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Taking the pulse of health in Ohio

PATIENT-CENTERED MEDICAL HOME STATUS IN OHIO: FINAL REPORT

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KEY DEFINITIONS

Patient-Centered Medical Home (PCMH)

PCMH is a concept for health care delivery that refers to a model of coordinated and comprehensive primary care. Several groups have published sets of PCMH principles,[1-3] but in general, care in a PCMH is patient-centered, accessible, comprehensive, and coordinated

Care Consistent with a PCMH (CCW-PCMH)

CCW-PCMH was the construct we developed in this report to measure patient-centered medical home through the perspective of the individual user. This approach was in contrast to estimating how many people were served by a recognized or accredited PCMH facility. The CCW-PCMH measure developed for this report consisted of 7 components: 1) usual source of care, 2) usual source of care from a clinic, health center, doctor's office, or hospital outpatient department, 3) personal doctor or nurse, 4) health care visit in the past year, 5) enhanced access, 6) specialist care and coordination, and 7) provider engagement (for adults) or provider appointment reminders (for children). The enhanced access component consisted of questions asking about obtaining needed answers to medical questions during regular office hours, obtaining needed medical assistance right away, and obtaining needed medical assistance during nights, weekends, or holidays. The specialist care and coordination component consisted of questions about problems seeing a specialist and whether the patient's provider's office seemed informed about their specialist care. The provider engagement component consisted of questions concerning whether anyone in the provider's office asked about prescription medicines taken and depression. Survey respondents who reported high levels of care within each of the seven components were classified as having CCW-PCMH.

Usual Source of Care

A person's usual source of care is the place that he or she typically visits for medical care. Possible places include a doctor's office, hospital outpatient department, emergency room, health center, or clinic.

Mental Health-Related Impairment (MHI)

MHI is a general term used to describe adults who are functionally limited because of a mental or emotional problem. MHI is measured in this report as being functionally limited 14 or more days a month due to a mental or emotional problem.

Medicaid Service Region

Ohio's Medicaid managed care plans currently operate in 8 service regions: Northwest, Northeast, Northeast Central, East Central, Central, West Central, Southwest, and Southeast. These regions served as the geographic stratification variables for the 2012 Ohio Medicaid Assessment Survey. All service regions for Ohio Medicaid's managed care plans will be statewide, beginning July 1, 2013.

1. BACKGROUND OF PATIENT-CENTERED MEDICAL HOME

With increased emphasis being placed on lowering the cost of healthcare, increasing access, and improving outcomes, new models for delivery of healthcare services have been proposed. The Patient-Centered Medical Home (PCMH) is a concept that refers to a model of coordinated and comprehensive primary care. Other names for the concept are the primary care medical home model, the advanced primary care model, the health home model, or simply the medical home model. These terms are often used interchangeably in literature to refer to the same concept. Full implementation of the model and the accumulation of studies providing evidence are still in their early stages, but the PCMH model has shown the potential to improve care, reduce costs, and improve patient experience.

1.1 History and Characteristics

The medial home concept was first introduced in the 1960's by the American Academy of Pediatrics (AAP) as a central location for all medical information on a child. This original characterization of medical home is not the same medical home that we think of presently and simply focused on the central location of medical information. In 2002, the AAP released a policy statement endorsing the current medical home model for infants, children, and adolescents which they also reaffirmed in 2008. They listed seven defining characteristics of care in a PCMH as care being accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective.[1] In 2007 a joint policy statement released by the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians, and the American Osteopathic Association endorsed the medical home model for the primary care of all children, youth and adults. The principles of PCMH listed in this joint statement were personal physician, physician directed medical practice, whole person orientation, care is coordinated and/or integrated, quality and safety, enhanced access, and payment.[2] The Agency for Healthcare Research and Quality (AHRQ) lists five principles of a medical home: patient-centered, comprehensive care, coordinated care, superb access to care, and a systems-based approach.[3]

1.2 PCMH in Health Reform

The PCMH concept has become an important idea in recent health reform legislation, and many states have implemented medical home initiatives.[4] The Patient Protection Affordable Care Act (ACA) includes a 90% federal match rate for certain medical home services for all Medicaid enrolled children and Medicaid enrolled adults patients who have at least two chronic conditions, one chronic condition and at risk for another, or one serious condition and a persistent mental health condition.[5]

1.3 PCMH in Ohio

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 that seeks to create a more effective and efficient health care delivery in Ohio through the PCMH model.[6] OPCPCC includes many members and supporters across the state of Ohio including the Ohio Department of Health, the Ohio Department of Mental Health, and the Ohio Department of Job and Family Services.

Several PCMH and related health demonstration projects or initiatives are currently taking place in Ohio including the Comprehensive Primary Care Initiative Demonstration in the Cincinnati-Dayton region,[7] the State Innovation Models initiative,[8] and Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration,[9] which are each national projects under the Centers for Medicare and Medicaid Services. FQHCs under the Advanced Primary Care Practice Demonstration achieve PCMH recognition by the National Committee for Quality Assurance (NCQA).

Ohio Medicaid and the Ohio Department of Health have recently begun a project focused on creating "health homes" for individuals on Medicaid who have serious and persistent mental illness.[10] Their definition of "health homes" is based on PCMH but expands the concept further.[11] The Ohio PCMH Education Pilot Project (House Bill 198) granted funding to 50 Ohio practice sites, each affiliated with a medical school or nursing school, to support implementation of PCMH[12]. Several practices in Ohio are PCMH accredited by the Accreditation Association for Ambulatory Health Care (AAAHC).

1.4 Effectiveness of the PCMH Model

Several recent literature reviews have evaluated the evidence for medical homes.[13-20] Although authors' specific conclusions vary, one point is consistently made: the number of high quality studies evaluating comprehensive

implementations of the medical home is insufficient. Much of the research cited as evidence in support of the medical home model only examines individual components rather than the whole system, and many consider these studies as evaluations of precursors to the medical home model. As one author writes "The evidence for effectiveness of the patient-centered medical home is largely indirect and of mixed quality but overall points in a positive direction."[13]

More recently, an increased number of medical home demonstration projects that incorporate multiple components of PCMH have been implemented, providing opportunities to evaluate more complete perspectives of the medical home. However, researchers have found that many of these interventions and evaluations suffer from poor study design and lack rigor. A 2012 review commissioned by the AHRQ examined 498 studies on U.S.-based interventions published or disseminated from January 2000 through September 2010. Only 14 evaluations of 12 interventions included at least three of the five AHRQ medical home principles and evaluated either a triple-aim outcome (quality of care, cost, and patient experience) or health care professional experience.[14,17] Of these 14, only 6 included methods the authors considered rigorous for at least one outcome. They found some favorable effects for triple-aim outcomes, some unfavorable effects on cost, but mostly the findings were inconclusive due to effects that were not found to be statistically significant or were of unknown statistical significance.

Lowering the cost of healthcare, increasing access, and improving outcomes continue to be a major focus of health care policy, and the PCMH model has shown promise in these areas. Initiatives and associated research continue to be important in order to conclusively prove the effectiveness of the model and how to best implement it.

2. MEASURING PATIENT-CENTERED MEDICAL HOME

Patient-centered medical home is both a health care concept and a recognition or accreditation which healthcare providers can obtain. These two meanings of PCMH lend themselves to estimating two different populations. The first is the group of people who receive health care that is consistent with the concepts underlying the definition of PCMH. The second is the group of people who receive health care from a location that is accredited or recognized as a PCMH.

This report viewed PCMH from an individual user care perspective rather than a health system perspective. From the information in the 2012 Ohio Medicaid Assessment Survey it could not be determined whether an individual received healthcare from an accredited or recognized PCMH, but it was possible to characterize the care that each individual reported and compare it to care that should be observed under the PCMH model.

Throughout this document we will use the phrases "care consistent with a PCMH" and "care not consistent with a PCMH" to distinguish the population that we are estimating. Care consistent with a PCMH does not indicate whether or not the respondent participates in a recognized or accredited PCMH.

2.1 Indicators of PCMH in Past Health Surveys

Data from the National Survey of Children with Special Health Care Needs,[21,22] the National Survey of Children's Health,[23-27] and the Medical Expenditure Panel Survey [28,29] have been used to estimate whether or not the individuals in the population of interest have a PCMH. Developing this type of PCMH measure is particularly challenging when analyzing data from health surveys because researchers are restricted to the information available from the survey. Due to this variation across surveys, the methodology for categorizing a medical home is somewhat varied in the literature. Typically, investigators attempt to match survey questions to individual characteristics of the AAP, Joint Principles, or AHRQ definitions of a medical home, and then scale and average the responses to determine if an individual has care consistent with that characteristic. Respondents who have care consistent with all of these characteristics are considered to have a medical home.

2.2 Data Source and Study Population

The source of data for this report was the 2012 Ohio Medicaid Assessment Survey (OMAS). The 2012 OMAS is a population-based survey that measures the health insurance coverage, health status, and health care experiences of Ohio's Medicaid, Medicaid eligible, and non-Medicaid child and adult populations. A random stratified dual-frame

telephone survey design was used to collect data from samples representative of all non-institutionalized Ohio households and residents. This survey included both landline and cell phone frames. The landline sampling was based upon a list-assisted stratified random digit dial (RDD) procedure. African-Americans and households with children were oversampled and Asians and Hispanics were surname list-assisted sampled in the landline sampling. The cell phone sampling was a statewide simple random sample.

From May to October 2012, trained telephone interviewers administered the OMAS to 22,929 Ohio residents. For the landline telephone frame, households were randomly selected through a list assisted 1+block RDD method. Upon reaching the household, the interviewer selected an eligible adult age 19 years and older who had the most recent birthday to complete the adult version of the survey. For the cell phone frame, the adult who answered the phone was interviewed. When a respondent indicated that there were any children age 0-18 years in the household, the interviewer selected the child who had the most recent birthday. In the landline sample, the adult who was most knowledgeable about the selected child's health insurance coverage and health status completed the child version of OMAS on behalf of the child. For the cell phone sample, the adult respondent completed the child version. There were 5,515 respondents to the child portion of the survey. The overall response rate for the survey was 29.4%, including a 30.2% response rate for the landline sample and 24.4% for cell phone sample. A detailed description of the survey methodology can be found at www.grc.osu.edu/omas.

Six study populations were of interest in this report, which consisted of both the total and currently enrolled Medicaid populations of adults 19 through 64 years of age, children (18 years and younger), and seniors (aged 65 years and older). Through this report unless otherwise noted, Medicaid refers to the population of adults or children covered by Medicaid including those who have dual Medicaid/Medicare coverage.

2.3 General Methodology

This report is meant to provide a general picture of the status of PCMH in Ohio. Descriptive analysis is solely presented. No statistical hypothesis testing was completed.

2.4 Components of CCW-PCMH

We identified 7 components of care consistent with a PCMH for both adults and children from the survey instrument based on the collective principles of PCMH outlined by the American Academy of Pediatrics (AAP)[1], the joint principles of patient-centered medical home [2], and the Agency for Healthcare Research and Quality (AHRQ)[3]. The 7 components were measured by one or more questions from the survey instrument. When combined, the components allowed us to characterize the care of each respondent. (See Figure 2.1 for a schematic diagram of the CCW PCMH definition and Table A.1 in the appendix for the exact questions used in each component.) The 7 components in our definition were:

1. Usual source of care;
2. Usual source of care is a clinic, health center, doctor's office, or hospital outpatient department (non-E.R. usual source of care);
3. Personal doctor or nurse;
4. Health care visit in the past year;
5. Enhanced access;
6. Specialist care and coordination; and
7. Provider engagement (for adults) or provider appointment reminders (for children).

The enhanced access component consisted of questions asking about obtaining needed answers to medical questions during regular office hours, obtaining needed medical assistance right away, and obtaining needed medical assistance during nights, weekends, or holidays. The specialist care and coordination component consisted of questions about problems seeing a specialist and whether the patient's provider's office seemed informed about their specialist care. The provider engagement component consisted of questions asking about whether anyone in the provider's office asked about prescription medicines taken and depression.

