

# **An Overview of the Patient-Centered Medical Home for Rural Patients, Caregivers, and Healthcare Stakeholders**



**May 2015**

# **An Overview of the Patient-Centered Medical Home for Rural Patients, Caregivers, and Healthcare Stakeholders**

University of Kansas School of Social Welfare Center for Children & Families  
Rural Patient-Centered Medical Home Project

May 2015

Author: Michelle Levy, A.M. Research Associate, KUSSW

This overview is supported through a contract between the University of Kansas School of Social Welfare (KUSSW) and the Patient-Centered Outcomes Research Institute (PCORI) through its Eugene Washington Engagement Award. The contents of this publication are solely the responsibility of the author and project team and do not necessarily represent the official views of PCORI.

## **Rural Patient-Centered Medical Home Project**

Project Lead: Dr. Amy Mendenhall

KUSSW Team: Cheryl Holmes & Michelle Levy

The overall project is designed to prepare a local steering committee to participate in comparative effectiveness research (CER), obtain baseline information to learn more about PCMH from a rural perspective, select an area in need of CER, and create channels for sharing those results. Foundational partners include the University of Kansas School of Social Welfare, REACH Healthcare Foundation, Thrive Allen County, Community Health Center of Southeast Kansas, and Health Care Collaborative of Rural Missouri. Patients and caregiver representatives joined, providing additional critical perspectives. A National Advisory Group also assists.

The following overview was primarily written for the local steering committee stakeholders but is available for others to use as desired.

## How to Use this Overview

The purpose of this overview is to inform you about the **Patient-Centered Medical Home** or **PCMH**. This overview will tell you what PCMH is, how it has been used in rural areas, and what we know about how it works. There will be special attention given to the “patient-centered” part of PCMH.

This overview is written specifically for rural stakeholders. Some of you may be hearing about PCMH for the first time, while others may have experience as a patient or provider involved with PCMH. In order for you to actively participate in discussions on this topic, it is important that we have a similar understanding of the Patient-Centered Medical Home. It is our hope that this overview will help you to feel excited and ready to join in conversations about PCMH.

As you will learn, PCMH involves a significant change in health care so it is hard to present a review of this topic in a short, easy-to-read summary. We have tried to provide this information as simply as we can along with real-life examples to help you understand how it applies to everyday situations.

A large number of published research articles and reports were reviewed to inform this overview. Keep in mind, however, that this overview is not a traditional academic literature review. It does not discuss all of the evidence and approaches to PCMH that are available. Also, it does not present the details of findings or cite each resource used. There is a list of main resources reviewed at the end of this report along with websites on this topic if you'd like to learn more.

Before you begin, here are a few specific reading tips:

- Key terms are **boldface** within the overview and defined in the glossary which is at the end of the document. One key term that is important to understand is “**primary care**” or “**primary health care**” which means a patient’s main source for regular medical care.
- When reading about the Patient-Centered Medical Home, you may see other terms used such as **Medical Home** and **Health Homes**. Sometimes these terms are describing programs that are the same as PCMH and sometimes they may be describing something different. For this overview, we will always use the term PCMH.

- The term “*provider*” or “*providers*” will be used when referring to the individuals that deliver health care. Providers may be doctors, nurses, community health workers, or other medical professionals.
- The term “*patient experience*” will be used to mean both the experience of patients as well as their caregivers.
- A list of acronyms, such as **PCMH**, is included at the end of this overview.

We encourage you to write down your thoughts and questions as you read. There are some activities within this overview that give you a chance to reflect on what you are reading. There is no right or wrong answer to these activities and no one has to see your responses. We hope that you will use the activities as opportunities to capture your ideas and to be part of the conversation about PCMH.

## WHAT IS A PATIENT-CENTERED MEDICAL HOME (PCMH)?

A **Patient-Centered Medical Home (PCMH)** is not a place. It is not **home health care**. PCMH is a way of providing **primary health care**. There are several definitions of PCMH. In fact, one study found that there are 29 different definitions or models with up to 123 different features. It's no wonder that talking about the PCMH can be confusing for professionals and patients alike.

