹⁶ Goroll, Allan H et al. Payment Reform to Support High-Performing Practice: Report of the Payment Reform Task Force, *Patient-Centered Primary Care Collaborative*, July 2010.

¹⁷ Staff model HMOs and fully capitated HMOs may not incorporate financial incentives for PCMH activities in the same way as POS and PPO models, although they can still provide the coordinated, patient-centered care that is at the heart of PCMHs.

¹⁸ Rachel Yalowich et al. Matching Patients with Their Providers: Lessons On Attribution an Enrollment from Four Multi-Payer Patient-Centered Medical Home Initiatives, *National Academy for State Health Policy*, May 2014.

of all health professionals involved to ensure that care is appropriate, timely, and safe.”¹⁹

The IOM recommended a redesign of the American health care system. They proposed new rules to guide patient-clinician relationships, an organizing framework to better align incentives in payment and accountability with quality improvement, and key steps to promote evidence-based practice and strengthen clinical information systems.

More recently, challenges have mounted for primary care specifically. Access to primary care is limited in many areas, particularly in rural communities. Fewer U.S. physicians are choosing this field as a profession, and satisfaction among primary care physicians has lessened amid the increasing demands of office-based practice. Concern is growing that the current models of primary care will not be sustainable and will not meet the broad health care needs of the American population.²⁰

The PCMH has been described as a “lifeline for primary care” that has the potential to transform and increase the appeal and viability of primary care practice.^{21, 22} Aside from potentially attracting physicians to primary care by reimbursing services not previously paid for and providing supplemental payments to hire new staff members as mentioned above, medical homes support primary care doctors by relying heavily on team-based care.²³ Using professionals like nurse practitioners, physician assistants, nutritionists, community health workers and social workers along with technology like EHRs can increase efficiency and allow practices to provide for larger populations.²⁴

How Do PCMHs differ from ACOs?

PCMHs are frequently associated with Accountable Care Organizations (ACOs) as they often work in complementary ways. PCMHs and ACOs are, however, two distinct models.²⁵

¹⁹ “Crossing the Quality Chasm: A New Health System for the 21st Century”, *Institute of Medicine*, March 2001,

<http://www.iom.edu/-/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf>.

²⁰ “The Patient-Centered Medical Home. Closing the Quality Gap: Revisiting the State of the Science” Executive Summary, *Agency for Healthcare Research and Quality*, July 2012.

http://www.effectivehealthcare.ahrq.gov/ehc/products/391/1177/EvidenceReport208_ClosingTheQualityGap-Patient-Centered-Medical-Home_ExecutiveSummary_20120703.pdf.

²¹ *Ibid.*

²² Robert A. Berenson et al. “A House is Not A Home: Keeping Patients At The Center of Practice Redesign” *Health Affairs*, 27, no.5 (2008): 1219-1230.

²³ David I. Auerbach et al. “Nurse-Managed Health Centers And Patient-Centered Medical Homes Could Mitigate Expected Primary Care Physician Shortage.” *Health Affairs* 32 (11): 1933-1941.

²⁴ *Ibid.*

²⁵ See Cohen, Burack and Quincy, *Accountable Care Organizations: Still A Lot to Learn About Best Practices*, Consumers Union, March 2015.

Both PCMHs and ACOs seek to improve care coordination and quality and, to a varying degree, control costs, but ACOs have two key features that are not part of the PCMH model:

1. ACOs incorporate a much wider array of health care services and providers, including specialists and hospitals;²⁶
2. ACOs feature financial incentives in the form of shared savings arrangements. Under these arrangements, providers and payers agree to share any savings that might be produced through improved quality of care and coordination..

Many experts consider the PCMH to be the core of the ACO, with many of the nation's highest performing ACOs built over a strong PCMH component. The ACO is commonly referred to as the medical neighborhood or village that surrounds the patient centered medical home.^{27, 28}

There is rarely a monetary incentive for providers within the medical home model to work collaboratively with specialists and facilities outside the PCMH. Unless a medical home is part of an ACO, this lack of financial incentive makes it difficult to encourage and achieve coordination and patient-centered care across the care continuum.

Accrediting Bodies

Several entities offer accreditation for the medical home model, including the National Committee on Quality Assurance (NCQA), The Joint Commission, the American Accreditation Healthcare Commission, and URAC. Certain states, like Oregon^{29,30}, and private payers involved with medical home pilots or models also have their own standards.