2.5 Overview of Scoring Methods

Due to the skip pattern in the OMAS, not every respondent was asked every question used in the overall CCW-PCMH measure. For example, if an interviewee responded that he did not need answers to medical questions

during regular office hours, medical assistance right away, or medical assistance during nights, weekends, or holidays, then he was not asked about the how quickly he was able to get his question answered or get that medical assistance. Similarly if a respondent said that she did not need to see a specialist in the past year, then she was not asked how much of a problem it was to see a specialist. Accordingly, only respondents who needed specific types of care were scored on components 5 and 6.

After evaluating components that a respondent answered, each respondent was placed into one of four categories that characterized the type of care he or she received. These four categories were:

1. Yes, care consistent with a PCMH
2. No, care not consistent with a PCMH
3. Usual source of care, insufficient PCMH information
4. Don't know/refused

In more detail, the criteria for belonging to each of the four categories were as follows:

1. Yes, care consistent with a PCMH
   a) The respondent met the passing criteria for component 1-4 and 7.
   b) If answered, the respondent met the passing criteria for components 5 and 6.

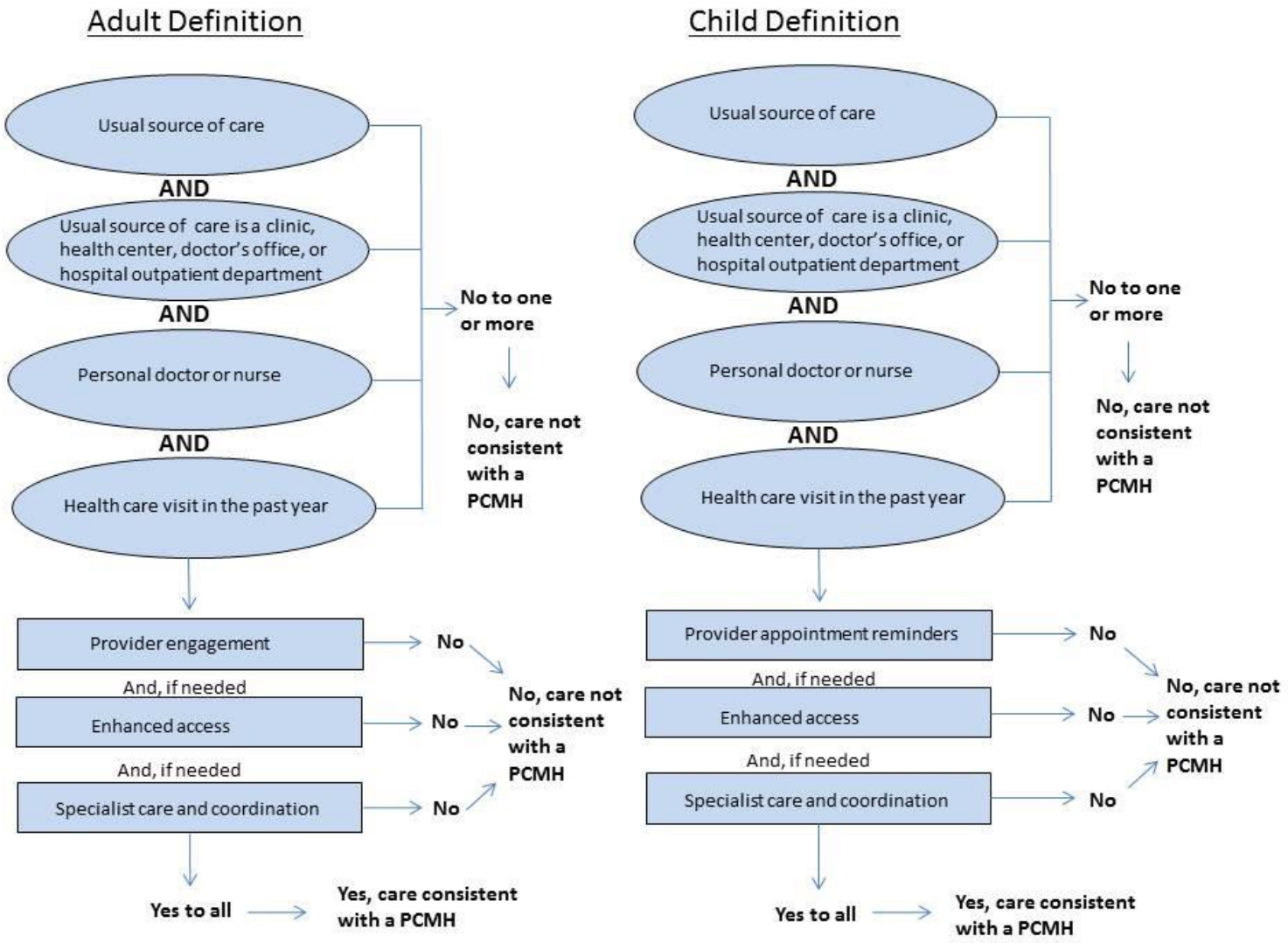
2. No, care not consistent with a PCMH
   a) The respondent failed the criteria for at least one component.

3. Usual source of care, insufficient PCMH information
   a) The respondent met the criteria for component 1.
   b) The respondent met the passing criteria for any further components answered.
   c) The respondent was either not asked (due to an incomplete interview) or did not provide sufficient information to score at least one of components 2, 3, 4, or 7.

4. Don't know/refused
   a) The respondent gave an answer of don't know or refused to the question regarding usual source of care.
   b) The respondent did not fail the criteria for component 4 or 6.

Of the 22,929 adult interviews and 5,515 child proxy interviews 227 (0.99%) and 242 (4.39%), respectively, were terminated before the question regarding usual source of care was asked, and did not fail component 4 or 6. These cases were treated as missing in our analysis and are not included in the calculation of eligible denominators.

Figure 2.1: Diagram of the CCW-PCMH measure.



2.6 Component Scoring Details

The scoring for CCW-PCMH components 1 through 4 was each based on the answer given to a single question. Scoring for components 5 through 7 was each based on answers from several questions with varying numbers of response options. For each of these components we created a standardized scoring scale which ranges from 0 to 100 to average the responses to questions with different numbers of response options into an overall component score. Don't know and refused responses were treated like missing responses and not included in the averaging process.

The passing and failing criteria for each component was as follows:

Usual source of care
Passing criteria: Responded as having a usual source of care.

Failing criteria: Responded as not having a usual source of care.

Usual source of care is a clinic, health center, doctor's office, or hospital outpatient department
Passing criteria: Responded as having usual care from a clinic, health center, doctor's office, or hospital outpatient department.

Failing criteria: Responded as having a usual care from a hospital emergency room, does not go to one place most often, a pharmacy, a friend/family member/colleague, the internet, alternative care, urgent care center, or some other place.

Personal doctor or nurse
Passing criteria: Responded as having one or more person that they thought of as a personal doctor or nurse.

Failing criteria: Responded as having no one they thought of as a personal doctor or nurse.

Health care visit in the past year
Passing criteria (adult): Responded as seeing a doctor or other health care professional about his or her own health in the past year.

Passing criteria (child): Responded as seeing a doctor or other health care professional about the child's health in the past year OR had a well-child checkup in the past year.

Failing criteria (adult): Responded as last seeing a doctor or other health care professional about his or her own health more than a year ago or never.

Failing criteria (child): Responded as last seeing a doctor or other health care professional about the child's health more than a year ago or never AND did not have a well-child checkup in the past year.

Enhanced access
This component consisted of scores from up to 3 possible questions for adults and up to 2 possible questions for children. Responses from answered questions were scaled to scores between 0 and 100. For example if the response options were never, sometimes, usually, and always, then those responses were scaled to 0, 33, 66, and 100 respectively. The scaled scores were then averaged to create a component score.

Passing criteria: A component score of a 66 or higher.

Failing criteria: A component score below 66.

Specialist care and coordination
This component consisted of scores from up to 2 possible questions for adults and 1 possible question for children. Responses from answered questions were scaled to scores between 0 and 100. The scaled scores were then averaged to create a component score. The possible responses to the question "How much of a problem, if any, was it for you to see a specialist?" were a big problem, a small problem, and no problem. These responses were scaled to 0, 66, and 100, respectively. We assigned a score of 66 to the response of "a small problem" because otherwise due to our

passing threshold, this response would cause children and some adults to fail the component and thus the overall CCW-PCMH measure. Our view was that "a small problem" seeing a specialist by itself should not be cause enough to fail the component.

Passing criteria: A component score of a 66 or higher.

Failing criteria: A component score below 66.

Provider engagement (for adults)
This component consisted of scores from 2 yes/no questions. Responses from answered questions were scaled to scores of 100 and 0 respectively. The scaled scores were then averaged to create a component score.

Passing criteria: A component score of a 66 or higher. (The passing score here was effectively 100 due to the number of questions and response options.)

Failing criteria: A component score below 66.

Provider appointment reminders (for children)
This component consisted of a single yes/no question.

Passing criteria: A response of "Yes".

Failing criteria: A response of "No".

3. OVERALL AND COMPONENT PREVALENCE OF PCMH

In this section we describe the prevalence of care consistent with a PCMH among adults 19-64 years and children, both overall and among the Medicaid population. We also consider the percent of adults and children passing the individual CCW-PCMH components, which collectively make up our PCMH measure, in order to help understand why adults and children failed to have care consistent with a PCMH.

Key Findings:

- 18.2% of Ohio adults 19-64 years received care consistent with a PCMH, and 19.9% of adults 19-64 years covered by Medicaid received care consistent with a PCMH;
- The percentage of children receiving care consistent with a PCMH was 36.9% overall and 33.0% among those covered by Medicaid;
- 67.7% of all adults ages 19-64 and 62.1% in the Medicaid population had a non-E.R. usual source of care and a personal doctor or nurse;
- 84.3% of children overall and 79.1% in the Medicaid population had a non-E.R. usual source of care and a personal doctor or nurse;
- Among adults 19-64 years with a personal doctor or nurse only 36.9% met the passing criteria for the provider engagement component; and
- Among children with a personal doctor or nurse who needed enhanced access, 62.6% met the passing criteria for the enhanced access component. Among children with a personal doctor or nurse, 68.0% met the passing criteria for the provider appointment reminder component.

3.1 Care Consistent with a PCMH

An estimated 1,276,667 Ohio adults 19-64 years received care consistent with a PCMH, which constituted 18.2% of the population, and 19.9% of the adult Medicaid population ages 19-64 years received CCW-PCMH (Table 3.1). Among children 18 and younger, an estimated 36.9% received care consistent with a PCMH, and an estimated 33.0% of children covered by Medicaid received care consistent with a PCMH (Table 3.2). In both the adult and child populations determination of CCW-PCMH care could not be made in a small percent of respondents (less than 4%). More information on why these respondents were kept separate can be found in Section 2.

Table 3.1: The prevalence of receiving CCW-PCMH among all and Medicaid covered Ohio adults ages 19-64 years.

All adults 19-64 years	%*	90% CI	Count	90% CI
Yes, care consistent with a PCMH	18.2	(17.6 - 18.9)	1,276,667	(1,228,534 - 1,324,801)
No, care not consistent with a PCMH	78.2	(77.5 - 78.9)	5,479,731	(5,396,106 - 5,563,356)
Usual source of care, insufficient PCMH information	3.0	(2.6 - 3.3)	207,317	(185,319 - 229,316)
Medicaid adults 19-64 years				
Yes, care consistent with a PCMH	19.9	(18.1 - 21.8)	191,927	(172,348 - 211,506)
No, care not consistent with a PCMH	75.4	(73.4 - 77.4)	726,894	(688,024 - 765,763)
Usual source of care, insufficient PCMH information	3.8	(3.0 - 4.7)	36,858	(28,347 - 45,369)

**This column does not add up to 100% because the results for don't know and refused are not presented.*

Table 3.2: The prevalence of receiving CCW-PCMH among all and Medicaid covered Ohio children ages 0-18 years.