Most PCMH models include five principles outlined by the **Agency for Healthcare Research & Quality (AHRQ)**. The following table shows these principles along with what they mean when providing primary health care. As you read through the principles and their meanings, think about what these values mean to you.

AHRQ Five Principles	What does this mean in health care?	What does this mean to me?
<b>1) Patient-Centered</b>	Care is based on the patient's needs, values, and preferences.	
<b>2) Comprehensive Care</b>	Care that meets all of your needs (for example, physical and mental).	
<b>3) Coordinated Care</b>	Doctors and other providers working together on your care.	
<b>4) Accessible Services</b>	You are able to get the care you need when and where you need it.	
<b>5) Quality and Safety</b>	"Behind the scenes" work to ensure you are getting the best possible care.	

## HOW DO PATIENTS EXPERIENCE A PCMH?

A patient would likely experience a medical visit at a **PCMH** much differently than a typical medical visit. To give you an idea of how it might be different, imagine a patient named John.

### A Typical Medical Visit

John has been diagnosed with diabetes. Lately, John has been sleeping a lot more than usual and finds that he lacks energy. John's wife urges him to go to the doctor so he schedules a visit. The doctor, who seems rushed, orders some lab work, reviews John's blood pressure, and checks his feet. He talks to John briefly about monitoring his blood sugar. The doctor suspects John may also be depressed so he encourages John to call the local mental health center when he gets home. He then asks John if he has questions, but John can't think of what to ask right then so the visit ends. By the time that John gets home he has forgotten exactly what the doctor said about monitoring his blood sugar. He tries to call the office but it's after 5 pm so no one is there to take the call. The next day John goes back to work and then he is too busy during the day to try calling again to ask about monitoring his blood sugar. Living in a small town, John doesn't want anyone to know he is feeling a bit down so he doesn't call the mental health center. He decides that since he didn't hear back from the doctor's office, it must mean his tests were fine so he goes on like he did before.

## A Patient-Centered Medical Home Visit

Now, imagine John visiting his doctor who is part of a PCMH. This doctor also orders lab work and checks John's blood pressure and feet. During the visit, a specially trained counselor who works with the doctor comes into the exam room. The counselor uses an **evidence-based** brief screening tool to determine that John is mildly depressed. The counselor talks with John about various options to help him feel better. They discuss medication, therapy, support group, and lifestyle changes (more exercise, hobbies, etc.). John agrees to try riding bikes with his son several times a week. The counselor, doctor, and a **care coordinator** talk briefly as a team about how depression might be impacting John's diabetes. The doctor knows that John is most comfortable getting written directions on what to do at home. John leaves with easy-to-read directions on how to monitor his blood sugar. An after-hours care coordinator calls John later that evening at home to check if he understands the directions or if he has any questions. John is also reminded when the lab results will likely be available and how he will get them. John feels confident that he can follow through with the care he needs.

Now that you have a feel for one patient's experience in a PCMH, let's revisit the **AHRQ five principles of the PCMH** and their meaning. Consider how these principles were used in John's visit at the PCMH.

AHRQ Principles	What does this mean in health care?	How does John experience this at the PCMH?
<b>1) Patient-Centered</b>	Care is based on patient's needs, values, and preferences.	<b>John is given options for treatment and his choice to ride bikes for exercise is respected. The health care team knows that John is most comfortable with written directions.</b>
<b>2) Comprehensive Care</b>	Care that meets all of your needs (for example, physical and mental).	<b>A specially trained counselor is on-site at the clinic to address mental health concerns as early as possible.</b>
<b>3) Coordinated Care</b>	Doctors and other providers are working together on your care.	<b>The counselor, doctor, and care coordinator are working together as a team to address John's physical and mental health needs.</b>
<b>4) Accessible Services</b>	You are able to get the care you need, when and where you need it.	<b>The on-site counselor makes it easier for John to access care. An after-hours care coordinator calls John at home to follow-up.</b>
<b>5) Quality and Safety</b>	"Behind the scenes" work to ensure you are getting the best possible care.	<b>An evidence-based screening tool helps providers to follow best practices and ensure that needed care is provided.</b>

## WHY IS PCMH NEEDED?

The purpose of **PCMH** is to *fundamentally* change **primary care** to improve patient outcomes and support the **Institute for Healthcare Improvement's** "**Triple Aim**," a national health goal for improving patient care and **population health** and reducing costs. Population health means health outcomes for a group of people.

