

# PATIENT-CENTERED MEDICAL HOMES AND THE HEALTH OF OHIO'S ADULTS AND CHILDREN

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### INTRODUCTION

The Patient-Centered Medical Home (PCMH) is a model of coordinated, comprehensive primary care that has been shown to increase health care quality, reduce costs and improve patient satisfaction. Using data from the 2015 Ohio Medicaid Assessment Survey (OMAS), this policy brief describes who experiences such care in Ohio and how the model is associated with more effective and efficient patterns of health care. Analyses focus on adults and children covered by Medicaid as well as lower income individuals who have other types of insurance or are uninsured. Given concerns about health disparities — especially in the area of infant mortality — the brief also considers racial/ethnic minority populations and pregnant women. For more comprehensive and detailed results, please refer to the accompanying chartbook.

### **BACKGROUND**

In recent years, numerous efforts have sought to expand access to the PCMH model across Ohio. For example:

- Ohio's PCMH Education Pilot Project led 42 primary care practices through a 2-year transformation process. These practices were primarily teaching sites specifically selected in areas in the state in which there were not already established regional transformation efforts.
- Sixty-one practices in southwest Ohio participate in the Comprehensive Primary Care Initiative sponsored by the Centers for Medicare and Medicaid Services (CMS).
- In 2014, CMS awarded Ohio a four-year \$75 million State Innovation Model (SIM) grant to develop payment systems that will facilitate PCMH development and practice.

And at the center of such efforts, the Ohio Patient-Centered Primary Care Collaborative (OPCPCC) is a coalition of primary care providers, insurers, employers, consumer advocates, government officials and public health professionals working together to increase the institutional capacity for the PCMH model across the state.

The Ohio Medicaid Assessment Survey (OMAS) is a valuable source for understanding PCMH and its benefits.<sup>2</sup> Rather than directly assessing institutional capacity of PCMH, OMAS data offer patients' perspectives by studying how their self-reported experiences reflect care that is consistent with the PCMH model. As such, this study focuses on "care consistent with a PCMH" (CC-PCMH).

Using OMAS to study CC-PCMH offers policymakers a broad view, so analyses can estimate how CC-PCMH differs in key subpopulations across Ohio. The approach also enables researchers to examine how CC-PCMH is associated with important variables (e.g., unmet health needs) not available in medical records.

## **HIGHLIGHTS**

- Low income adults with Medicaid are just as likely as those with employer-sponsored insurance to have CC-PCMH.
- Adults and children who have health insurance are more likely than the uninsured to have CC-PCMH.
- Low income Medicaid adults with special health care needs, are less likely to have unmet health needs, to misuse prescription painkillers or to have frequent emergency department visits if they have CC-PCMH.
- The benefits of CC-PCMH largely persist across racial/ethnic groups, pregnant women and other key subpopulations.

Of course the approach also has its limitations. One is that patients' perceptions of their care may not align with their actual experiences of health care service delivery. In other words, it is uncertain whether self-report survey questions related to CC-PCMH are really measuring the PCMH model, or if they are just another way of measuring patient satisfaction.

Also, some people may exhibit patterns of care that do not fit our measure of CC-PCMH, yet nonetheless work well for them. Some children with special health care needs, for example, have their care managed by a specialist rather than a primary care provider. So they may miss the strong relationship to a primary care practice that is at the center of the PCMH model.

## **OBJECTIVES**

This policy brief aims to describe the types of people who experience CC-PCMH and how such care is associated with more effective and efficient patterns of health care.

PCMH may be a valuable model for all types of patients, but this brief focuses on Ohio adults and children covered by, or potentially eligible for Medicaid because they live in a lower income household.<sup>3</sup> And given concerns about health disparities, the brief also considers racial/ethnic minority populations and pregnant women.

It is unrealistic to expect that CC-PCMH would be associated with better health outcomes in a cross-sectional study like OMAS. Often people with chronic conditions have more experience navigating health care systems. Over time, many learn how to communicate well with providers, get timely urgent care and attain other aspects of the PCMH model. Thus, CC-PCMH may be more common among people with worse health outcomes. To test the benefits of CC-PCMH, this study examines outcomes within populations that have greater health needs. Thus, it considers questions like: among children with special health care needs, are those with CC-PCMH less likely to have unmet health needs?