All children	%*	90% CI	Count	90% CI
Yes, care consistent with a PCMH	36.9	(35.6 - 38.3)	1,016,870	(976,769 - 1,056,971)
No, care not consistent with a PCMH	59.6	(58.2 - 61.0)	1,641,864	(1,597,406 - 1,686,323)
Usual source of care, insufficient PCMH information	2.2	(1.7 - 2.6)	59,542	(47,629 - 71,454)
Medicaid children				
Yes, care consistent with a PCMH	33.0	(30.8 - 35.3)	373,446	(343,831 - 403,061)
No, care not consistent with a PCMH	63.1	(60.8 - 65.4)	712,974	(674,330 - 751,618)
Usual source of care, insufficient PCMH information	2.4	(1.6 - 3.1)	26,734	(18,172 - 35,295)

**This column does not add up to 100% because the results for don't know and refused are not presented.*

3.2 CCW-PCMH Components

Tables 3.3 and 3.4 detail the percentage of adults 19-64 years and children who passed each individual CCW-PCMH component. Taking the first three components together, only 67.7% of all adults 19-64 years had a usual source of care, a non-E.R. usual source of care, and a personal doctor or nurse. This percentage was 62.1% in the Medicaid population. Among adults with a personal doctor or nurse, few passed the provider engagement component (36.9% overall, 50.8% Medicaid). Among adults 19-64 years with a personal doctor or nurse who needed enhanced access, 71.8% overall and 62.1% of adults covered by Medicaid met the component passing criteria for enhanced access. A similar pattern was found in children: among children who had a personal doctor or nurse and needed enhanced access, 62.6% overall and 56.9% of children covered by Medicaid met the enhanced access component. Also greatly impacting the overall CCW-PCMH measure in children was the provider appointment reminders component. Only 68.0% of all children with a personal doctor or nurse and 70.7% of those covered by Medicaid passed this component. A higher percentage of children than adults had a non-E.R. usual source of care and a personal doctor or nurse (84.3% overall, 79.1% Medicaid). Table A.2 in the appendix provides a more detailed breakdown of CCW-PCMH components and individual questions.

Table 3.3: Percent of all and Medicaid covered Ohio adults ages 19-64 years meeting each of the seven CCW-PCMH components.

Adult CCW-PCMH component	All adults 19-64 years	Medicaid adults 19-64 years
Health care visit in the past year [a]	85.5	91.6
Specialist care/coordination [b]	78.6	72.7
Usual source of care [a]	90.2	92.0
Non-E.R. usual source of care [c]	89.9	82.1
Personal doctor or nurse [d]	85.7	84.0
Enhanced access [e]	71.8	62.1
Provider engagement [f]	36.9	50.8

a. *Among all* ***b.*** *Among those who needed specialist care* ***c.*** *Among those with a usual source of care* ***d.*** *Among those with a non-E.R. usual source of care* ***e.*** *Among those with a personal doctor or nurse and who needed enhanced access* ***f.*** *Among those with a personal doctor or nurse*

Table 3.4: Percent of all and Medicaid covered Ohio children meeting each of the seven CCW-PCMH components.

Child CCW-PCMH component	All children	Medicaid children
Health care visit in the past year [a]	95.6	96.6
Specialist care/coordination [b]	93.0	90.3
Usual source of care [a]	97.2	97.2
Non-E.R. usual source of care [c]	95.9	94.2
Personal doctor or nurse [d]	90.4	86.3
Enhanced access [e]	62.6	56.9
Provider appointment reminders [f]	68.0	70.7

a. *Among all* ***b.*** *Among those who needed specialist care* ***c.*** *Among those with a usual source of cared* ***d.*** *Among those with a non-E.R. usual source of care* ***e.*** *Among those with a personal doctor or nurse and who needed enhanced access* ***f.*** *Among those with a personal doctor or nurse*

4. DEMOGRAPHIC AND SOCIOECONOMIC ANALYSIS

In this section we detail the prevalence of care consistent with a PCMH among various demographic and socioeconomic groups, and we attempt to identify the specific CCW-PCMH components that are the cause of any variation across groups.

Key Findings:

- The prevalence of CCW-PCMH for adults 19-64 years in both the overall and the Medicaid population depended on age, race/ethnicity, income, insurance status, insurance type, and education;
- CCW-PCMH was much more common among insured adults 19-64 years (20.7%) and children (37.8%), than for uninsured adults (6.5%) and children (18.3%);
- Variation in the percent of adults and children receiving CCW-PCMH was primarily due to the proportion of the people in the group having a non-E.R. usual source of care and a personal doctor or nurse; and
- Among adults 19-64 years, the estimated percent receiving CCW-PCMH increased with age, income, and education.

In Table 3.1 and 3.2 we presented all three possible response categories for the care consistent with a PCMH outcome variable. In the following tables we only present the positive response option for the sake of brevity and clarity. The response category "Usual source of care, insufficient PCMH information" does not change greatly over different subpopulations.

4.1 Insurance

The estimated prevalence of care consistent with a PCMH was much higher for both insured adults 19-64 years (20.7%) and children (37.8%) than it is for uninsured adults (6.5%) and children (18.3%) (Table 4.1). These differences were the largest that we observed across all demographic variables. These results were not unexpected as adults and children with insurance were much more likely than the uninsured to have a usual source of care and a personal doctor or nurse, which are the basic elements of CCW-PCMH.

Table 4.1: The prevalence of having CCW-PCMH among adults 19-64 years and children by insurance status.

Adults 19-64 years	%	90% CI	Count	90% CI
Insured	20.7	(19.9 - 21.4)	1,198,110	(1,151,527 - 1,244,692)
Uninsured	6.5	(5.4 - 7.5)	78,558	(65,196 - 91,919)
Children				
Insured	37.8	(36.4 - 39.2)	994,000	(954,152 - 1,033,848)
Uninsured	18.3	(13.4 - 23.2)	22,870	(16,093 - 29,647)

We saw some variation in the prevalence of having care consistent with a patient-centered medical home by insurance type. Among insured adults 19-64 years, those with directly purchased insurance (14.8%) had the lowest estimated prevalence of CCW-PCMH, whereas adults with Medicare without Medicaid (26.4%), and dual coverage (26.7%) both had a higher estimated prevalence (Table 4.2). The prevalence among adults 19-64 years with job-based coverage was 21.3%.

Adults 19-64 years with dual Medicaid/Medicare coverage had a higher estimated prevalence of CCW-PCMH (26.7%) than those covered by Medicaid, not Medicare (18.1%) (Table 4.3). An estimated 22.1% of adults 19-64 years in the Aged, Blind, Disabled (ABD) program, and 17.5% of adults covered through Healthy Families or Healthy Start programs received care consistent with a PCMH. See Section A.4 in the appendix for details on how we defined the ABD and Healthy Families or Healthy Start groups from survey responses.

Table 4.2: The prevalence of having CCW-PCMH among adults 19-64 years by insurance type.

	%	90% CI	Count	90% CI
Medicaid, not Medicare	18.1	(16.1 - 20.2)	138,639	(121,410 - 155,867)
Dual Medicaid and Medicare	26.7	(22.6 - 30.8)	53,289	(43,865 - 62,712)
Medicare, not Medicare	26.4	(22.9 - 29.9)	70,921	(59,997 - 81,845)
Job-based	21.3	(20.4 - 22.3)	813,107	(774,264 - 851,950)
Directly purchased	14.8	(12.1 - 17.6)	54,256	(43,376 - 65,135)
Uninsured	6.5	(5.4 - 7.5)	78,558	(65,196 - 91,919)

Table 4.3: The prevalence of having CCW-PCMH among adults 19-64 years by Medicaid program.

	%	90% CI	Count	90% CI
All Medicaid	19.9	(18.1 - 21.8)	191,927	(172,348 - 211,506)
Dual Medicaid and Medicare	26.7	(22.6 - 30.8)	53,289	(43,865 - 62,712)
Medicaid, not Medicare	18.1	(16.1 - 20.2)	138,639	(121,410 - 155,867)
Healthy Families/Healthy Start programs	17.5	(14.9 - 20.1)	85,965	(71,894 - 100,035)
Aged Blind Disabled program	22.1	(17.5 - 26.6)	33,430	(25,565 - 41,294)

An estimated 43.1% of children covered by job-based insurance coverage received CCW-PCMH, and 33.0% and 35.4% of children covered by Medicaid or Medicare and directly purchased insurance received CCW-PCMH (Table 4.4). A higher percentage of children covered by job-based coverage had responses indicating a non-E.R. usual source of care, a personal doctor or nurse, and enhanced access than children with other types of insurance coverage.

Table 4.4: The prevalence of having CCW-PCMH among children by insurance type.

	%	90% CI	Count	90% CI
Medicaid or Medicare	33.0	(30.8 - 35.2)	378,266	(348,584 - 407,947)
Job-Based Coverage	43.1	(41.2 - 45.0)	565,097	(535,244 - 594,950)
Directly Purchased	35.4	(28.1 - 42.6)	30,063	(22,275 - 37,851)
Uninsured	18.3	(13.4 - 23.2)	22,870	(16,093 - 29,647)

4.2 Age, Gender, and Race/Ethnicity

The prevalence of CCW-PCMH in both the overall and the Medicaid population varied by age, race/ethnicity, and gender. For adults, the estimated prevalence of CCW-PCMH consistently increased from the 19-24 years age group to the 55-64 years age group (Table 4.5). Among children we saw a decreasing trend of the estimated prevalence of CCW-PCMH from the less than 1 year age group to the 13-18 years age group (Table 4.6). These patterns held for both the overall and Medicaid populations.

Among adults the change in CCW-PCMH prevalence across age groups was driven by increases in the proportion of adults reporting a non-E.R. usual source of care, a personal doctor or nurse, and a doctor's visit in the past year with age. A higher percentage of younger children had responses indicating getting care reminders, enhanced access, and seeing a doctor in the past year than older children, which lead to higher estimated CCW-PCMH prevalence among the younger age groups.

Table 4.5: The prevalence of CCW-PCMH among adults by age group and Medicaid status.

All adults	%	90% CI	Count	90% CI
19-24 years	13.5	(11.4 - 15.6)	125,300	(104,716 - 145,883)
25-34 years	14.8	(13.2 - 16.3)	207,756	(184,218 - 231,295)
35-44 years	17.7	(16.2 - 19.1)	261,138	(237,567 - 284,709)
45-54 years	20.2	(18.9 - 21.5)	351,212	(326,201 - 376,222)
55-64 years	22.8	(21.6 - 24.0)	331,262	(311,884 - 350,639)
Medicaid adults				
19-24 years	15.0	(10.4 - 19.6)	25,247	(16,859 - 33,635)
25-34 years	18.3	(14.6 - 22.1)	51,184	(39,678 - 62,690)
35-44 years	18.5	(14.7 - 22.3)	37,359	(29,014 - 45,705)
45-54 years	24.4	(20.3 - 28.5)	46,880	(37,690 - 56,069)
55-64 years	25.5	(21.5 - 29.6)	31,257	(25,650 - 36,864)

Table 4.6: The prevalence of CCW-PCMH among children by age group and Medicaid status

All children	%	90% CI	Count	90% CI
Less than 1 year	41.9	(35.3 - 48.5)	55,865	(44,718 - 67,011)
1 to 5 years	44.0	(41.1 - 47.0)	303,867	(278,228 - 329,507)
6 to 12 years	35.8	(33.6 - 38.1)	362,267	(334,820 - 389,715)
13 to 18 years	32.0	(30.0 - 34.1)	294,871	(273,004 - 316,737)
Medicaid children				
Less than 1 year	38.2	(28.4 - 48.0)	25,657	(17,430 - 33,884)
1 to 5 years	37.1	(32.8 - 41.4)	126,403	(108,177 - 144,630)
6 to 12 years	31.2	(27.6 - 34.9)	128,970	(110,658 - 147,282)
13 to 18 years	29.8	(26.0 - 33.7)	92,416	(78,492 - 106,339)

Females in the adult population reported a higher estimated prevalence of care consistent with a PCMH than males (22.2% versus 14.1% for all adults 19-64 years and 22.0% versus 15.7% for Medicaid adults 19-64 years, Table 4.7). The likelihood of receiving CCW-PCMH was similar for male children (37.0%) and female children (36.8%) (Table 4.8). A higher percentage of adult females reported seeing a doctor in the past year and provider engagement compared to adult males.