There is debate about the role of accrediting bodies. NCQA has received criticism because of the high accreditation cost, which can be burdensome for smaller practices.³¹ They have also been criticized for relying on PCMH self-reporting,

²⁶ When a PCMH is not part of an ACO, it is not clear whether the primary care doctor would coordinate hospital-based care. A doctor may do this because it is a good medical practice, but it is not known if the financial incentives built into the PCMH model are sufficient to encourage this.

²⁷ *So... What Exactly is the Difference Between a PCMH and an ACO?*, Health Directions Blog, <http://info.healthdirections.com/blog/bid/290280/So-What-Exactly-is-the-Difference-Between-a-PCMH-and-an-ACO>.

²⁸ *The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System*, NCQA, http://www.ncqa.org/Portals/0/Public%20Policy/2014%20Comment%20Letters/The_Future_of_PCMH.pdf.

²⁹ <http://stvincentshealthpartners.org/ct-state-innovation-model-sim-frequently-asked-questions-2/>

³⁰ David B. Klein et al. *The Patient-Centered Medical Home: A Future Standard for American Healthcare?*, *Public Administration Review*, Sep/Oct 2013.

³¹ Recognition fees range from \$120 to under \$150 per clinician per year, with almost all practices receiving some sort of discount. *The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System*, NCQA http://www.ncqa.org/Portals/0/Public%20Policy/2014%20Comment%20Letters/The_Future_of_PCMH.pdf.

uploading documents like screen shots and reports, which the NCQA considers to be a cost-effective way to monitor practices.^{32,33} Many experts, however, consider in-person, on-site reviews to be more effective.^{34,35}

Perhaps the most important issue to consider is how NCQA measures medical home quality. Critics point to the program's focus on structural measures and not outcomes.³⁶ This allows practices with strong structural capabilities to receive the PMCH designation without actually functioning like true medical homes. NCQA states that "working towards measuring outcomes in PCMH is a top NCQA priority, and our ultimate goal is a balance of structural and performance measures."³⁷

PCMHs and the ACA

The PCMH was first named in 1967³⁸, but received a big boost from the Affordable Care Act (ACA), through the Medicaid Health Home Program in particular.³⁹ The ACA gives states the option to design health homes (similar to PCMHs) that provide comprehensive care coordination for Medicaid beneficiaries with chronic conditions.⁴⁰ Health homes integrate public health initiatives, emphasize prevention and wellness, and sometimes promote an enhanced role for advanced practice nurses and other physician extenders.⁴¹

To encourage adoption, the ACA offered enhanced federal funding-- during the first eight quarters of health home implementation-- to support the transition to this care model.⁴² In November of 2010, CMS issued guidance outlining the details of the health home option and urging states with existing medical homes within their Medicaid programs to compare their programs' characteristics to those set forth by CMS.⁴³ The option to create health homes for Medicaid

³² *Ibid*

³³ *Ibid*

³⁴ *Ibid*

³⁵ Rachel A. Burton et al. March 2012. "Patient-Centered Medical Home Recognition Tools: A Comparison of Ten Surveys' Content and Operational Details," *Urban Institute*.

³⁶ *The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System*, NCQA,

http://www.ncqa.org/Portals/0/Public%20Policy/2014%20Comment%20Letters/The_Future_of_PCMH.pdf.

³⁷ *Ibid*

³⁸ Please see Appendix: PCMH Timeline

³⁹ Kaiser Family Foundation, Focus on Health Reform Brief: Medicaid's New "Health Home" Option, January 2011.

⁴⁰ The Medicaid Health Home State Plan Option is authorized under the Section 2703 of the ACA. Health Home Information Resource Center, <http://www.medicaid.gov/State-Resource-Center/Medicaid-State-Technical-Assistance/Health-Homes-Technical-Assistance/Health-Home-Information-Resource-Center.html>.

⁴¹ Karen Davis et al. How the Affordable Care Act Will Strengthen the Nation's Primary Care Foundation, *J Gen Intern Med* 26(10):1201-3.