Why do many people think that a fundamental change in primary care is needed?



- Nearly three out of four American adults report difficulty getting an appointment, health care advice by phone, or off-hours care without going to an emergency room.
- About three of four Americans saw more than one doctor in the past two years. Health care that is not coordinated may lead to unnecessary, repeated tests; medication mix-ups; and other problems.
- Nearly half the U.S. population has one or more **chronic conditions** (like diabetes or heart disease). Each year about \$1.3 trillion is spent on treating the most common chronic conditions.

PCMH helps to facilitate access to services and coordinates quality care so that more serious and costly problems can be avoided. Patients with access to regular **primary care** are more likely to receive recommended preventive services, get needed treatment, and have fewer avoidable hospital stays and emergency services. Patients with **chronic conditions** are often the focus of **population health** management efforts. For example, PCMH providers might track their patients who have diabetes and reach out to them between visits to ask about their health. By being aware of the patient preferences and needs, providers can work in a way that makes it more likely that patients will follow through on care recommendations.

## COMPARING PCMH WITH TYPICAL CARE

As you read about in John's visit, healthcare delivered through a **PCMH** is very different than typical care. The picture below shows some of the differences in how care is delivered and experienced by providers.

### Comparing old and new care

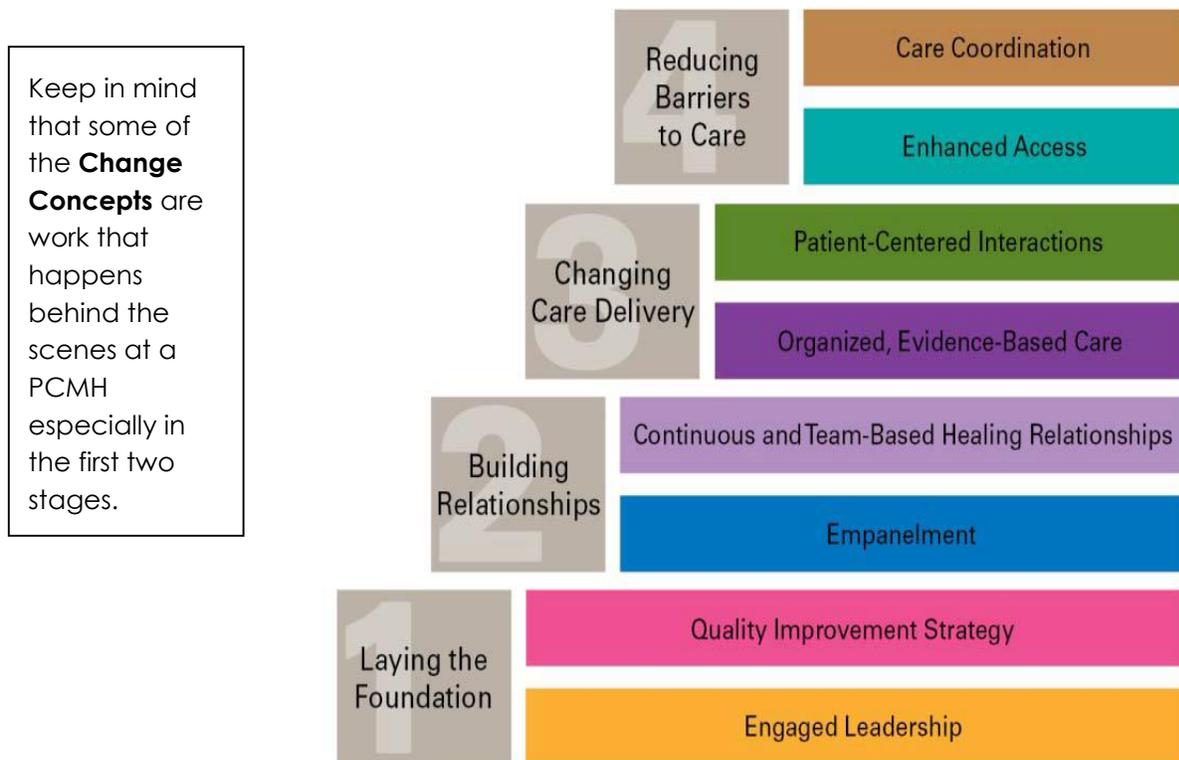


Source: Coach Medical Home [www.coachmedicalhome.org](http://www.coachmedicalhome.org)

## HOW DO HEALTH CARE PRACTICES BECOME A PCMH?

It's not easy to become a PCMH. The five **AHRQ principles** provide a broad idea of how a PCMH is different from standard medical care. Primary care providers usually need to make big changes in how they operate, what they call **practice transformation**, to become a PCMH. To help providers have a better idea of what they need to do and where to start, a group led by Qualis Health has developed "**Change Concepts.**" The picture below shows the four stages of practice transformation that includes eight Change Concepts (colored bars).

### The Change Concepts for Practice Transformation



Source: Wagner, E. H., Coleman, K., Reid, R. J., Phillips, K., Abrams, M. K., & Sugarman, J. R. (2012). The changes involved in patient-centered medical home transformation. *Primary Care: Clinics in Office Practice*, 39, 241-259.

Primary care practices that want to become a PCMH should start at the bottom of these steps and work their way up. Practices who meet certain standards can apply for PCMH Recognition from the **National Committee for Quality Assurance (NCQA)**.