Table 4.7: The prevalence of CCW-PCMH among adults 19-64 years by gender and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
Male	14.1	(13.2 - 15.0)	486,946	(454,650 - 519,241)
Female	22.2	(21.2 - 23.2)	789,722	(752,231 - 827,213)
Medicaid adults 19-64 years				
Male	15.7	(12.6 - 18.8)	49,793	(39,179 - 60,407)
Female	22.0	(19.7 - 24.3)	142,134	(125,606 - 158,662)

Table 4.8: The prevalence of CCW-PCMH among children by gender and Medicaid status.

All children	%	90% CI	Count	90% CI
Male	37.0	(35.2 - 38.9)	522,063	(491,064 - 553,062)
Female	36.8	(34.8 - 38.7)	494,807	(464,234 - 525,380)
Medicaid children				
Male	34.5	(31.4 - 37.7)	198,244	(176,021 - 220,467)
Female	31.5	(28.4 - 34.6)	175,202	(154,719 - 195,686)

When stratified by race/ethnicity, whites had the highest estimated prevalence in both the adult 19-64 years and child populations (19.4% and 38.2%, respectively). Tables 4.9 and 4.10 present the prevalence of having CCW-PCMH by race/ethnicity for adults and children, both overall and for those covered by Medicaid. For adults 19-64 years there were substantial gaps in the estimated prevalence of CCW-PCMH between African-Americans (15.0%), Hispanics (10.2%) and Asians (5.6%). This disparity was not present among children, where African-American, Hispanic, and Asian children had similar prevalence of CCW-PCMH at 32.9%, 31.9%, and 34.3%, respectively.

Among adults, the variation in the prevalence of care consistent with a PCMH by race/ethnicity was mostly explained by lower proportions of non-white adults reporting a non-E.R. usual source of care and a personal doctor or nurse. A smaller percentage of non-white children than white children had a non-E.R usual source of care and a personal doctor or nurse.

Table 4.9: The prevalence of CCW-PCMH among adults 19-64 years by race/ethnicity and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
White	19.4	(18.6 - 20.2)	1,117,949	(1,071,695 - 1,164,204)
Black/African-American	15.0	(13.5 - 16.6)	125,224	(111,939 - 138,508)
Hispanic	10.2	(7.5 - 12.9)	19,965	(14,530 - 25,400)
Asian	5.6	(3.4 - 7.9)	11,341	(6,727 - 15,955)
Other	14.7	(11.3 - 18.1)	2,188	(1,646 - 2,731)
Medicaid adults 19-64 years				
White	22.0	(19.6 - 24.4)	152,171	(133,960 - 170,382)
Black/African-American	16.4	(13.4 - 19.5)	36,415	(29,287 - 43,543)
Hispanic	8.3	(3.5 - 13.1)	2,733	(1,130 - 4,336)
Asian*	-	-	-	-
Other*	-	-	-	-

**The sample size was too small for accurate estimation.*

Table 4.10: The prevalence of CCW-PCMH among children by race/ethnicity and Medicaid status.

Overall	%	90% CI	Count	90% CI
White	38.2	(36.7 - 39.8)	786,580	(750,257 - 822,903)
Black/African-American	32.9	(29.5 - 36.3)	136,688	(120,151 - 153,225)
Hispanic	31.9	(27.1 - 36.7)	43,433	(35,518 - 51,349)
Asian	34.3	(26.9 - 41.6)	44,804	(33,233 - 56,375)
Other	38.5	(30.5 - 46.5)	5,365	(4,004 - 6,725)
Medicaid				
White	33.6	(30.7 - 36.5)	240,622	(215,917 - 265,328)
Black/African-American	31.0	(26.8 - 35.2)	89,766	(75,451 - 104,082)
Hispanic	31.6	(25.0 - 38.3)	26,995	(20,144 - 33,845)
Asian	40.4	(23.5 - 57.3)	12,478	(5,661 - 19,295)
Other	41.8	(30.5 - 53.1)	3,585	(2,392 - 4,779)

4.3 Income, Education, and Employment

The estimated prevalence of care consistent with a PCMH increased with income and educational attainment. For adults and children in the overall population we saw a strong positive association between 2011 annual family income as a percent of the federal poverty level and estimated CCW-PCMH prevalence. Among adults 19-64 years, the estimated prevalence ranged from 14.5% among those whose income was less than 63% of the FPL to 22.1% among those whose income was 401% or more of the FPL (Table 4.11).

Among adults 19-64 years covered by Medicaid the estimated prevalence of CCW-PCMH was 24.6% among those with income between 63% and 100% of the FPL. This estimated prevalence was considerably higher than among

other income levels in the Medicaid population (Table 4.11). This increase in CCW-PCMH prevalence in the Medicaid population among those with income between 63% and 100% of the FPL appears to be responsible for the relatively higher prevalence in the overall adult 19-64 years population among those with income between 63% and 100% of the FPL (Table 4.11). Among adults 19-64 years with income between 63% and 100% of the FPL, the estimated prevalence of CCW-PCMH was only 12.6% for those without Medicaid coverage compared to 24.6% among those with Medicaid coverage.

The estimated prevalence of CCW-PCMH ranged from 31.8% among children whose family's income was less than 63% of the FPL to 44.1% among children whose family's income was 401% or more of the FPL (Table 4.12).

The positive correlation between prevalence of CCW-PCMH and income was likely attributable in part to the fact that the proportion of people with a non-E.R. usual source of care and a personal doctor or nurse increased with income. Adults at higher income levels more frequently reported enhanced access, specialist care and coordination, and provider engagement. A higher percentage of children at higher income levels had responses indicating a non-E.R. usual source of care, a personal doctor or nurse, and enhanced access than children at lower income levels.

Table 4.11: The prevalence of CCW-PCMH among adults 19-64 years by income as a percentage of the Federal Poverty Level (FPL) and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
Less than 63% FPL	14.5	(12.8 - 16.2)	149,251	(130,735 - 167,767)
63%-100% FPL	17.4	(15.2 - 19.5)	112,046	(96,894 - 127,198)
101%-138% FPL	13.8	(11.7 - 15.8)	82,658	(69,512 - 95,804)
139%-150% FPL	16.1	(11.3 - 20.8)	20,595	(13,957 - 27,232)
151%-200% FPL	17.0	(14.7 - 19.4)	96,490	(81,819 - 111,162)
201%-250% FPL	18.6	(16.2 - 20.9)	108,975	(93,833 - 124,116)
251%-300% FPL	18.8	(16.2 - 21.4)	92,544	(78,561 - 106,526)
301%-400% FPL	17.5	(15.7 - 19.3)	147,082	(130,606 - 163,559)
401% FPL or more	22.1	(20.8 - 23.3)	467,027	(438,064 - 495,989)
Medicaid adults 19-64 years				
Less than 63% FPL	18.8	(16.0 - 21.6)	80,115	(67,007 - 93,223)
63%-100% FPL	24.6	(20.8 - 28.4)	62,988	(51,833 - 74,144)
101%-200% FPL	18.6	(14.7 - 22.4)	35,491	(27,499 - 43,484)
201% FPL or more	14.9	(9.5 - 20.4)	13,332	(8,097 - 18,567)

Table 4.12: The prevalence of CCW-PCMH among children by income as a percentage of the Federal Poverty Level (FPL) and Medicaid status.

All children	%	90% CI	Count	90% CI
Less than 63% FPL	31.8	(28.4 - 35.2)	152,719	(133,310 - 172,127)
63%-100% FPL	31.0	(26.9 - 35.0)	97,242	(82,137 - 112,348)
101%-138% FPL	32.0	(27.6 - 36.3)	84,928	(70,864 - 98,991)
139%-150% FPL	35.7	(26.0 - 45.3)	19,355	(12,731 - 25,979)
151%-200% FPL	34.8	(30.6 - 39.0)	91,393	(77,698 - 105,087)
201%-250% FPL	36.1	(31.6 - 40.6)	82,867	(70,205 - 95,529)
251%-300% FPL	37.2	(32.1 - 42.2)	66,306	(54,770 - 77,841)
301%-400% FPL	42.3	(38.5 - 46.2)	131,019	(115,429 - 146,609)
401% FPL or more	44.1	(41.4 - 46.8)	291,041	(268,321 - 313,761)
Medicaid children				
Less than 63% FPL	32.1	(28.3 - 35.9)	128,764	(110,470 - 147,057)
63%-100% FPL	32.2	(27.7 - 36.8)	85,692	(71,365 - 100,019)
101%-138% FPL	38.1	(32.1 - 44.0)	64,063	(51,422 - 76,703)
139%-200% FPL	31.4	(25.3 - 37.5)	42,487	(32,495 – 52,478)
201% FPL or more	32.8	(26.9 – 38.7)	52,442	(40,878 – 64,005)

Similar to income, educational attainment was highly correlated with the estimated prevalence of CCW-PCMH. Adults 19-64 years with an advanced degree had an estimated prevalence of CCW-PCMH of 22.6%, compared to 14.4% among adults without a high school diploma (Table 4.13).

Table 4.13 The prevalence of CCW-PCMH among adults 19-64 years by educational attainment and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
Up to high school but no diploma	14.4	(12.3 - 16.4)	109,119	(92,214 - 126,024)
High school graduate or equivalent	15.6	(14.5 - 16.7)	370,489	(342,616 - 398,361)
Some college	18.2	(16.6 - 19.9)	228,843	(206,390 - 251,297)
Associate degree	20.9	(18.9 - 22.9)	190,159	(170,380 - 209,938)
4 year college graduate	21.9	(20.2 - 23.5)	225,088	(206,434 - 243,741)
Advanced degree	22.6	(20.6 - 24.6)	152,970	(137,653 - 168,287)
Medicaid adults 19-64 years				
Up to high school but no diploma	19.5	(15.6 - 23.4)	53,343	(41,499 - 65,187)
High school graduate or equivalent	19.1	(16.3 - 21.8)	71,843	(60,457 - 83,230)
Some college	20.7	(16.5 - 24.9)	38,562	(29,945 - 47,179)
Associate degree	19.9	(14.3 - 25.6)	17,971	(12,301 - 23,642)
4 year college graduate or advanced degree	27.3	(19.5 - 35.1)	10,207	(6,803 - 13,611)

Table 4.14 presents the prevalence of having care consistent with a PCMH by the adult's employment status. Among adults 19-64 years who worked full-time (at least 35 hours), 17.4% received CCW-PCMH, compared to 18.4% among those working part-time (less than 35 hours), and 19.4% among those not currently working.

Table 4.14: The prevalence of CCW-PCMH among adults 19-64 years by employment status and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
Working full-time (at least 35 hours)	17.4	(16.5 - 18.4)	607,146	(572,367 - 641,925)
Working part-time (less than 35 hours)	18.4	(16.6 - 20.2)	199,177	(178,131 - 220,223)
Not currently working	19.4	(18.3 - 20.5)	466,808	(438,040 - 495,575)
Medicaid adults 19-64 years				
Working full-time (at least 35 hours)	14.9	(10.1 - 19.8)	17,906	(11,680 - 24,132)
Working part-time (less than 35 hours)	17.0	(12.5 - 21.5)	28,334	(20,108 - 36,560)
Not currently working	21.7	(19.4 - 23.9)	145,570	(128,846 - 162,294)

4.4 Family Composition

The estimated prevalence of care consistent with a PCMH for adults varied modestly by the number of adults in the family. Among adults 19-64 years who were the only adult in their family an estimated 15.7% received CCW-PCMH, compared to 19.5% among those with 2 adults in the family (Table 4.15). A smaller percentage of adults who were the only adult in their family reported a non-E.R. usual source of care than adults with more adults in the family.

Table 4.15: The prevalence of CCW-PCMH among adults 19-64 years by the number of adults in the family and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
1 adult	15.7	(14.5 - 16.8)	284,744	(262,268 - 307,221)
2 adults	19.5	(18.5 - 20.4)	677,801	(643,275 - 712,326)
3 or more adults	18.4	(16.9 - 19.9)	314,122	(285,993 - 342,252)
Medicaid adults 19-64 years				
1 adult	18.7	(16.2 - 21.2)	79,104	(67,526 - 90,683)
2 adults	21.7	(18.5 - 24.9)	75,803	(63,262 - 88,343)
3 or more adults	19.4	(14.8 - 24.0)	37,020	(27,219 - 46,821)

Table 4.16 shows the prevalence of CCW-PCMH among adults 19-64 years by the number of children in the family. Prevalence of CCW-PCMH did not vary greatly due to the number of children in the family.

