SUMMARY: The success of health care reform implementation in 2014 partly depends on more efficient delivery of care to the millions of California residents eligible to gain insurance. Emerging evidence supports the effectiveness of the patient-centered medical home (PCMH) as a potential model of care delivery, which improves health outcomes and reduces costs. Among other principles, PCMH entails receipt of care from a personal doctor, who coordinates the patient’s care and develops an individualized treatment plan for the patient. These principles are particularly essential in delivery of care to those with chronic conditions who require more intensive care management. Using the 2009 California Health Interview Survey (CHIS 2009), this policy brief indicates that patients who reported meeting these fundamental PCMH principles were more likely to have visited the doctor and to have received flu shots, and they also had better communication with providers than those who did not report meeting these PCMH principles. The data also showed that uninsured individuals, Medi-Cal beneficiaries, those at or below 133% of the federal poverty level, Latinos, and Asian-Americans were less likely to report meeting all three PCMH principles. These findings highlight the population groups that would most benefit from the PCMH care delivery model, particularly Medi-Cal beneficiaries and those eligible for Covered California, the California health benefits exchange.

California is at the forefront of implementing the Patient Protection and Affordable Care Act of 2010 (ACA), under which millions of California residents will be eligible to gain coverage in 2014. The success of this coverage expansion in improving access partly depends on more efficient delivery of care to everyone, but particularly those with chronic conditions who require more intensive care management. Promoted by ACA, patient-centered medical home (PCMH) is a promising approach to achieving better patient outcomes, especially for those with chronic conditions. PCMH includes receipt of care from a personal doctor, who coordinates the patient’s care and develops an individualized treatment plan for the patient, among other principles. In this policy brief, the receipt of care according to three PCMH principles is evaluated for adult California residents with a usual source of care and with diabetes, asthma, or heart disease. The respondents in the 2009 California Health Interview Survey (CHIS 2009) were asked about three PCMH principles: (1) if the patient had an individual treatment plan from any provider, and (2) if the patient had a personal doctor; those with a personal doctor were also asked (3) if the personal doctor or the doctor’s staff coordinated the patient’s care. The ideals of care delivery according to the PCMH model are broader, though many PCMH activities are not noticeable by patients and are difficult to discern in general population surveys. Thus, the estimated availability of PCMH in...
this brief reflects three fundamental PCMH principles from the individual’s point of view.

More than Half of Adults with Chronic Conditions Reported Meeting Three Patient-Centered Medical Home Principles

An estimated 4.76 million adults in California reported having a usual source of care and either diabetes, asthma, or heart disease (data not shown). Of these adults, over 2.5 million (52%) reported meeting all three PCMH principles, including an individual treatment plan and a personal doctor who coordinates their care (Exhibit 1). A further 20% reported having a personal doctor and an individual treatment plan, and an additional 11% reported having a doctor who coordinates their care. Others reported meeting only one PCMH principle or none.

“Only half of Californians with a chronic condition have the three core characteristics of a medical home.”
Latinos, Poor, and Uninsured Least Likely to Meet Patient-Centered Medical Home Principles

An equal proportion of White and African-American (56%) adults with chronic conditions reported receiving care consistent with all three PCMH principles, but fewer Latinos (45%) and Asian-Americans (43%) reported this (Exhibit 2). A higher proportion of Latinos (10%) than of any other group reported that their care did not meet any of the three PCMH principles.

In addition, a lower proportion (46%) of respondents with incomes below 133% of the federal poverty level (FPL) than those with incomes from 134% to 400% FPL (53%) or those above 400% FPL (54%) reported having care that met all three PCMH principles. The highest income group was least likely to report care that did not meet any PCMH principles (2%) or that met only one principle (7%).