## ARE ALL PATIENT-CENTERED MEDICAL HOMES THE SAME?

**PCMH** is not “one size fits all”—it can look different from place to place. Some practices have implemented all the elements of PCMH while others have only implemented some. It also looks different from place to place because PCMH providers can take different approaches to meet the same five **AHRQ Principles** (Patient-Centered, Comprehensive Care, Coordinated Care, Accessible Services, and Quality and Safety).

For example, an important part of Patient-Centered Care is respecting patient and family values and needs. One way to do this is to find out what a patient is expecting before the visit starts. One clinic may have a check-in nurse ask patients what they hope to get from the visit while another clinic might have patients complete a questionnaire in the waiting room. Both clinics would be respecting patient and family values and needs.

### Think About It:

How would you like your healthcare provider to find out about your expectations for a visit?

Letting primary care locations meet the **AHRQ principles** in different ways gives them flexibility. This may be especially important in rural areas that may have a harder time making the changes necessary to become a **PCMH** due to often having more limited resources, such as number of providers to cover after-hours care.

## HOW HAS PCMH BEEN USED?

There are a growing number of **PCMH** initiatives across the country. A 2014 study found 44 states using PCMH serving nearly 21 million people. PCMH has been used in primary care practices that serve the cities as well as rural and frontier communities. It has been used with **health care safety net** practices including **federally qualified health centers (FQHCs)**, clinics serving homeless or migrant populations, faith-based organizations, medical student programs, and **critical access hospitals**. It has been used with patients with private insurance, **Medicaid** and **Medicare**, and uninsured/self-pay patients.

## WHY ISN'T PCMH DONE EVERYWHERE?

Since many people think **PCMH** offers a proven way to improve the delivery of health care and health outcomes, you may be wondering why it isn't done everywhere. Change of any kind can be difficult, but it is especially difficult when putting a new model of care like PCMH in practice. You've already read about the **AHRQ Principles** and **Change Concepts**. For most primary care practices, there are a lot of changes to be made to become a PCMH. Those changes take resources, including time and money. Some primary care practices have received grants or other up-front support to make changes. Practices have also found help from experts and others who are also doing PCMH to be important. Studies have found that it takes time (typically 2-4 years) to make these kinds of major changes.