Table 4.16: The prevalence of CCW-PCMH among adults 19-64 years by the number of children in the family and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
None	17.7	(16.8 - 18.5)	660,183	(626,580 - 693,786)
1 child	19.0	(17.4 - 20.7)	254,660	(230,615 - 278,704)
2 children	18.3	(16.6 - 20.0)	209,297	(188,106 - 230,489)
3 or more children	19.4	(17.3 - 21.6)	152,427	(133,852 - 171,003)
Medicaid adults 19-64 years				
None	20.4	(17.7 - 23.1)	77,590	(66,259 - 88,921)
1 child	21.7	(17.5 - 26.0)	48,481	(37,862 - 59,100)
2 children	17.0	(12.9 - 21.1)	31,657	(23,321 - 39,993)
3 or more children	19.7	(15.1 - 24.3)	34,199	(25,409 - 42,989)

5. SUBPOPULATIONS OF SPECIAL INTEREST

In this section we describe the prevalence of care consistent with a PCMH among several subpopulations of interest that typically have greater health risk and health care needs than the general population. These include seniors, adults with mental health-related impairments, adults with physical health risks, women pregnant in the past 12 months, adults and children with disabilities, and adults and children with special health care needs.

Key Findings:

- 19.8% of seniors overall and 17.5% covered by Medicaid received care consistent with a PCMH;
- Seniors with health risk factors received CCW-PCMH more often than seniors overall;
- 19.4% of adults 19-64 years with mental health-related impairments (MHI) received CCW-PCMH overall, which includes 23.9% of adults with MHI in the Medicaid population;
- Adults 19-64 years with health risk factors were more likely to receive care consistent with a PCMH than the overall population;
- CCW-PCMH was more common among adults 19-64 years with disabilities and special health care needs than those without disabilities or special health care needs; and
- A similar percentage of children with disabilities and special health care needs received CCW-PCMH than children without disabilities or special health care needs.

5.1 Seniors

Overall 19.8% of seniors (ages 65 years and above) received care consistent with a PCMH, and 17.5% of seniors covered by Medicaid received care consistent with PCMH (Table 5.1). A higher percentage of seniors reported a usual source of care, a non-E.R. usual source of care, a personal doctor or nurse, having a health visit in the past year, and enhanced access than adults 19-64 years.

Table 5.1: The prevalence of CCW-PCMH among all and Medicaid covered seniors.

	%	90% CI	Count	90% CI
All seniors	19.8	(18.8 - 20.7)	320,756	(303,722 - 337,790)
Medicaid seniors	17.5	(14.7 - 20.3)	21,348	(17,664 - 25,031)

Compared to 19.8% of seniors overall, an estimated 21.9%, 22.0%, 23.5%, 22.0%, and 23.3% of seniors with cancer, diabetes, obesity, hypertension, and a heart condition received care consistent with a PCMH (Table 5.2). A heart condition included a heart attack, coronary heart disease, or congestive heart failure.

Table 5.2: The prevalence of CCW-PCMH by health risk factor and Medicaid status among seniors.

Risk factor	All seniors %	90% CI	Medicaid %	90% CI
Overall	19.8	(18.8 - 20.7)	17.5	(14.7 - 20.3)
Cancer	21.9	(20.0 - 23.9)	19.0	(13.0 - 25.0)
Diabetes	22.0	(20.0 - 24.0)	18.9	(14.0 - 23.8)
Obesity	23.5	(21.6 - 25.3)	23.2	(17.8 - 28.6)
Hypertension	22.0	(20.7 - 23.2)	20.4	(16.9 - 23.9)
Heart condition	23.3	(21.2 - 25.4)	21.7	(16.5 - 26.9)

The estimated percentage of seniors with care consistent with a PCMH was 24.3% in suburban counties, compared to 17.2% in Appalachian counties, 19.3% in Metropolitan counties and 18.7% in Rural Non-Appalachian counties (Table 8.3).

Table 5.3: The prevalence of CCW-PCMH among seniors by county type and Medicaid status.

All Seniors	%	90% CI	Count	90% CI
Appalachian	17.2	(15.3 - 19.1)	42,465	(37,415 - 47,514)
Metropolitan	19.3	(18.0 - 20.6)	168,947	(156,578 - 181,316)
Rural non-Appalachian	18.7	(16.0 - 21.3)	40,726	(34,260 - 47,192)
Suburban	24.3	(21.6 - 27.0)	68,619	(60,096 - 77,142)
Medicaid Seniors				
Appalachian	17.4	(11.8 - 23.1)	3,789	(2,476 - 5,103)
Metropolitan	17.6	(14.0 - 21.3)	13,395	(10,425 - 16,365)
Rural non-Appalachian	11.7	(4.2 - 19.1)	1,409	(459 - 2,358)
Suburban	22.5	(12.0 - 33.0)	2,754	(1,297 - 4,211)

5.2 Adults with Mental Health-Related Impairments (MHI)

Ohio Medicaid and the Ohio Department of Health have begun a project focused on creating "health homes" for individuals covered by Medicaid who have serious and persistent mental illness.[10] The agencies' definition of "health homes" is based on the PCMH model but expands the concept further.[11] The first phase of their project began in October 2012 and serviced approximately 14,000 individuals.[30] OMAS interviews were completed within the first few days of October 2012 meaning that this project should would not contribute to the CCW-PCMH prevalence in the 2012 OMAS data.

An estimated 510,267 (7.3%) adults 19-64 years reported having MHI as measured by 14 or more days of functional impairment due to a mental health condition or emotional problem. This included 161,351 (18.7%) adults in the Medicaid population. An estimated 19.4% of adults with MHI received care consistent with a PCMH, which included 23.9% in the Medicaid population (Table 5.4).

Table 5.4: The prevalence of CCW-PCMH among adults 19-64 years by MHI and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
With MHI	19.4	(16.9 - 21.9)	98,965	(84,879 - 113,051)
Without MHI	18.1	(17.4 – 18.8)	5,479,731	(5,396,106 – 5,563,356)
Medicaid adults 19-64 years				
With MHI	23.9	(19.4 - 28.3)	43,034	(33,953 - 52,115)
Without MHI	19.0	(12.3 – 21.0)	148,893	(131,485 – 166,301)

5.3 Adults with Physical Health Risks

A greater percentage of adults 19-64 years with health risk factors received care consistent with a PCMH than the overall population. Overall an estimated 18.2% of Ohio adults 19-64 years received care consistent with a PCMH, compared to 25.6%, 27.3%, 21.8%, 22.8%, and 28.6% of adults with cancer, diabetes, obesity, hypertension, and a heart condition, respectively (Table 5.5). A heart condition included a heart attack, coronary heart disease, or congestive heart failure. For each of the five health risks listed, a higher percentage of adults with the health risk reported a usual source of care, a personal doctor or nurse, a health care visit in the past year, and provider engagement than adults without the health risk.

Table 5.5: The prevalence of CCW-PCMH among adults 19-64 years by health risk factor and Medicaid status.

Risk Factor	All %	90% CI	Medicaid %	90% CI
All Adults	18.2	(17.6 - 18.9)	19.9	(18.1 - 21.8)
Cancer	25.6	(23.1 - 28.1)	30.2	(23.8 - 36.6)
Diabetes	27.3	(25.1 - 29.4)	25.3	(20.8 - 29.8)
Obesity	21.8	(20.6 - 23.1)	25.8	(22.6 - 28.9)
Hypertension	22.8	(21.6 - 24.0)	25.0	(21.9 - 28.0)
Heart Condition	28.6	(25.8 - 31.4)	28.9	(23.7 - 34.1)

5.4 Women of Child Bearing Age and Women Pregnant in the Past 12 Months

An estimated 20.3% of women of child bearing age (ages 19-44 years) received CCW-PCMH, and an estimated 26.0% of all women pregnant in the past 12 months received CCW-PCMH (Table 5.6).

Table 5.6: The prevalence of CCW-PCMH among all and Medicaid covered women of child bearing age and women pregnant in the past 12 months.

Women of child bearing age	%	90% CI	Count	90% CI
All	20.3	(18.9 - 21.7)	392,203	(361,562 - 422,843)
Covered by Medicaid	19.1	(16.4 - 21.9)	90,107	(75,811 - 104,403)
Women pregnant in the past 12 months				
All	26.0	(21.7 - 30.4)	65,921	(53,241 - 78,602)
Covered by Medicaid	20.1	(13.8 - 26.4)	21,023	(13,662 - 28,384)

5.5 Adults with Disabilities and Special Health Care Needs

The estimated prevalence of CCW-PCMH was higher among adults 19-64 years with disabilities (21.9%) and with special health care needs (23.6%), then for those without disabilities (17.4%) and without special health care needs (17.1%) (Table 5.7).

Disability was approximated by the respondent indicating needed long-term day-to-day assistance, needed special therapies, a potential disabling mental health condition, needed assistance for adults with special health care needs that are in fair or poor health, or involvement in certain disability benefit programs. Special health care needs was approximated by the respondent indicating needing special therapies, a mental health condition, or difficulties with day to day activities expecting to last more than 12 months.

Table 5.7: The prevalence of CCW-PCMH among all and Medicaid covered adults ages 19-64 with disabilities and special health care needs.

Adults 19-64 years	All %	90% CI	Medicaid %	90% CI
With disabilities	21.9	(20.3 - 23.5)	23.3	(20.6 - 26.0)
Without disabilities	17.4	(16.6 - 18.1)	17.0	(14.5 - 19.5)
With special health care needs	23.6	(21.9 25.3)	25.6	(22.5 - 28.8)
Without special health care needs	17.1	(16.4 - 17.8)	16.1	(13.9 - 18.3)

5.6 Children with Disabilities and Special Health Care Needs

Among children with disabilities, 34.7% received CCW-PCMH overall, including 31.7% among those covered by Medicaid. 36.8% of children with special health care needs received CCW-PCMH, including 33.2% among those covered by Medicaid (Table 5.8).

Disability in children was approximated by responses indicating need for atypical care or services, activity limitations, need for special therapies long term, a potential disabling mental health or developmental condition, or involvement in certain disability benefit programs. Special health care needs was approximated by the responses indicating that the child had a condition expected to last more than 12 months that caused the child to take medication, required more than usual amount of medical care, to have limited abilities, to need special therapy, or to need treatment or counseling.

Table 5.8: The prevalence of CCW-PCMH among all and Medicaid covered children with disabilities and special health care needs.

Children	All %	90% CI	Medicaid %	90% CI
With disabilities	34.7	(31.6 - 37.8)	31.7	(27.7 - 35.8)
Without disabilities	37.4	(36.0 - 38.9)	33.5	(30.9 - 36.2)
With special health care needs	36.8	(34.1 - 39.5)	33.2	(29.5 - 36.9)
Without special health care needs	36.9	(35.4 – 38.5)	33.0	(30.2 – 35.7)

6. PLACE OF USUAL SOURCE OF CARE

In this section we describe the place where adults and children received their usual source of care, at what places they are receiving care consistent with a PCMH, and consider the health risks of the adults that use each place of care.

Key Findings

- The most common usual source of care for both children and adults was a doctor's office followed by a clinic or health center;
- The estimated prevalence of care consistent with a PCMH was highest for those who use a doctor's office as their usual source of care compared with other usual sources of care;
- Adults and children using a doctor's office as their usual source of care had responses showing a higher percentage of all CCW-PCMH components, except the provider engagement component for adults and the provider appointment reminder component for children; and
- Hospital outpatient departments served as the usual source of care for adults with greater health risks.

6.1 Usual Source of Care Among Adults

An estimated 628,730 (9.0%) Ohio adults 19-64 years were without a usual source of health care (Table 6.1). The most common reasons given for not having a usual source of care were that the person seldom or never got sick (42%) and didn't have insurance (20%). A slightly smaller percent of adults 19-64 years covered by Medicaid did not have a usual source of care (7.0%, Table 6.2).