Initially, we planned to examine how CC-PCMH has changed over time, but differences in each year's version of the OMAS precluded our ability to do so. A separate policy brief describes changes in adults' usual source of care since 2012.4

### **METHODS**

OMAS is a telephone survey that samples both landline and cell phones in Ohio. The survey examines access to the health system, health status, and other characteristics of Ohio's Medicaid, Medicaid eligible, and non-Medicaid populations. In 2015, researchers completed 42,876 interviews with adults and 10,122 proxy interviews of children. The 2015 OMAS is the sixth iteration of the survey. For details, please see the OMAS methods report.<sup>5</sup>

To be classified as having CC-PCMH, a respondent had to meet seven criteria: (1) Has an appropriate, usual source of care (e.g., a doctor's office or hospital outpatient department); (2) Has a personal care provider (PCP; i.e., "a health professional who knows you well and is familiar with your health history"); (3) Has seen this PCP in the past 12 months; (4) Reports that the PCP communicates well with them; (5) Got urgent care (if needed) on the same or next day; (6) Got after hours care (if needed) without a problem; and (7) Got specialist care (if needed) without a problem. For the last 3 criteria, a respondent who did not need a type of care was classified as having CC-PCMH so long as s/he met the other criteria.

The findings reported in this brief are weighted to be representative Chart I: Percentage of Ohio adults who have of all non-institutionalized adults or children in Ohio. All differences presented are statistically significant at p<0.05 unless otherwise noted.

### **RESULTS**

Overall, 40.0% of Ohio adults (of all income levels) experience CC-PCMH. Yet this figure varies markedly by household income, as well as by gender and age. Females are more likely than males to experience CC-PCMH, especially when they are of child-bearing age (19-44 years; chart 1). In addition, CC-PCMH is more common among older adults. There are few differences in the prevalence of CC-PCMH across different regions of the state, or by the type of county (e.g., urban vs. suburban).

CC-PCMH by gender and age group

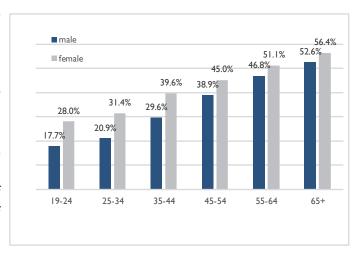
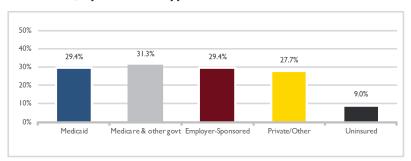


Chart 2: Estimated probabilities<sup>6</sup> of lower income adults having CC-PCMH, by insurance type/status



Among lower income adults, CC-PCMH is **similarly common among those with Medicaid compared to those with employer-sponsored or other types of insurance**, even after adjusting for group differences in demographic characteristics and health status (chart 2).<sup>6</sup> Also, uninsured adults are much less likely to experience CC-PCMH. Among adults who potentially became newly eligible under Medicaid expansion (not shown in chart), those who enrolled in Medicaid are over 3 times as likely to have CC-PCMH compared to those who did not enroll and are uninsured (22.8% vs. 6.1%).

Among children, 39.2% have CC-PCMH (as reported by an adult in the household.) Children from higher income households are more likely to experience CC-PCMH, as are younger children. For instance, 52.2% of infants (<1 year) had CC-PCMH, compared to 35.8% of 13-18 year olds. In addition, children in Northwest Ohio are somewhat less likely to have CC-PCMH compared to those in other regions

Health insurance is also important. Children from low income households with Medicaid are less likely to have CC-PCMH compared to those with employer-sponsored insurance, even after controlling for differences in demographic characteristics and health status (estimated probability 32.7% vs. 42.9%). The main factor contributing to this difference was that **children** covered by Medicaid are more likely to have a problem getting prompt urgent care or after hours care.

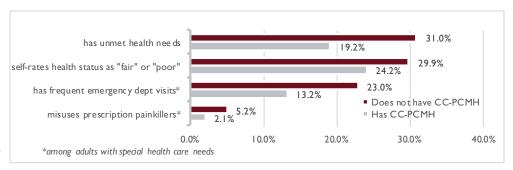
For both adults and children, whites are more likely than African-Americans or Hispanics to have CC-PCMH, although this difference is largely — but not completely — explained by group differences in household income, insurance and other characteristics. Moreover, there are no significant differences by race/ethnicity in the proportion of pregnant women who experience CC-PCMH. Among children, racial/ethnic differences in access to CC-PCMH are limited to those over I years old.

## **CC-PCMH** and better health care

CC-PCMH is associated with a range of favorable health care outcomes. The benefits of CC-PCMH extend to low income adults covered by Medicaid as well as those with other types of insurance and (nearly always) to the uninsured as well. Moreover they persist across different racial/ethnic minority groups, for people with a history of chronic conditions (e.g., cancer) and those with special health care needs.