Several parts of the 2010 federal health law, the **Patient Protection and Affordable Care Act (PPACA)**, sometimes called "Obamacare," support the use of PCMH so it is anticipated that it will continue to grow.

## HOW DO I KNOW IF MY PROVIDER IS PART OF A PCMH?

There is an online directory (<http://recognition.ncqa.org>) that you can search to see if your provider is part of a **PCMH** that has gone through **NCQA** PCMH recognition. Keep in mind, however, that your provider may be undergoing **practice transformation** efforts or using PCMH principles but has not gone through the NCQA process. Best way to know if your provider is a PCMH? Ask them!

## DOES PCMH WORK?

There is growing evidence that **PCMH** contributes to a reduction of health care costs and improvements in health. Many PCMH initiatives have been able to show that patients served by a PCMH have fewer hospital stays and emergency room visits. However, not all research on PCMH has shown positive results. In a recent (2013-2014) report that combined outcomes across 28 PCMH studies, less than half showed improvements in quality and access.

Some of the differences in outcomes may be due to the types of patients served. For example, studies on costs find they are more likely to decrease for patients with **chronic conditions**.

Since PCMH is not “one size fits all,” it is difficult to compare studies of PCMH. Practices are taking different approaches and some have implemented all the elements of PCMH while others have only implemented some. One study found that primary care locations that adopt more PCMH features had higher patient ratings of care coordination but there was no impact on access, quality, or safety.

Results may also vary depending on how long a practice has done PCMH. There is some evidence that the intense efforts required to start PCMH may result in worse patient outcomes in the short term.

There is a clear need for more research to determine if the PCMH improves quality, affordability, and the patient experience. There is also a need to figure out which patients benefit and which approaches are most likely to lead to positive outcomes.

### What PCMH Outcomes are Typically Evaluated?

- Hospital stays
- Primary care visits
- Emergency room use
- Total cost
- Patient satisfaction

## HOW HAS PCMH BEEN USED IN RURAL AREAS?

Rural residents face many challenges in getting health care. They are more likely to be uninsured and report poorer health. Geographic distance and a shortage of providers in some rural areas can increase difficulties in accessing care. It is hoped that **PCMH** might help make a difference with these challenges.

PCMH has been used in rural doctor's offices and **rural health clinics** in many states. We do not know exactly how many rural practices use PCMH. We do know that typically there are greater barriers for rural providers who would like to become a PCMH. Small **primary care** practices which are common in rural areas may not have the resources to hire a full-time **care coordinator** or to implement **electronic medical records**. Increasing access to care is more difficult with a small rural doctor's office.

There is much that remains to be known about how PCMH works in rural areas because the rural experience is often not separated in larger studies of PCMH. In one very small study of 3 rural safety net clinics, a multidisciplinary team to address rural issues was identified as critical for patient-centered care.

## WHAT ABOUT THE "PATIENT-CENTERED" PART OF PCMH?

A "patient-centered" medical home suggests that a patient will be at the center of care. There are many definitions of "patient-centered" care. Most definitions include some or all of these features:

- Care that is tailored to a patient's preferences and needs.
- Increased involvement of patients and families in a patient's care.
- Shared responsibility/partnership between patients and providers for a patient's health (such as self-care, shared decision-making).
- Easier access to care.
- Improved communication between patients and providers.

*"We still have much to learn about truly meeting patients' needs and engaging patients meaningfully in their care."*

(Kilo & Wasson, 2010)

In addition to increasing how patients are involved in their own care, "patient-centered" also includes increasing patient involvement at the organizational

level, such as having patient representatives serving on a quality improvement committee.

Many people think that not enough attention has been given to the “patient-centered” part of PCMH. So far, many would argue that there has been more focus on changing the office/clinic structure and technology and less on putting the patient in the center of PCMH.