Table 6.1: Place of usual source of care among adults 19-64 years.

Place of usual source of care	%*	90% CI	Count	90% CI
Clinic or health center	15.5	(14.8 - 16.1)	1,084,850	(1,037,165 - 1,132,535)
Doctor's office	61.5	(60.6 - 62.3)	4,311,023	(4,234,528 - 4,387,518)
Hospital emergency room	6.1	(5.7 - 6.6)	428,971	(396,087 - 461,855)
Hospital outpatient department	4.1	(3.7 - 4.4)	285,694	(260,804 - 310,585)
Some other place	1.6	(1.4 - 1.8)	111,845	(94,920 - 128,770)
No usual source of care	9.0	(8.4 - 9.5)	628,730	(588,734 - 668,725)

**This column does not add to 100% because don't know and refused categories are not shown, but were included in the eligible denominator.*

Of adult Ohioans 19-64 years with a usual source of care, an estimated 428,971 identified their source of care as an emergency room (Table 6.1). This constituted a significant percentage (6.1%) of adults ages 19-64 using an E.R. as their usual source of care. The most common source of usual care was a doctor's office (61.5%), followed by a clinic or health center (15.5%). Among the adult Medicaid population, 46.3% of these adults used a doctor's office, 22.1% used a clinic or health center, and 13.4% used a hospital emergency room as their usual source of care (Table 6.2).

Table 6.2: Place of usual source of care among all Medicaid covered adults 19-64 years.

Place of usual source of care	%*	90% CI	Count	90% CI
Clinic or health center	22.1	(20.1 - 24.0)	212,834	(192,034 - 233,634)
Doctor's office	46.3	(43.9 - 48.7)	446,174	(416,140 - 476,209)
Hospital emergency room	13.4	(11.7 - 15.1)	129,355	(111,875 - 146,835)
Hospital outpatient department	7.1	(5.9 - 8.3)	68,113	(56,136 - 80,090)
Some other place	1.4	(0.8 - 2.1)	13,921	(7,797 - 20,045)
No usual source of care	7.0	(5.7 - 8.2)	67,377	(54,680 - 80,075)

**This column does not add to 100% because don't know and refused categories are not shown, but were included in the eligible denominator.*

6.2 Usual Source of Care among Children

An estimated 35,329 (1.3%) children in Ohio were without a usual source of care (Table 6.3). The most common reasons for not having a usual source of care for children were that the child seldom or never got sick, no insurance, and the previous doctor/source was no longer available. A majority of children (76.8%) utilized a doctor's office, although 14.3% used a clinic or health center as their usual source of care. A reported 2.1% of children utilized a hospital emergency room as their usual source of care (Table 6.4). Among children covered by Medicaid, 65.4% of children used a doctor's office, 22.4% used a clinic or health center, and 3.2% used a hospital emergency room as their usual source of care.

Table 6.3: Place of usual source of care among children.

Place of usual source of care	%*	90% CI	Count	90% CI
Clinic or health center	14.3	(13.3 - 15.2)	392,642	(364,845 - 420,440)
Doctor's office	76.8	(75.6 - 78.0)	2,113,653	(2,069,830 - 2,157,476)
Hospital emergency room	2.1	(1.7 - 2.6)	59,013	(47,493 - 70,532)
Hospital outpatient department	2.7	(2.2 - 3.1)	74,088	(61,539 - 86,636)
Some other place	1.6	(1.3 - 2.0)	44,483	(34,836 - 54,131)
No usual source of care	1.3	(1.0 - 1.6)	35,329	(27,624 - 43,033)

**This column does not add up to 100% because the results for don't know and refused are not presented.*

Table 6.4: Place of usual source of care among children covered by Medicaid.

Place of usual source of care	%*	90% CI	Count	90% CI
Clinic or health center	22.4	(20.5 - 24.3)	252,544	(228,723 - 276,366)
Doctor's office	65.4	(63.2 - 67.6)	737,702	(697,909 - 777,495)
Hospital emergency room	3.2	(2.4 - 4.0)	36,221	(26,870 - 45,572)
Hospital outpatient department	4.3	(3.3 - 5.2)	48,143	(37,346 - 58,941)
Some other place	2.1	(1.4 - 2.7)	23,127	(15,382 - 30,871)
No usual source of care	1.2	(0.7 - 1.6)	13,322	(8,046 - 18,597)

**This column does not add up to 100% because the results for don't know and refused are not presented.*

6.3 Care Consistent with a PCMH by Usual Source of Care

Table 6.5 shows that among adults 19-64 years who received care consistent with a PCMH, 79.8% went to a doctor's office, 15.2% went to a clinic or health center, and 5.0% went to a hospital outpatient department as their usual place of care. In the population of adults 19-64 years who were covered by Medicaid and received care consistent with a PCMH, 66.8% used a doctor's office, 26.3% a clinic or health center, and 6.9% a hospital outpatient as their usual source of care.

Among children who received care consistent with a PCMH, 84.8%, 12.6%, and 2.6% utilized a doctor's office, clinic or health center, and hospital outpatient department as their usual source of care, respectively (Table 6.6). These percentages changed to 73.4%, 21.8%, and 4.8% for a doctor's office, clinic or health center, and hospital outpatient department among children covered by Medicaid.

Table 6.5: Place of usual source of care among adults 19-64 years with CCW-PCMH.

All adults 19-64 years	%	90% CI	Count	90% CI
Clinic or health center	15.2	(13.7 - 16.6)	193,545	(173,238 - 213,851)
Doctor's office	79.8	(78.2 - 81.5)	1,019,397	(976,133 - 1,062,661)
Hospital outpatient department	5.0	(4.1 - 5.9)	63,726	(52,510 - 74,941)
Medicaid adults 19-64 years				
Clinic or health center	26.3	(21.9 - 30.8)	50,583	(40,667 - 60,498)
Doctor's office	66.8	(62.0 - 71.5)	128,148	(111,811 - 144,486)
Hospital outpatient department	6.9	(4.5 - 9.2)	13,196	(8,611 - 17,781)

Table 6.6: Place of usual source of care among children with CCW-PCMH.

All children	%	90% CI	Count	90% CI
Clinic or health center	12.6	(11.0 - 14.1)	127,765	(110,895 - 144,636)
Doctor's office	84.8	(83.1 - 86.5)	862,494	(824,920 - 900,067)
Hospital outpatient department	2.6	(1.9 - 3.3)	26,611	(19,427 - 33,795)
Medicaid children				
Clinic or health center	21.8	(18.4 - 25.2)	81,336	(67,195 - 95,476)
Doctor's office	73.4	(69.8 - 77.0)	274,047	(248,261 - 299,833)
Hospital outpatient department	4.8	(3.2 - 6.5)	18,064	(11,656 - 24,472)

Both overall and among the Medicaid population the estimated prevalence of CCW-PCMH was higher for patients who used a doctor's office as their usual source of care than other usual sources of care. Among adults 19-64 years who used a clinic or health center as their usual source of care, 17.8% received care consistent with a PCMH (Table

6.7). The prevalence of CCW-PCMH was 23.6% and 22.3% among those adults 19-64 years who utilized a doctor's office and hospital outpatient department as their usual source of care. A greater percentage of adults who utilized a doctor's office as their usual source of care reported all CCW-PCMH components, except for the provider engagement, than adults who utilized a clinic or health center or hospital outpatient department.

Table 6.7: The prevalence of CCW-PCMH among all and Medicaid covered adults 19-64 years by usual source of care.

Usual source of care	% All	90% CI	% Medicaid	90% CI
Clinic or health center	17.8	(16.1 - 19.6)	23.8	(19.6 - 27.9)
Doctor's office	23.6	(22.7 - 24.6)	28.7	(25.6 - 31.8)
Hospital outpatient department	22.3	(18.8 - 25.8)	19.4	(13.1 - 25.7)

The prevalence of CCW-PCMH among children was 32.5% among those who utilized a clinic or health center, 40.8% among those who utilized a doctor's office, and 35.9% among those who utilized a hospital outpatient department as their usual source of care (Table 6.8). Among children covered by Medicaid, these percentages were similar with 32.2%, 37.1%, and 37.5% of children receiving CCW-PCMH among clinics or health centers, doctor's offices, and hospital outpatient departments, respectively. Children with doctor's offices as their usual source of care had responses more often indicating all CCW-PCMH components, except provider appointment reminders, than children with other usual sources of care.

Table 6.8: The prevalence of CCW-PCMH among all and Medicaid covered children by usual source of care.

Usual source of care	% All	90% CI	% Medicaid	90% CI
Clinic or health center	32.5	(29.0 - 36.1)	32.2	(27.6 - 36.8)
Doctor's office	40.8	(39.3 - 42.4)	37.1	(34.3 - 40.0)
Hospital outpatient department	35.9	(27.9 - 44.0)	37.5	(26.7 - 48.3)

Even though hospital outpatient departments may be part of the greater network of a PCMH, they are not typically used as the usual source of care in the PCMH model. Re-classifying those who used a hospital outpatient department as their usual source of care as not having CCW-PCMH decreases the prevalence among adults 19-64 years from 18.2% to 17.3% [90% CI (16.7%, 18.0%)]. Among adults 19-64 years covered by Medicaid, this changes the prevalence of CCW-PCMH from 19.9% to 18.5% [90% CI (16.7%, 20.4%)]. For children this changes the prevalence of care consistent with a PCMH from 36.9% to 36.0% [90% CI (34.6%, 37.3%)] in the overall population and from 33% to 31.4% [90% CI (29.2%, 33.6%)] in the Medicaid population.

Even though outpatient departments may not be a focus of the PCMH model, the prevalence of CCW-PCMH was equal or higher among those who used a hospital outpatient department as their usual source of care compared to those using a clinic or health center (Tables 6.7 and 6.8), suggesting that the relatively small percentage of children and adults who use a hospital outpatient department as their usual source of care (Tables 6.5 and 6.6) received similar levels of care as others. However, hospital outpatient departments are not likely to be best-suited for an increased share of the population.

6.4 Health Risk Profile by Usual Source of Care

Adults 19-64 years who used the hospital outpatient department as their usual source of care had greater health risks than adults with other usual sources of care. Table 6.9 shows the percent of adults 19-64 years who reported cancer, diabetes, hypertension, and a heart condition by usual source of care. A heart condition included a heart attack, coronary heart disease, or congestive heart failure.

Table 6.9: The percent of Ohio and Medicaid covered adults 19-64 years who reported certain health conditions by usual source of care.

All adults 19-64 years	% Cancer	% Diabetes	% Obesity	% Hypertension	% Heart condition
Clinic or health center	7.9	12.6	32.9	33.2	8.1
Doctor's office	7.7	11.1	34.3	31.2	6.1
Hospital E.R.	7.5	11.7	34.1	33.9	10.6
Hospital outpatient department	9.5	14.8	31.1	38.9	14.2
Medicaid adults 19-64 years					
Clinic or health center	9.3	16.0	42.5	44.6	14.8
Doctor's office	8.3	19.5	45.0	40.0	12.4
Hospital E.R.	7.7	15.4	35.3	37.1	11.2
Hospital outpatient department	15.4	19.9	34.7	43.8	20.1

7. GEOGRAPHIC ANALYSIS

In this section we investigate the prevalence of care consistent with a PCMH, usual source of care, and personal doctor or nurse amongst adults and children by county type and geographic region. These regions were defined by the eight Medicaid managed care service regions. These regions were the active managed care regions during the fielding period of the 2012 OMAS.

Key Findings:

- Among adults and children, the estimated prevalence of CCW-PCMH was highest among Suburban counties.
- The percent of adults and children with care consistent with a PCMH, a usual source of care, and a personal doctor or nurse did not vary greatly across geographic region; and
- Geographic association between the percent of adults or children with CCW-PCMH in a region and the number of PCMH recognized or accredited locations in that region was weak, suggesting that there were not enough recognized or accredited PCMH providers per region to make a significant difference in CCW-PCMH prevalence.