Consider the examples in chart 3. After adjusting for group differences, lower income (≤138% FPL) Medicaid adults who have CC-PCMH are less likely than those without CC-PCMH to have unmet health needs (estimated probability 19.2% vs. 31.0%) or to rate their health as "fair" or "poor" (24.2% vs. 29.9%). For those with special health care needs, having CC-PCMH was associated with a lower probability of misusing prescription

Consider the examples in chart 3. After Chart 3: Estimated probability<sup>4</sup> of outcomes among Medicaid adults by adjusting for group differences. lower CC-PCMH status



painkillers in the past year (2.1% vs 5.2%) or having frequent (3+) emergency department visits (13.2% vs. 23.0%).6

Analyses found similar results for children. Medicaid children from lower income households who have CC-PCMH are less likely than those without CC-PCMH to have unmet health needs (4.5% vs. 8.0%)<sup>6</sup> or frequent (3+/year) emergency department visits (3.7% vs. 6.7%).<sup>6</sup> Such children are **more likely to have a well-child visit**, especially children without special health care needs (90.9% vs. 74.9%).<sup>6</sup>

### **POLICY CONSIDERATIONS**

Given these robust findings, Ohio should have renewed confidence in the PCMH model and an appreciation of its broad value. It is noteworthy, for instance, that adults with special health care needs are less likely to misuse prescription painkillers if they have CC-PCMH. Such a finding may merit exploring the role of the PCMH model in efforts to prevent prescription opioid abuse.

Medicaid provides low income adults with CC-PCMH just as effectively as does employer-sponsored insurance. Because the uninsured are less likely to have access to, and benefit from CC-PCMH, Medicaid expansion is a critical tool in providing access to such care.

CC-PCMH has similarly strong benefits for African-American and white Ohioans, so expanding African-Americans' access to the PCMH model may help reduce certain racial/ethnic disparities in health. However, the PCMH model may be less relevant for reducing disparities in infant mortality, as racial/ethnic differences in CC-PCMH are less pronounced for pregnant women and infants than for other populations.

The findings from this study parallel those from research conducted elsewhere using other methods, suggesting that OMAS is a useful tool for assessing the PCMH model across Ohio. One possible use would be to evaluate efforts to expand certain aspects of patient-centered care. Consider the finding that among children from low income homes, the only deficits in CC-PCMH between children covered by Medicaid versus employer-sponsored insurance was in having a problem seeing a specialist or getting prompt after hours care. Statewide efforts to improve one or both of these components could be evaluated using OMAS data. In such work OMAS's focus on the patient perspective will be critical, but should be complemented by data from other sources that assess the institutional capacity for PCMH.

#### **REFERENCES**

- 1. Ohio Department of Health. Ohio's OPCPCC. Accessed July 28, 2015 at: http://www.odh.ohio.gov/landing/medicalhomes/opcpcc.aspx
- 2. Ashmead R, Seiber E, Sahr T. <u>Patient-Centered Medical Home Status in Ohio: Final Report</u>. Columbus, OH: The Ohio Colleges of Medicine Government Resource Center and The Ohio State University; 2013.
- 3. Among adults, "lower income" refers to individuals in households with incomes ≤138% of the federal poverty level (FPL). For children, the figure is ≤200% FPL ("Higher income" refers to households with incomes higher than these thresholds.)
- 4. Steinman K. Lacking a Usual Source of Care: Findings for Ohio's Medicaid, Medicaid-Eligible and Other Key Subpopulations. Columbus, OH: Ohio Colleges of Medicine Government Resource Center; 2016.
- 5. Ohio Colleges of Medicine Government Resource Center and RTI International. 2015 Ohio Medicaid Assessment Survey: Methodology Report. Research Triangle Park, NC: RTI International; 2015.
- 6. Estimated probabilities are values from a statistical model that represent the estimated percentage of a hypothetical subpopulation predicted to have the outcome, assuming they have otherwise average characteristics. For this brief, statistical models adjust for demographic characteristics (e.g., age, gender), insurance type/status and health status (e.g., special health care needs). Moreover, the analyses adjust for survey weights. Please refer to the chartbook for more details.

#### FOR MORE INFORMATION

To view more information about OMAS and the findings in this policy brief, please visit the OMAS website at the Ohio Colleges of Medicine Government Resource Center <a href="www.grc.osu.edu/OMAS">www.grc.osu.edu/OMAS</a>.