## WHAT RESEARCH ON PCMH HAS BEEN DONE FROM A PATIENT’S VIEW?

*“Little is known about how patients view aspects of the PCMH or how they define patient-centeredness.”* (Van Berckelaer et al. 2012)

One common way that **PCMH** practices have increased focus on patients’ preferences is through measuring patient satisfaction. A number of studies have found that patients and staff are more satisfied and that patients report improved care coordination. In one small study, a majority of patients (67%) reported supporting the shift to PCMH and described improved communication and increased feelings of safety and trust as a result.

While collecting patient satisfaction is an important first step, practices must also use the feedback to make changes to better meet patients’ needs. We believe that evaluating patient satisfaction is different than asking patients what is important to them in the PCMH. What parts of a PCMH are most important to patients? How does a practice or individual provider show that they are patient-centered? What outcomes matter? Providers and researchers are

The first published study asking patients\* what they want in a medical home was done in 2012. The patients said:

- 1) Timely, clear, and polite communication.
- 2) An ongoing relationship with a doctor who knows them personally.
- 3) Trusting the provider’s guidance and being more involved in their own care.

\*Focus groups for this study included mostly minority women from urban, academic internal medicine practices so findings may or may not apply in rural or other settings.

just beginning to ask these questions. As far as we know, no studies have asked these questions of rural patients specifically.

## **PATIENT, CAREGIVER AND HEALTHCARE STAKEHOLDER INPUT NEEDED**

There is a need to know what rural residents say is important to them in a **PCMH**. This information is needed so that **Comparative Effectiveness Research (CER)** can be conducted in this area. CER compares different types of health care treatment to determine what works best. The **Patient-Centered Outcomes Research Institute (PCORI)** was created to improve the quality and relevance of evidence to help patients, caregivers, clinicians, employers, insurers, and policy makers make informed health decisions. PCORI supports research that is focused on **patient-centered outcomes** or health outcomes that are important to patients and their caregivers. PCORI is committed to getting ideas and opinions from many different people to guide its work.

### **What Is Important to Me in a PCMH?**

Ideas to get you started: *I am able to access my health information when needed. My different health providers (primary care & specialists) seem to be on the same page.*

We welcome your ideas and feedback in our work together!

## GLOSSARY

**Agency for Health Care Research & Quality (AHRQ)** – part of the United States Department of Health and Human Services, which supports research and is designed to improve the outcomes and quality of healthcare. Additionally, the organization seeks to reduce costs, address patient safety and medical errors, and broaden access to effective services.

**AHRQ Principles of the Patient-Centered Medical Home** – a model for delivering primary care that is patient-centered, comprehensive, coordinated, accessible, and continuously improved through a systems-based approach to quality and safety.

**Care Coordinator** – an individual who organizes patient care activities between two or more parties (including the patient) to facilitate the appropriate delivery of health care services.

**Change Concepts** – general ideas used to stimulate specific, actionable steps that lead to improvement.

**Chronic Conditions or Chronic Disease** – a long-lasting condition that can be controlled but not cured. Chronic disease is the leading cause of death and disability in the United States.

**Comparative Effectiveness Research (CER)** – a type of research that compares different types of health care treatment to determine what works best.

**Critical Access Hospitals (CAH)** – a program that works to improve access to rural health care and reduce rural hospital closures by providing essential services to a community.

**Electronic Medical Record (EMR) or Electronic Health Record (EHR)** – a digital version of the traditional paper-based medical record for an individual. The EMR represents a medical record within a single facility, such as a doctor's office or a clinic.

**Empanelment** – the act of assigning individual patients to individual primary care providers (PCP) and care teams with sensitivity to patient and family preference. Empanelment is the basis for **population health** management and the key to continuity of care.

**Evidence-based** – the use of current best evidence along with clinical expertise and patient values to guide health care decisions.

**Federally Qualified Health Clinic (FQHC)** – Clinics that serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. FQHCs qualify for enhanced reimbursement from **Medicare** and **Medicaid**, as well as other benefits.