7.1 County Type

Among adults 19-64 years, an estimated 16.6% of Appalachian county residents received CCW-PCMH (Table 7.1). Similarly an estimated 17.7%, 19.0%, and 20.9% of adults 19-64 years in metropolitan, rural non-Appalachian, and suburban counties received CCW-PCMH. Among adults 19-64 years covered by Medicaid the estimated prevalence of CCW-PCMH in Appalachian, metropolitan, and suburban counties was 21.3%, 18.7%, and 19.5% respectively (Table 7.1). The estimated prevalence of CCW-PCMH care among the adult Medicaid rural non-Appalachian county population was 24.5%.

The estimated prevalence of CCW-PCMH among children in suburban, metropolitan, Appalachian, and rural non-Appalachian counties was 40.5%, 37.3%, 34.8%, and 33.5%, respectively (Table 7.2). The prevalence of CCW among children covered by Medicaid was almost constant across county types (Table 7.2).

Table 7.1: The prevalence of CCW-PCMH among adults 19-64 years by county type and Medicaid status.

All adults 19-64 years	%	90% CI	Count	90% CI
Appalachian	16.6	(15.2 - 18.1)	184,721	(167,387 - 202,054)
Metropolitan	17.7	(16.8 - 18.6)	680,028	(644,095 - 715,961)
Rural non-Appalachian	19.0	(17.1 - 20.8)	174,062	(155,781 - 192,343)
Suburban	20.9	(19.1 - 22.8)	237,857	(214,927 - 260,787)
Medicaid adults 19-64 years				
Appalachian	21.3	(17.4 - 25.1)	40,116	(32,077 - 48,155)
Metropolitan	18.7	(16.3 - 21.1)	104,918	(90,208 - 119,628)
Rural non-Appalachian	24.5	(18.6 - 30.5)	25,994	(18,850 - 33,138)
Suburban	19.5	(13.3 - 25.6)	20,899	(13,522 - 28,276)

Table 7.2: The prevalence of CCW-PCMH among children by county type and Medicaid status.

All children	%	90% CI	Count	90% CI
Appalachian	34.8	(31.6 - 37.9)	146,055	(130,950 - 161,160)
Metropolitan	37.3	(35.4 - 39.1)	549,351	(517,969 - 580,733)
Rural non-Appalachian	33.5	(30.1 - 37.0)	131,184	(115,492 - 146,876)
Suburban	40.5	(37.0 - 43.9)	190,280	(170,340 - 210,221)
Medicaid children				
Appalachian	33.4	(28.7 - 38.0)	73,609	(61,318 - 85,901)
Metropolitan	33.3	(30.3 - 36.3)	211,555	(188,745 - 234,366)
Rural non-Appalachian	30.0	(23.7 - 36.3)	42,758	(32,253 - 53,262)
Suburban	34.4	(27.4 - 41.4)	45,524	(34,346 - 56,702)

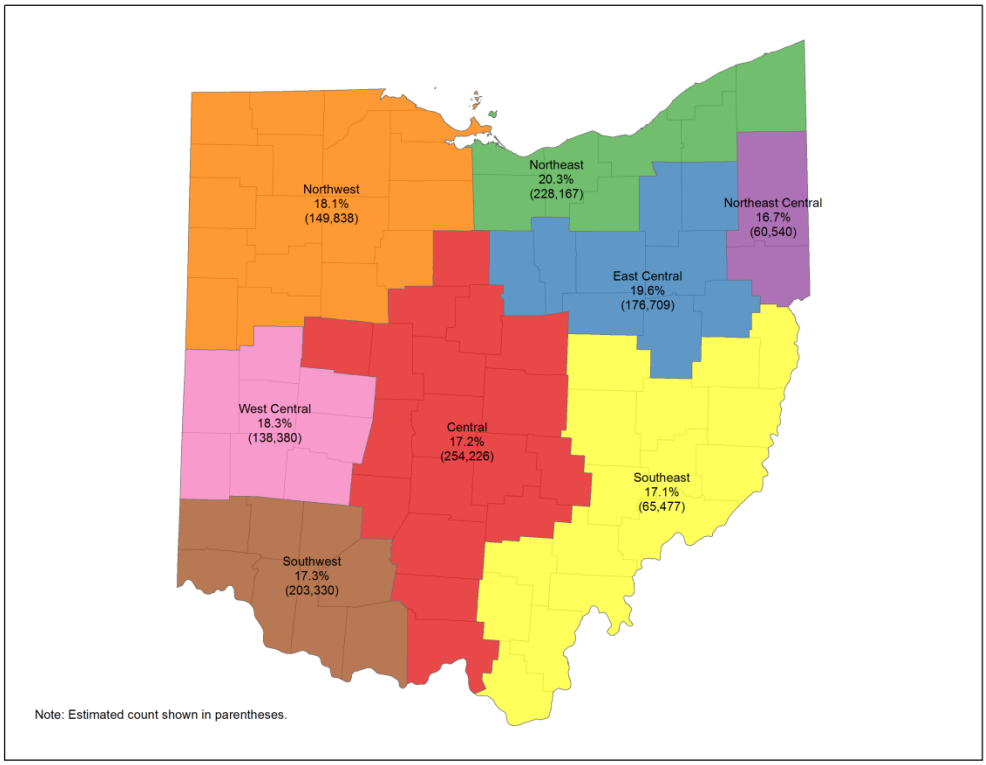
7.2 Care Consistent with PCMH by Geographic Region

Care consistent with PCMH did not vary greatly across geographic regions. The estimated prevalence of CCW-PCMH among adults 19-64 years ranged from 20.3% in the Northeast region to 16.7% in the Northeast Central region (Table 7.3, Figure 7.1). Among adults 19-64 years covered by Medicaid, the estimated prevalence of CCW-PCMH ranged from 15.1% in the Southwest to 24.2% in the West Central region (Table 7.3). Please note that the precision of these estimates, especially among the Medicaid population, was low.

Table 7.3: The prevalence of CCW-PCMH among adults 19-64 years by Medicaid service region and Medicaid coverage status.

All adults 19-64 years	%	90% CI	Count	90% CI
Northwest	18.1	(16.2 - 20.1)	149,838	(132,855 - 166,822)
Northeast	20.3	(18.5 - 22.1)	228,167	(206,642 - 249,691)
Northeast Central	16.7	(14.4 - 19.0)	60,540	(51,752 - 69,329)
East Central	19.6	(17.8 - 21.4)	176,709	(158,795 - 194,623)
Central	17.2	(15.7 - 18.7)	254,226	(230,297 - 278,155)
West Central	18.3	(16.3 - 20.2)	138,380	(122,219 - 154,541)
Southwest	17.3	(15.7 - 18.9)	203,330	(183,313 - 223,347)
Southeast	17.1	(14.6 - 19.6)	654,77	(55,176 - 75,778)
Medicaid adults 19-64 years				
Northwest	17.9	(12.7 - 23.1)	18,632	(12,770 - 24,493)
Northeast	19.8	(15.4 - 24.3)	32,645	(24,635 - 40,655)
Northeast Central	19.1	(12.7 - 25.5)	10,784	(6,848 - 14,719)
East Central	22.4	(17.0 - 27.8)	27,699	(20,148 - 35,250)
Central	19.2	(14.6 - 23.8)	34,783	(25,557 - 44,010)
West Central	24.2	(17.7 - 30.6)	24,558	(17,015 - 32,100)
Southwest	15.1	(11.2 - 19.0)	25,160	(18,232 - 32,088)
Southeast	26.9	(20.3 - 33.5)	17,666	(12,515 - 22,817)

Figure 7.1: The estimated prevalence of CCW-PCMH among adults 19-64 years by Medicaid service region.

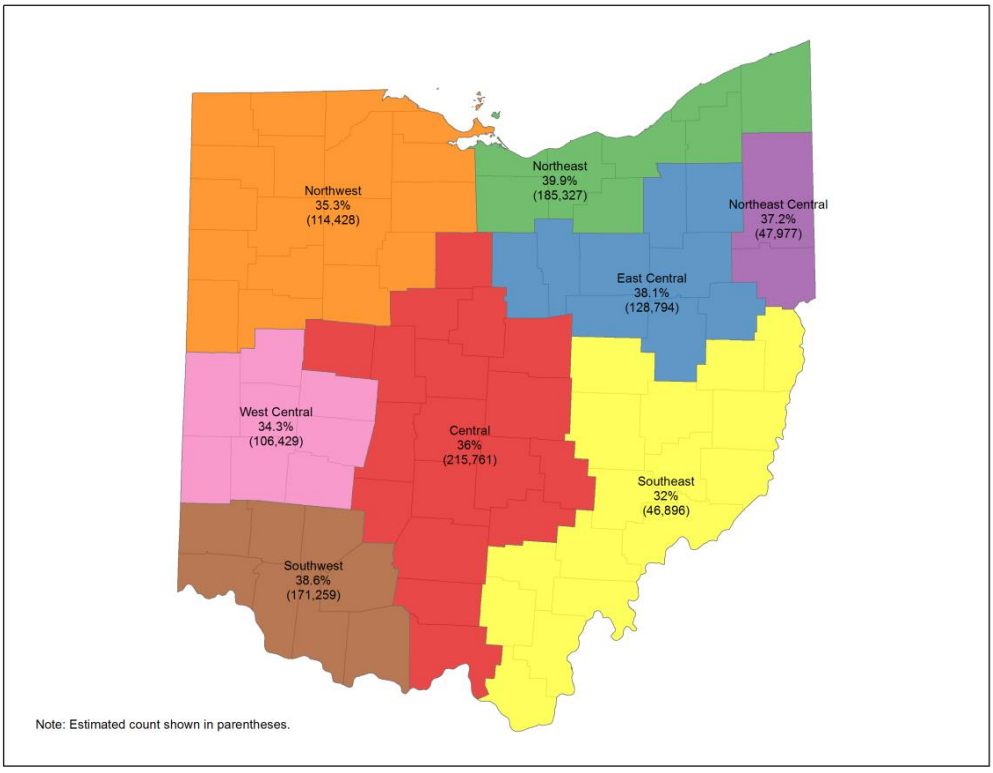


Among children the estimated prevalence of CCW-PCMH across regions ranged from 32% in the Southeast to 39.9% in the Northeast (Table 7.4, Figure 7.2). Care consistent with PCMH among the Medicaid child population ranged from an estimated 27.2% in the Southeast to 39.3% in the Northeast Central (Table 7.4). Please note that the precision of these estimates, especially among the Medicaid population, was low.

Table 7.4: The prevalence of CCW-PCMH among children by Medicaid service region and Medicaid coverage status.

All children	%	90% CI	Count	90% CI
Northwest	35.3	(31.5 39.1)	114,428	(100,241 128,616)
Northeast	39.9	(36.4 43.5)	185,327	(165,346 205,307)
Northeast Central	37.2	(32.1 42.4)	47,977	(39,904 56,050)
East Central	38.1	(34.4 41.8)	128,794	(113,670 143,919)
Central	36.0	(32.9 39.1)	215,761	(194,447 237,075)
West Central	34.3	(30.5 38.1)	106,429	(92,675 120,182)
Southwest	38.6	(35.2 41.9)	171,259	(153,445 189,073)
Southeast	32.0	(27.4 36.6)	46,896	(39,592 54,200)
Medicaid children				
Northwest	32.7	(26.2 39.3)	41,124	(31,187 51,061)
Northeast	32.9	(27.0 38.7)	57,886	(45,559 70,212)
Northeast Central	39.3	(31.1 47.4)	26,803	(19,661 33,945)
East Central	36.4	(30.1 42.7)	52,219	(40,898 63,539)
Central	28.3	(23.3 33.3)	66,359	(52,876 79,842)
West Central	32.5	(26.0 38.9)	43,689	(33,184 54,195)
Southwest	38.0	(31.9 44.1)	62,822	(50,076 75,568)
Southeast	27.2	(20.9 33.4)	22,545	(16,905 28,184)

Figure 7.2: The estimated prevalence of CCW-PCMH among children by Medicaid service region.



7.3 PCMH Recognized and Accredited Locations across Ohio

There was little association between the prevalence of CCW-PCMH in a region and the number of PCMH recognized or accredited practices in that region (Figures 7.3 and 7.4). For more information on the types of PCMH practices see Section 1.3. The majority of the PCMH recognized or accredited locations were located in the Cincinnati, Columbus, and Cleveland areas, but for example the Central region had a similar CCW-PCMH prevalence among adults 19-64 years as the Southeast region where there were almost no PCMH recognized or accredited practices (Figure 7.3).