⁴² Health Home Information Resource Center, <http://www.medicaid.gov/State-Resource-Center/Medicaid-State-Technical-Assistance/Health-Homes-Technical-Assistance/Health-Home-Information-Resource-Center.html>

⁴³ Kaiser Family Foundation, Focus on Health Reform Brief: Medicaid's New "Health Home" Option, January 2011.

beneficiaries became available to states on January 1, 2011.⁴⁴ States must submit a State plan amendment for their Medicaid plan to CMS and receive approval.⁴⁵ As of June 2014, fifteen states have received CMS approval for their State plan amendment for Medicaid health homes, and many others are in the process of submitting requests.⁴⁶

Mixed results reflect the very real difficulty in making apples-to-apples comparisons among PCMH models due to lack of uniformity.

What Does The Evidence Say About PCMHs?

PCMHs are a relatively new delivery model. Rough estimates are that only about 15 % of primary care is delivered through a medical home model today. Research is still ongoing regarding the best models, and whether hoped for quality, cost and patient/provider satisfaction outcomes will be realized. Many experts believe that full PCMH transformation takes several years so recent expansions of PCMHs cannot be fully evaluated.

To-date, evaluations have produced decidedly mixed results with respect to quality and cost outcomes. This reflects, in part, the very real difficulty in making apples-to-apples comparisons among PCMH models due to lack of uniformity.

DO PCMHs REALIZE THEIR GOALS?

A recent meta-analysis of the published PCMH evidence examined 19 studies and summarized the outcome evidence on patient and staff experience, care processes, clinical quality, and cost control outcomes.⁴⁷ Researchers found that PCMH interventions had a small positive effect on patient experiences and a small to moderate positive effect on the delivery of preventative health care services.⁴⁸ The evidence pointed to a reduction in emergency department visits, but not in hospital admissions in older adults.⁴⁹ The authors found insufficient evidence for overall cost savings in their review.⁵⁰

Isolated evidence suggests that it is possible to realize more impressive results. A study examining the Group Health Cooperative in Seattle looked at one clinic's transformation to the medical home model compared to other clinics within the Group Health Cooperative. This study found improvements in patients' experiences, quality, and a reduction in clinician burnout over the two year evaluation period.⁵¹ Patients in the medical home had higher primary care costs

⁴⁴ CMS, Health Homes for Enrollees with Chronic Conditions, <http://downloads.cms.gov/cmsgov/archived-downloads/SMDL/downloads/SMD10024.pdf>

⁴⁵ *Ibid.*

⁴⁶ http://www.medicaid.gov/State-Resource-Center/Medicaid-State-Technical-Assistance/Health-Homes-Technical-Assistance/Downloads/HH-MAP_v34.pdf .

⁴⁷ George L. Jackson et al. "The Patient-Centered Medical Home: A Systematic Review." *Ann Intern Med*, vol. 158, no.3, February, 2013.

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ Robert J. Reid et al. "The Group Health Medical Home At Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout of Providers." *Health Affairs*, no.5 (2010): 835-843.

but had 29% fewer emergency visits and 6% fewer hospitalizations, for a net savings of \$10.3 per patient per month.⁵² These results are for a general patient population, although researchers noted that adults seeking care at the PCMH were older and more likely to be female than adults seeking care from control providers.⁵³ It is important to note that many key pieces were in place within the Group Health Cooperative before this clinic transitioned to the PCMH model, including the use of EHRs, multi-disciplinary provider teams, and extended hours and same day appointments for patients.⁵⁴ It is likely that the original structure and design of the Group Health Cooperative played a role in the ability to successfully transition to the medical home model and produce strong health outcomes and costs savings.

In contrast to the findings from Group Health Cooperative, results from the Southeastern Pennsylvania Chronic Care Initiative showed disappointing PCMH outcomes. This PCMH pilot project is the first multi-payer project in the nation to report on results over a 3-year transformation period. It included 32 small and medium primary care practices that voluntarily joined the pilot in the southeastern region of the Pennsylvania Chronic Care Initiative (PACCI).⁵⁵ Friedberg et al. looked at the associations between the participation of medical practices in the PACCI pilot, and changes in cost and quality of care.⁵⁶ Researchers chose comparison practices with approximately the same composition as those in the PACCI. They examined eleven quality measures for diabetes, asthma, and preventative care, along with utilization of hospital, emergency department, and ambulatory care services, and cost of care. The findings showed that participating in the pilot was associated with statistically significant improvement on only one of the eleven quality measures,⁵⁷ and was not associated with significant improvements in quality of care or reduction in costs.⁵⁸ This is the most significant study to-date to find poor results from a PCMH evaluation.