### Exhibit 2
Proportion of Adults with Chronic Conditions Who Met Patient-Centered Medical Home Principles by Race/Ethnicity and Income, Ages 18 and Older, California

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>0-133% FPL</th>
<th>134-400% FPL</th>
<th>401% FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>56%</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Latino</td>
<td>33%</td>
<td>26%</td>
<td>37%</td>
</tr>
<tr>
<td>African-American</td>
<td>15%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Asian-American</td>
<td>9%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Note: Percentages may not add to 100% due to rounding error.
Adults with chronic conditions who were insured by Medicare, employment-based, or privately purchased coverage were more likely to meet all three PCMH principles (58%, 53%, and 54%; Exhibit 3) than individuals with Medi-Cal or no insurance coverage. The uninsured were the least likely of all groups to have a medical home – 21% met none of the three PCMH principles.

PCMH Care Most Frequently Reported If Usual Source of Care Was a Doctor’s Office

A significantly higher proportion of respondents whose usual source of care was a doctor’s office (54%) than of respondents whose usual source of care was a clinic (48%) or alternative provider reported receiving care that met all three PCMH principles (19%; Exhibit 4). Of those who reported having alternative providers as their usual source of care, 31% reported that their care did not meet any of the three PCMH principles.
### Proportion of Adults with Chronic Conditions Who Met Patient-Centered Medical Home Principles by Number of Doctor Visits and Flu Shots in the Past Year, Ages 18 and Older, California, 2009

<table>
<thead>
<tr>
<th></th>
<th>No visits</th>
<th>1 to 4 visits</th>
<th>5 or more visits</th>
<th>Had flu shot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal doctor, care coordination, and individual treatment plan</strong></td>
<td>3%</td>
<td>46%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td><strong>Personal doctor with care coordination or with individual treatment plan</strong></td>
<td>6%</td>
<td>51%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td><strong>Personal doctor or individual treatment plan</strong></td>
<td>6%</td>
<td>62%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td><strong>None of the above</strong></td>
<td>22%</td>
<td>49%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td><strong>Personal doctor, care coordination, and individual treatment plan</strong></td>
<td>59%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Personal doctor with care coordination or with individual treatment plan</strong></td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Personal doctor or individual treatment plan</strong></td>
<td>45%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>None of the above</strong></td>
<td>26%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Percentages may not add to 100% due to rounding error.

---

**Meeting Patient-Centered Medical Home Principles Was Associated with More Doctor Visits and Flu Shots**

Adults with an individual treatment plan and a personal doctor who coordinated their care were more likely (50%) to have had five or more doctor visits in the past year than adults who reported meeting two of the three (43%), one of the three (31%), or none of the three PCMH principles (30%; Exhibit 5). Adults who reported meeting none of the three PCMH principles were least likely to have seen a provider in the past year (22%), despite having chronic conditions.

The rate of flu shots, an essential preventive measure for those with chronic conditions, was highest among adults with chronic conditions who reported meeting all three PCMH principles (59%). The rate of flu shots significantly decreased for groups who reported meeting fewer or none of the principles.

"**Having a medical home improves the rate of flu shots."**
Meeting Patient-Centered Medical Home Principles Was Associated with More Timely Communication with the Doctor and Confidence in Self-Care

Adults with chronic conditions were asked whether they had called the doctor’s office with a medical question in the past year and, if so, how often they got a response. More adults who met all three PCMH principles had called the doctor’s office (46%) than those with care that met two (34%), one (25%), or no (7%) PCMH principles (data not shown). Among those who did call the doctor’s office, those who met all three PCMH principles were most likely to report having received a call back usually or always (92%; Exhibit 6). Those who met none of the PCMH principles were least likely to report a call back usually or always (42%) and most likely to report never getting a call back (17%).

Adults with chronic conditions were asked whether they felt confident in their ability to manage and control their chronic conditions. Most reported a high level of confidence; however, those who met three PCMH principles reported being confident more frequently (95%) than those who met only one (90%) or none of the three principles (91%; data not shown).

Policy and Practice Implications

The three fundamental PCMH principles examined in this brief do not fully reflect the ideals of a patient-centered medical home; however, these data provide a population-level snapshot of care received prior to the passage of ACA and can be used to identify approaches to improving patient care and outcomes.