**Health Care Safety Net Providers** – health care providers that deliver care to low-income, vulnerable patients including public hospitals, community health centers, local health departments, and free clinics.

**Health Home** – a team-based clinical approach that includes the consumer, providers, and family members, when appropriate.

**Home Health** – a wide range of health care services that are given in the home for illness or injury.

**Institute for Healthcare Improvement (IHI)** – an independent not-for-profit organization that works with health care professionals to improve health and health care worldwide.

**Medicaid** – a program that provides free or low-cost health coverage to millions of Americans, including some low-income people, families and children, pregnant women, the elderly, and people with disabilities. Medicaid is run jointly by federal and state governments, and details vary somewhat between states.

**Medical Home** – a model of primary care that is patient-centered, accessible, comprehensive, team-based, coordinated, and focused on quality and safety.

**Medicare** – the federal health insurance program for people who are 65 or older, certain younger people with disabilities, and people with permanent kidney failure.

**National Committee for Quality Assurance (NCQA)** – a private, not-for-profit organization dedicated to improving health care quality. NCQA develops quality standards and performance measures for a broad range of health care organizations.

**Patient Centered Medical Home (PCMH)** – a care delivery model whereby patient treatment is coordinated through their **primary care physician** to ensure

they receive the necessary care when and where they need it, in a manner they can understand.

**Patient-Centered Outcomes** – health outcomes that are important to patients.

**Patient-Centered Outcomes Research Institute (PCORI)** – a nonprofit, nongovernmental organization located in Washington, DC. Congress authorized the establishment of PCORI in the **Patient Protection and Affordable Care Act** of 2010. PCORI's purpose is to improve the quality and relevance of evidence available to help patients, caregivers, clinicians, employers, insurers, and policy makers make informed health decisions.

**Patient Protection and Affordable Care Act (PPACA)** – (commonly called the Affordable Care Act (ACA) or "ObamaCare") a United States federal statute signed into law by President Barack Obama on March 23, 2010.

**Population Health** – the health outcomes of a group of individuals.

**Practice Transformation** – a change in how care is provided that includes investing time and money, and asking physicians and staff to change their roles.

**Primary Care** or **Primary Health Care** – the day-to-day health care given by a health care provider. Typically this provider acts as the first contact and principal point of continuing care for patients within a health care system, and coordinates other specialist care that the patient may need.

**Primary Care Physician** or **Primary Care Provider (PCP)** – a physician or other provider who provides both the first contact for a person with an undiagnosed health concern as well as continuing care of varied medical conditions.

**Quality Improvement** – a process of analyzing a health organization's performance (including efficiency, outcomes of care and patient satisfaction) and making changes in the current system to achieve better results.

**Rural Health Clinics (RHC)** – a program intended to increase primary care services for **Medicaid** and **Medicare** patients in rural communities. RHCs can be public, private, or non-profit.

**Triple Aim** – Improving the patient experience of care (including quality and satisfaction), improving the health of populations, and reducing the per capita cost of health care.

## **ACRONYMS**

**AHRQ – Agency for Health Care Research & Quality**

**CAH – Critical Access Hospitals**

**CER – Comparative Effectiveness Research**

**ED – Emergency Department**

**EHR – Electronic Health Record**

**EMR – Electronic Medical Record**

**FQHC– Federally Qualified Health Clinic**

**IHI – Institute for Health Care Improvement**

**NCQA – National Committee for Quality Assurance**

**PCMH – Patient Centered Medical Home**

**PCORI – Patient-Centered Outcomes Research Institute**

**PPACA – Patient Protection and Affordable Care Act**

**PCP – Primary Care Physician or Primary Care Provider**

**RHC – Rural Health Clinics**

## FOR MORE INFORMATION

AHRQ Patient Centered Medical Home Resource Center [www.PCMH.ahrq.gov](http://www.PCMH.ahrq.gov)

Patient Centered Primary Care Collaborative [www.pcpcc.org](http://www.pcpcc.org)

To watch a short video on PCMH, go to [www.emmisolutions.com/medical-home-english](http://www.emmisolutions.com/medical-home-english)

## MAIN RESOURCES REVIEWED

Coach Medical Home [www.coachmedicalhome.org](http://www.coachmedicalhome.org)

Cole, E. S., Campbell, C., Diana, M. L, Webber, L., & Culbertson, R. (2015). Patient-centered medical homes in Louisiana had minimal impact on Medicaid population's use of acute care and costs. *Health Affairs*, 34(1), 87-94.