In the discussion of results, Friedberg et al. point to several important issues that might explain their findings. Researchers referred to the role of financial rewards for NCQA recognition as a possible distraction from other activities that would have improved quality and lowered costs. In other regions of Pennsylvania,

⁵² The savings estimate approaches statistical significance but could still be due to chance. Robert J. Reid et al. "The Group Health Medical Home At Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout of Providers." *Health Affairs*, no.5 (2010): 835-843.

⁵³ Robert J. Reid et al. "The Group Health Medical Home At Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout of Providers." *Health Affairs*, no.5 (2010): 835-843.

⁵⁴ *Ibid.*

⁵⁵ The practices in the PACCI were not just for chronic care patients, despite the word "chronic" in the pilot title. These were small to medium primary care practices. Friedberg, MW et al. Association Between Participation in a Multipayer Medical Home Intervention and Changes in Quality, Utilization, and Costs of Care, *JAMA*, 2014; 311(8): 815-825.

⁵⁶ Friedberg, MW et al. Association Between Participation in a Multipayer Medical Home Intervention and Changes in Quality, Utilization, and Costs of Care, *JAMA*, 2014; 311(8): 815-825.

⁵⁷ Nephropathy screening in diabetes is the only quality measure that showed improvement. Friedberg, MW et al. Association Between Participation in a Multipayer Medical Home Intervention and Changes in Quality, Utilization, and Costs of Care, *JAMA*, 2014; 311(8): 815-825.

⁵⁸ Friedberg, MW et al. Association Between Participation in a Multipayer Medical Home Intervention and Changes in Quality, Utilization, and Costs of Care, *JAMA*, 2014; 311(8): 815-825.

PACCI organizers placed less emphasis on NCQA recognition and allowed practices to focus more on collaboration.⁵⁹ The southeast practices in PACCI also did not have direct incentives to contain costs and did not receive insurer feedback on their patients' care utilization.⁶⁰ Feedback and other decision support systems improve care by alerting providers when services are needed and by helping them make evidence-based decisions.⁶¹ Researchers hypothesized that, due to these factors, only a few practices actually extended their hours. Extended hours could theoretically create savings, by providing patients an alternative to costly emergency and urgent care.⁶²

The study authors also recognize that there may have been a selection bias since the pilot participants were all volunteers. It is possible these practices were already highly focused on quality issues, making it harder to show improvement.⁶³ Additionally, the structural survey response rate was low among comparison practices, so the researchers were unable to determine if they were transforming as well due to other incentives.⁶⁴ Researchers also explained that the pilot and comparison practices were not perfectly matched.⁶⁵

A study conducted by Higgins and colleagues looked at many of the same Pennsylvania medical homes and found evidence of savings among high risk enrollees. Researchers compared enrollees in non-pediatric PCMH and non-PCMH practices from 2009 to 2011.⁶⁶ Higgins and colleagues gave the patients risk scores and specifically studied the sickest patients – those in highest the 10% risk group. The majority of medical home practices (15/17) that researchers followed were part of PACCI.⁶⁷

Like Friedberg, Higgins found that that costs and utilization did not differ significantly between the PCMH and non-PCMH practices when all patients are examined together.⁶⁸ However, they found significantly lower costs and utilization rates for high risk patients in PCMH practices as compared to non-PCMH practices.⁶⁹ Researchers also concluded that the net cost reduction for high risk patients was a result of lower hospitalization rates as the use of specialists actually increased significantly.⁷⁰

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*

⁶¹ Edward H. Wagner, Katie Coleman, Robert J. Reid, Kathryn Phillips, and Jonathan R. Sugarman. *Guiding Transformation: How Medical Practices Can Become Patient-Centered Medical Homes*, The Commonwealth Fund, February 2012.

⁶² Friedberg, MW et al. Association Between Participation in a Multipayer Medical Home Intervention and Changes in Quality, Utilization, and Costs of Care, *JAMA*, 2014; 311(8): 815-825.

⁶³ *Ibid.*

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

⁶⁷ Susannah Higgins et al., Medical Homes and Cost and Utilization Among High-Risk Patients, *Am J Manag Care*, 2014;20(3):e61-e71.

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

TRANSFORMATION PROCESS

While the concept and goals of the Patient-Centered Medical home are widely accepted, the process of transforming a physician practice into a PCMH is challenging and relatively new.