The higher frequency of visits, higher rates of flu shots, better communication with providers, and greater confidence in self-care highlight the positive relationship of these three PCMH principles with patient outcomes and health care use. Adults with chronic conditions who have an individual
treatment plan and a personal doctor who coordinates their care are more likely to require more frequent doctor visits to address their complex health care needs. These doctor visits often include receipt of recommended preventive care, such as flu shots. The ability of patients to communicate with their providers and participate in their care is also essential for better management of the chronic diseases examined in this brief.

The PCMH model is anticipated to improve population outcomes and efficiencies in care delivery after implementation of the ACA. The impact is likely to be pronounced for the uninsured Californians who are expected to participate in Medi-Cal or purchase coverage through Covered California, the health care benefit exchange in California. Interventions in care delivery should be targeted to populations who less frequently report meeting all three PCMH principles. These populations are more frequently uninsured Medi-Cal beneficiaries, those at or below 133% FPL, Latinos, Asian-Americans, and those receiving care in clinics or from alternative and nonconventional providers. These differences in care that meets PCMH principles highlight the shortcomings of the current health care delivery system. The current system can be improved by providing better care to populations most in need and enhancing resources in clinics that provide care to them.

Data Source and Methods

The findings of this policy brief are based on the 2009 California Health Interview Survey (CHIS 2009), a random-digit-dial telephone survey of the California population living in households and the largest statewide survey conducted in the U.S. Interviews were conducted in English, Spanish, Chinese (Mandarin and Cantonese), Vietnamese, and Korean. CHIS 2009 interviewed about 47,600 adults in California.

CHIS is conducted by the UCLA Center for Health Policy Research in collaboration with the California Department of Public Health, the Department of Health Care Services, and the Public Health Institute. For more information on CHIS sample size, methods, and data, please visit www.askchis.com.

Author Information

Nadereh Pourat, PhD, is a professor at the UCLA Fielding School of Public Health and director of research at the UCLA Center for Health Policy Research. Shana Alex Lavarreda, PhD, MPP, is the director of health insurance studies and a research scientist at the UCLA Center for Health Policy Research. Sophie Snyder is a graduate student researcher with the Center for Health Policy Research and a student in the UCLA Fielding School of Public Health’s MPH Program in Health Policy and Management.

Suggested Citation


Endnotes

1. PCMH principles also include coordinated care across all levels of care, care facilitated by enhanced communication, and various means of assuring that patients receive appropriate care. CHIS respondents were asked, “Is there anyone at your doctor’s office or clinic who helps coordinate your care with other doctors or services such as tests or treatments?”

2. An individual treatment plan (ITP) is one of the tools used to enhance patient and family participation in decision-making and self-care under PCMH principles. An ITP usually is a written document developed by the provider with the patient’s participation. It may include specific diagnoses and problems, intermediate and long-term treatment goals, and self-care instructions for the patient. CHIS respondents were asked, “Have your doctors or other medical providers worked with you to develop a plan so that you know how to take care of your [chronic condition]?”

3. Under the PCMH principles, each patient has an ongoing relationship with a personal physician who is the point of first contact and who provides continuous and comprehensive care. CHIS respondents were asked, “Do you have a personal doctor or medical provider who is your main provider?”

4. Originally introduced in the context of pediatric care for children with special health care needs, this concept was reintroduced by four physician organizations in 2007. The seven principles of PCMH include 1) personal physician, 2) physician-directed medical practice, 3) whole person orientation, 4) quality and safety, 5) coordinated and/or integrated care, 6) enhanced access, and 7) payment (http://healthpolicy.ucla.edu/publications/Documents/PDF/Health%20Coverage%20Cost%20of%20Health%20Net.pdf). These principles describe a proactive and comprehensive approach to delivery of care, with specific focus on evidence-based medicine, physician accountability for outcomes of care, and patient participation in clinical decision-making and self-care.

5. The federal poverty guidelines in 2009 were $14,570 for a two-person household, $18,310 for a three-person household, and $22,050 for a four-person household.

6. Some respondents named chiropractors or acupuncturists as their usual source of care.