Davis, K., Abrams, M., Stremikis, K. (2011). How the Affordable Care Act will strengthen the nation's primary care foundation. *Journal of General Internal Medicine*, 26(10), 1201-1203.

Derrett, S., Gunter, K. E., Nocon, R. S., Quinn, M. T., Coleman, K., Daniel, D. M., ... Chin, M. H. (2014). How 3 rural safety net clinics integrate care for patients: A qualitative case study. *Medical Care*, 52(11), S39-S47.

Driscoll, D., Hiratsuka, V., Johnston, J., Norman, S., Reilly, K., Shaw, J., ... Dillard, D. (2013). Process and outcomes of patient-centered medical care with Alaska Native people at Southcentral Foundation. *Annals of Family Medicine*, 11(1), S41-S49.

Gale, J. A., Croll, Z., Hartley, D., & Coburn, A.F. (January 2015). *Rural health clinic readiness for patient-centered medical home recognition: Preparing for the evolving healthcare marketplace* (Research & Policy Brief, PB-57). Portland, Maine: Maine Rural Health Research Center.

Green, E. P., Wendland, J., Carver, M. C., Rinker, C. H., & Mun, S. K. (2012) Lessons learned from implementing the patient-centered medical home. *International Journal of Telemedicine & Applications*, 2012, 1-8.

- Jackson, G. L., Powers, B. J., Chatterjee, R., Bettger, J. P., Kemper, A. R., Hasselblad, V., ... Williams, J. W. (2013). The patient-centered medical home: A systematic review. *Annals of Internal Medicine*, 158(3), 169-178.
- Kilo, C. M., & Wasson, J. H. (2010). Practice redesign and the patient-centered medical home: History, promises, and challenges. *Health Affairs*, 29(5), 773-778.
- MacKinney, A. C., Ullrich, F., & Mueller, K. J. (2011). *Patient-centered medical home services in 29 rural primary care practices: A work in progress* (Brief No. 2011-6). Iowa City, IA: Rural Health Research & Policy Centers.
- Nielsen, M., Gibson, A., Buelt, L., Grundy, P., & Grumbach, K. (2015). *The patient-centered medical home's impact on cost and quality: Annual review of evidence, 2013-2014*. Washington, D.C.: Patient-Centered Primary Care Collaborative.
- Qualis Health and the MacColl Center for Health Care innovation at the Group Health Research Institute. (2013). *Safety Net Medical Home Initiative: Key Activities Checklist Tool* (2<sup>nd</sup> ed.). Seattle, WA: Author.
- Sugarman, J. R., Phillips, K. E., Wagner, E. H., Coleman, K., & Abrams, M. K. (2014). The safety net medical home initiative: Transforming care for vulnerable populations. *Medical Care*, 52(11 Suppl 4), S1-S10.
- Van Berckelaer, A., DiRocco, D., Ferguson, M., Gray, P., Marcus, N., & Day, S. (2012). Building a patient-centered medical home: Obtaining the patient's voice. *Journal of the American Board of Family Medicine*, 25(2), 192-198.
- Vest, J. R., Bolin, J. N., Miller, T. R., Gamm, L. D., Siegrist, T. E., & Martinez, L. E. (2010). Medical homes: "Where you stand on definitions depends on where you sit." *Medical Care Research and Review*, 67(4), 393-411.
- Wagner, E. H., Coleman, K., Reid, R. J., Phillips, K., Abrams, M. K., & Sugarman, J. R. (2012). The changes involved in patient-centered medical home transformation. *Primary Care: Clinics in Office Practice*, 39, 241-259.