Another trend that emerged from the data is the need for a clear transition path from traditional practices to the PCMH model. There are many ways to accomplish this and not all are successful. Evidence seems to indicate that less tangible qualities like leadership, a practice's ability to adapt to change, and change management strategies, among others, are critical for success.⁷¹ Further, the transformation process may take longer than first realized- the evidence seems to suggest it takes 18 months to three years to see changes in outcomes.⁷²

THE BOTTOM LINE

These mixed findings mean several things. When examining the evidence, it is important to keep in mind that the PCMH is a model that allows for some variation. Not all medical homes choose to focus on and measure the same quality indicators; for example, medical homes may define and measure extended access hours differently. While this flexibility allows medical homes to best fit the needs of local populations and/or the needs of payers and providers, it makes it more difficult to draw definitive conclusions from the current research.

Another caveat: our ability to measure all that goes on in a medical home is imperfect. For practices to become effective medical homes requires a tremendous amount of work and thoughtfulness. Beyond electronic records and after-hours care, successful practices may engage in a years-long, difficult process of re-engineering their entire office workflow. This includes a much more intensive, team-based preparation before patient visits. Charts are reviewed ahead of time to make sure appropriate tests have been ordered and received, and that everyone involved in the patient's care is aware of their health situation. Nurses and nursing assistants perform routine checks and tests before the doctor sees the patient, which eliminates the common problem of the doctor seeing the patient only to find that some critical preliminary work has not been done.⁷³

While the concept and goals of the Patient-Centered Medical home are widely accepted, the process of transforming a physician practice into a PCMH is challenging and relatively new. Best-practices for this transformation are still being determined.⁷⁴

It may not be realistic to expect savings in the short-term, as transition to the PCMH model requires a substantial financial investment and successful

⁷¹ Sarah Hudson Scholle et al. May/June 2013. "Support and Strategies for Change Among Small Patient-Centered Medical Home Practices," *Ann Fam Med* vol.11, no. Suppl 1,S6-S13. http://annfammed.org/content/11/Suppl_1/S6.full

⁷² Conversation with Marci Nielsen, PhD, MPH, CEO of the Patient-Centered Primary Care Collaborative, on March 12, 2015.

⁷³ Based on an interview with Consumer Reports' Nancy Metcalf. Ms. Metcalf spent months researching and interviewing providers and patients connected to medical homes. <http://consumerhealthchoices.org/wp-content/uploads/2013/11/MedicalHomes.pdf>

⁷⁴ The process of a traditional medical practice becoming a PCMH.

implementation. In the longer term, medical homes will need to reduce hospital, emergency department, specialist, and testing use to be cost effective.⁷⁵ Tertiary providers may resist these efforts, making it difficult for the PCMH model to succeed in controlling overall health care costs.⁷⁶

Finally, more research is needed to better understand which sub-populations might receive the greatest benefit from the PCMH model. As Higgins found, high risk patients may derive the greatest benefit. Patient composition is also likely to be very important in terms of interpreting the evidence.

Consumer Considerations: What Policymakers Should Keep in Mind

While the changes of the medical home model all seem like good things, it is worth taking a second look explicitly from the consumer perspective. Consumers are ready to embrace excellent primary care providers, care coordination, extended hours and email access, and the other patient-centered features of the medical home.⁷⁷ However, operationalizing PCMHs may involve trade-offs that may not be attractive or acceptable to consumers. If the PCMH raises costs for consumers – for example, higher premiums to accommodate the new provider financial incentives – insurers, regulators and accreditors must ensure that commensurate, measurable quality and satisfaction benefits are realized.

As noted above, several studies suggest that the PCMH model is associated with improved patient satisfaction^{78,79,80,81} However, some studies have found that short-term disruptions of provider practice patterns (as part of the process of transformation) can result in temporary declines in patient satisfaction.⁸² One study found that patients seeing providers in practices that were transforming into medical homes appeared to have more positive experience than national benchmarks.⁸³ When researchers examined individual patient responses,

⁷⁵ “Issue Brief: Establishing Medical Homes.” *Catalyst for Payment Reform*.

⁷⁶ Elliot S. Fisher. 2008. “Building a Medical Neighborhood for the Medical Home.” *NEJM* 359 (12): 1201-1205.

⁷⁷ Quincy and Kleimann, *Engaging Consumers on Health Care Cost and Value Issues*, Consumers Union, October 2014

⁷⁸ J.S. Palfrey et al. 2004. “The Pediatric Alliance for Coordinated Care: Evaluation of Medical Home Model.” *Pediatrics* 113 (5 Suppl): 1507-16.

⁷⁹ Gill et al. 2005. “Impact of Providing a Medical Home to the Uninsured: Evaluation of a Statewide Program.” *Journal of Health Care for the Poor and Underserved* 16 (3): 515-35.

⁸⁰ DeVoe et al. 2008. “Comprehending Care in a Medical Home: A Usual Source of Care and Patients Perceptions about Healthcare Communication.” *Journal of the American Board of Family Medicine* 21 (5): 441-50.

⁸¹ Reid et al. 2009. “Patient-Centered Medical Home Demonstration: A Prospective, Quasi-Experimental, before and after Evaluation.” *American Journal of Managed Care* 15 (9): 71-87.

⁸² Leonie Heyworth, MD, MPH; Asaf Bitton, MD, MPH; Stuart R. Lipsitz, ScD; Thad Schilling, MD, MPH; Gordon D. Schiff, MD; David W. Bates, MD, MSc; and Steven R. Simon, MD, MPH. Patient-Centered Medical Home Transformation With Payment Reform: Patient Experience Outcomes, January 10, 2014

⁸³ Lisa M. Kern et al. 2012. “Patient experience at the time of practice transformation into Patient-Centered Medical Homes.” *European Journal for Person Centered Healthcare* 1(2): 290-297.

Not all dimensions of the patient experience have been measured.

however, they discovered that patients seemed to be happy with their doctors and the time spent interacting with them, but were discontented with how the practices themselves functioned.⁸⁴

Not all dimensions of the patient experience have been measured. For instance, as practice hours are extended and non-traditional forms of communication are put in place, consumers may not always see the same primary care provider. This may change the nature of the relationship between the patient and the provider in some ways, especially for consumers who have a long history with their primary care provider.⁸⁵

In addition, there are no tested protocols or communications for ensuring that consumers are aware of the existence of PCMHs and how they might seek out a physician who practices in a medical home or has the attributes of a medical home (for example, extended hours).

Patients generally are not aware of the medical home model. Focus groups with PCMH patients show they are aware of better access and coordination, but not the PCMH name.⁸⁶ In focus group settings, participants express initial skepticism that highly coordinated care and enhanced physician access is even possible.⁸⁷ In the absence of greater patient awareness of PCMHs, tools to help consumers locate a PCMH may be of limited usefulness.

Currently, some health plans provide a PCMH indicator within the provider directory, if this model is part of their plan offerings. In addition, the National Committee for Quality Assurance (NCQA) has a search function that allows patients to search for PCMHs that have NCQA accreditation (a sub-set of all PCMHs).⁸⁸

Consumers should be less worried about finding an officially accredited PCMH practice and more focused on finding a practice that has the patient-centered provider practices that are central to the PCMH model –extended hours, better care coordination, an emphasis on wellness and prevention, and solid electronic record systems. While the financial incentives within the PCMH model increase the likelihood of finding a practice with these attributes, noting them directly probably offers the greatest benefit to consumers.

⁸⁴ *Ibid.*

⁸⁵ One study found older Americans want team-based care http://www.jhartfound.org/learning-center/wp-content/uploads/2014/03/140331_team_care_poll_release_.pdf

⁸⁶ Internal PCMH Focus Group Findings Summary provided by NCQA, October 2010.

⁸⁷ *Ibid*; See also Quincy and Kleimann, *Engaging Consumers on Health Care Cost and Value Issues*, Consumers Union, October 2014

⁸⁸ NCQA Recognition Directory, <http://recognition.ncqa.org/>

Hence, policymakers, insurers and regulators should consider:

- **Improved Transparency:**
 - Consumer tested disclosures must be developed to ensure that patients can identify and make use of the key consumer friendly attributes of PCMH, so as to make an informed choice when selecting providers.

- **Continued Evaluation and Monitoring:**
 - The evidence regarding the ability of the PCMH model to increase patient and provider satisfaction, improve health outcomes and maintain or reduce costs is promising but mixed.
 - Researchers, philanthropy, regulators and accrediting bodies must continue to evaluate PCMH models with respect to this spectrum of goals and identify the variations that appear to be most successful.
 - Patient feedback is a critical component of these evaluations.

- **Well-aligned Financial Incentives:**
 - In order for a PCMH to be successful, the financial incentives must be aligned correctly. It is not realistic to expect a practice to invest financial and time resources into important primary care activities that are not traditionally reimbursed.

Conclusion

The Patient-Centered Medical Home model, in theory, is very positive development for patients. This model redirect care dollars to services consumers say they want and may redress the underpayment that primary care providers receive.

Yet, while experts agree that the goals of the PCMH are very worthy, there are varying views on the characteristics of a “good” PCMH, how the transformation should occur, and how results should be measured. As there is no single definition for a PMCH and there is no one organization responsible for recognizing, accrediting, and/or defining the medical home model⁸⁹, each PCMH may look different while still attempting to address and fulfill the same general goals. Customized models for particular regions or locales and/or patient populations may be appropriate.

More research is needed to determine the most effective PCMH models, the best way to transition and transform from a traditional practice into a PCMH, the best payment models, and how to best support practices through this process. More evidence is also needed to understand which populations will most benefit from

⁸⁹ David B. Klein et al. The Patient-Centered Medical Home: A Future Standard for American Healthcare?, *Public Administration Review*, Sep/Oct 2013.

the medical home model. Early experience suggests that it is difficult to convert traditional practices over to new practice patterns and cultural norms.

Research is needed to determine the best ways to measure and report the attributes of physician practices that are most important to consumers. In the long run, consumers should be less worried about finding an officially accredited PCMH practice and more concerned with finding a practice that has the consumer-friendly features that characterize the PCMH model.

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Appendix: Patient Centered Medical Home Timeline

1967	The American Academy of Pediatrics (AAP) introduced the term “medical home” in a book published by the AAP Council on Pediatric Practice, using it to refer to a central location for a child’s medical record. ^{90, 91, 92}
1990s	The staff at the MacColl Center for Health Care Innovation at Group Health Research Institute developed the Chronic Care Model to provider better and more coordinated care for the chronically ill. ^{93, 94}
1992	The AAP presented the medical home as a concept in a policy statement, referring to a pediatrician or primary care provider who serves as the regular source of care for a child. ⁹⁵
1997	The Robert Wood Johnson Foundation supported a planning project to refine the Chronic Care Model, and launched the national program, “Improving Chronic Illness Care.” ⁹⁶
2002	In their 2002 policy statement, the AAP refined their definition of a child’s medical home as needing to have these care attributes: accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective. ⁹⁷
2004	NCQA launches Physician Practice Connections, a precursor to the PCMH program. ⁹⁸
2004	The American Academy of Family Physicians (AAFP) develops its own medical home model. ⁹⁹
2006	The American College of Physicians (ACP) develops the “advanced medical home” model. ¹⁰⁰
2007	The American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians, and the American Osteopathic Association related the <i>Joint Principles of the Patient-Centered Medical Home</i> . ¹⁰¹
2008	NCQA launches the Physician Practice Connections PCMH model, the first PCMH Recognition program. ¹⁰²
2011	NCQA updates PMCH Recognition program to include behavioral health and health information technology meaningful use criteria among other standards. ¹⁰³
2014	NCQA updates PCMH Recognition program to include care management for high need populations, additional emphasis on team-based care, encouragement of patient and family involved in practice management, and alignment of quality improvement activities with the “triple aim” of better quality, cost, and care experience. ¹⁰⁴

⁹⁰ Joint Principles of the Patient-Centered Medical Home, March 2007.

⁹¹ *The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System*, NCQA,

⁹² Sia, C et al. History of the Medical Home Concept, *Pediatrics*, vol 113, no. 5, May, 2004.

⁹³ MacColl Center for Health Care Innovation, Chronic Illness Care, <http://maccollcenter.org/our-work/chronic-illness-care>.

⁹⁴ “The Chronic Care Model.” *Improving Chronic Illness Care*, http://www.improvingchroniccare.org/index.php?p=Model_Elements&s=18.

⁹⁵ “The Medical Home.” *Pediatrics* 1992;90;774.

⁹⁶ *Improving Chronic Illness Care*, <http://www.improvingchroniccare.org/>.

⁹⁷ “The Medical Home: Medical Home Initiatives for Children with Special Needs Project Advisory Committee.” *Pediatrics* 2002; 110; 184.

⁹⁸ *The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System*, NCQA.

⁹⁹ Joint Principles of the Patient-Centered Medical Home, March 2007.

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*

¹⁰² *The Future of Patient-Centered Medical Homes: Foundation for a Better Health Care System*, NCQA.

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*