The geographic regions here were quite large, and it is possible that a different association might be seen if looking at smaller areal units such as counties; however, this was not advisable using the 2012 OMAS because of small sample sizes in many counties. The weak association between the prevalence of CCW-PCMH and the number of PCMH recognized or accredited practices in that region could have been a result of the relatively few PCMH recognized or accredited providers compared to the population. The low precision of CCW-PCMH estimates by region in the OMAS may have also been a factor.

Figure 7.3: The estimated prevalence of CCW-PCMH among adults 19-64 years by Medicaid service region and PCMH recognized or accredited locations.

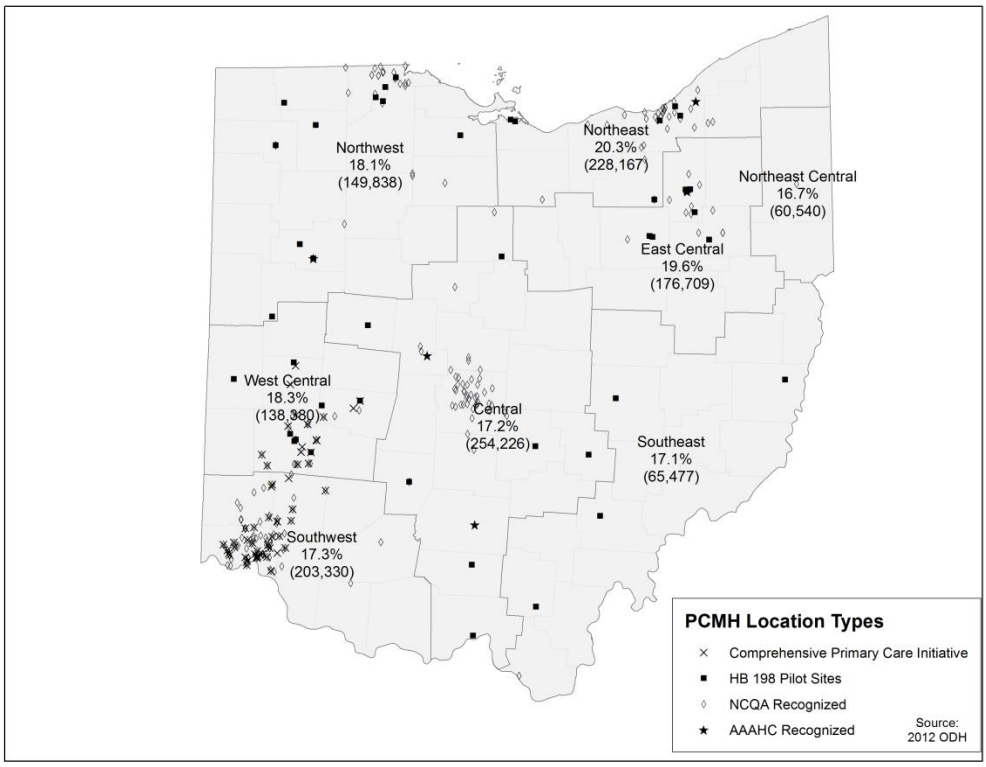
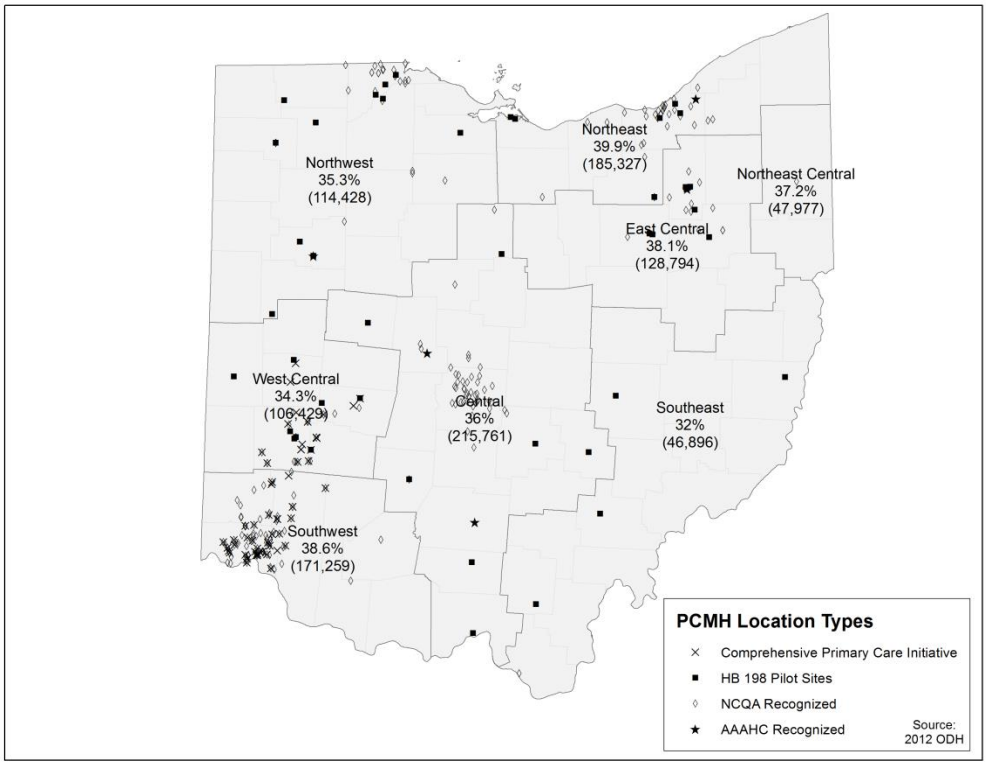


Figure 7.4: The estimated prevalence of CCW-PCMH among children by Medicaid service region and PCMH recognized or accredited locations.



7.4 Usual Source of Care

The percent of adults and children with a usual source of care did not vary meaningfully across geographic regions (Table 7.5, Table 7.6). Among adults 19-64 years the estimated prevalence ranged from 88.9% in the Southwest to 92.6% in the Northwest (Table 7.5). Among children we observed an even smaller range in the estimated prevalence of usual source of care (95.8% in the Northwest to 98.1% in the West Central, Table 7.6).

Table 7.5: The prevalence of having a usual source of care among adults 19-64 years by Medicaid service region and Medicaid coverage status.

All adults 19-64 years	%	90% CI	Count	90% CI
Northwest	92.6	(91.3 - 94.0)	764,778	(727,635 - 801,921)
Northeast	90.8	(89.4 - 92.2)	1,019,594	(976,255 - 1,062,934)
Northeast Central	89.8	(87.5 - 92.1)	325,309	(303,518 - 347,101)
East Central	90.4	(88.8 - 91.9)	815,333	(778,223 - 852,442)
Central	89.2	(87.8 - 90.6)	1,319,306	(1,267,879 - 1,370,734)
West Central	90.7	(89.0 - 92.3)	687,022	(652,074 - 721,970)
Southwest	88.9	(87.3 - 90.5)	1,044,169	(999,639 - 1,088,699)
Southeast	90.5	(88.4 - 92.5)	346,592	(324,541 - 368,642)
Medicaid adults 19-64 years				
Northwest	94.9	(91.4 - 98.3)	98,632	(84,322 - 112,943)
Northeast	93.6	(90.8 - 96.4)	153,959	(135,589 - 172,330)
Northeast Central	90.8	(85.1 - 96.6)	51,270	(42,084 - 60,456)
East Central	95.2	(92.7 - 97.7)	117,762	(102,335 - 133,188)
Central	88.8	(84.9 - 92.7)	161,083	(141,663 - 180,504)
West Central	91.8	(87.5 - 96.0)	93,326	(79,237 - 107,414)
Southwest	88.5	(84.5 - 92.5)	147,211	(128,962 - 165,459)
Southeast	95.8	(92.7 - 98.8)	62,956	(53,763 - 72,150)

Table 7.6: The prevalence of having a usual source of care among adults 19-64 years by Medicaid service region and Medicaid coverage status.

All children	%	90% CI	Count	90% CI
Northwest	95.8	(94.1 - 97.4)	310,334	(290,240 - 330,427)
Northeast	97.5	(96.6 - 98.5)	452,573	(426,656 - 478,490)
Northeast Central	97.6	(96.0 - 99.2)	125,667	(114,075 - 137,259)
East Central	95.9	(94.2 - 97.6)	324,212	(303,285 - 345,139)
Central	97.4	(96.4 - 98.3)	583,201	(552,928 - 613,474)
West Central	98.1	(97.2 - 99.1)	304,197	(283,595 - 324,799)
Southwest	98.0	(97.1 - 98.8)	435,151	(409,979 - 460,323)
Southeast	97.2	(95.7 - 98.8)	142,381	(130,458 - 154,303)
Medicaid children				
Northwest	93.6	(90.2 - 97.0)	117,583	(101,783 - 133,383)
Northeast	98.1	(96.5 - 99.7)	172,645	(152,795 - 192,496)
Northeast Central	96.7	(93.9 - 99.4)	65,990	(55,285 - 76,695)
East Central	96.5	(93.8 - 99.1)	138,367	(120,848 - 155,885)
Central	97.2	(95.5 - 99.0)	228,076	(204,100 - 252,052)
West Central	99.1	(97.9 – 100.0)	133,294	(116,098 - 150,490)
Southwest	97.4	(95.5 - 99.3)	160,912	(141,618 - 180,206)
Southeast	98.5	(97.0 - 99.9)	81,745	(70,456 - 93,034)

7.5 Personal Doctor or Nurse

Across geographic regions there was more variation in the estimated percent of adults 19-64 years with a usual source of care and a personal doctor or nurse than there was for a usual source of care. The estimated prevalence of having a usual source of care and a personal doctor or nurse ranged from 63.1% in the Southwest to 71.6% in the Northwest (Table 7.7, Figure 7.5). Among adults covered by Medicaid the estimated prevalence of having a usual source of care and a personal doctor or nurse Southwest region was only 49%, which was quite low compared to the remaining regions (Table 7.7). Among children, the prevalence of having a usual source of care and a personal doctor or nurse was relatively constant (Table 7.8, Figure 7.6).

Table 7.7: The prevalence of having a usual source of care and a personal doctor or nurse among adults 19-64 years by Medicaid service region and Medicaid coverage status.

All adults 19-64 years	%	90% CI	Count	90% CI
Northwest	71.6	(69.2 - 73.9)	590,950	(558,499 - 623,400)
Northeast	67.3	(65.1 - 69.5)	755,380	(718,450 - 792,311)
Northeast Central	68.4	(65.1 - 71.7)	247,930	(229,375 - 266,485)
East Central	70.7	(68.5 - 73.0)	638,440	(605,690 - 671,189)
Central	67.6	(65.6 - 69.6)	1,000,172	(955,193 - 1,045,151)
West Central	68.7	(66.2 - 71.2)	520,575	(490,623 - 550,527)
Southwest	63.1	(60.9 - 65.4)	741,137	(704,381 - 777,893)
Southeast	64.3	(61.1 - 67.6)	246,463	(228,459 - 264,467)
Medicaid adults 19-64 years				
Northwest	65.4	(58.6 - 72.2)	68,042	(56,010 - 80,074)
Northeast	65.6	(59.9 - 71.4)	107,940	(93,058 - 122,822)
Northeast Central	62.4	(53.7 - 71.1)	35,231	(27,809 - 42,653)
East Central	67.5	(61.4 - 73.5)	83,429	(70,521 - 96,337)
Central	59.0	(53.2 - 64.8)	106,966	(91,618 - 122,313)
West Central	68.6	(61.7 - 75.5)	69,739	(57,528 - 81,950)
Southwest	49.0	(43.1 - 54.9)	81,537	(68,547 - 94,526)
Southeast	68.9	(62.0 - 75.9)	45,315	(37,694 - 52,936)

Figure 7.5: The estimated prevalence of having a usual source of care and a personal doctor or nurse among adults 19-64 years by Medicaid service region.

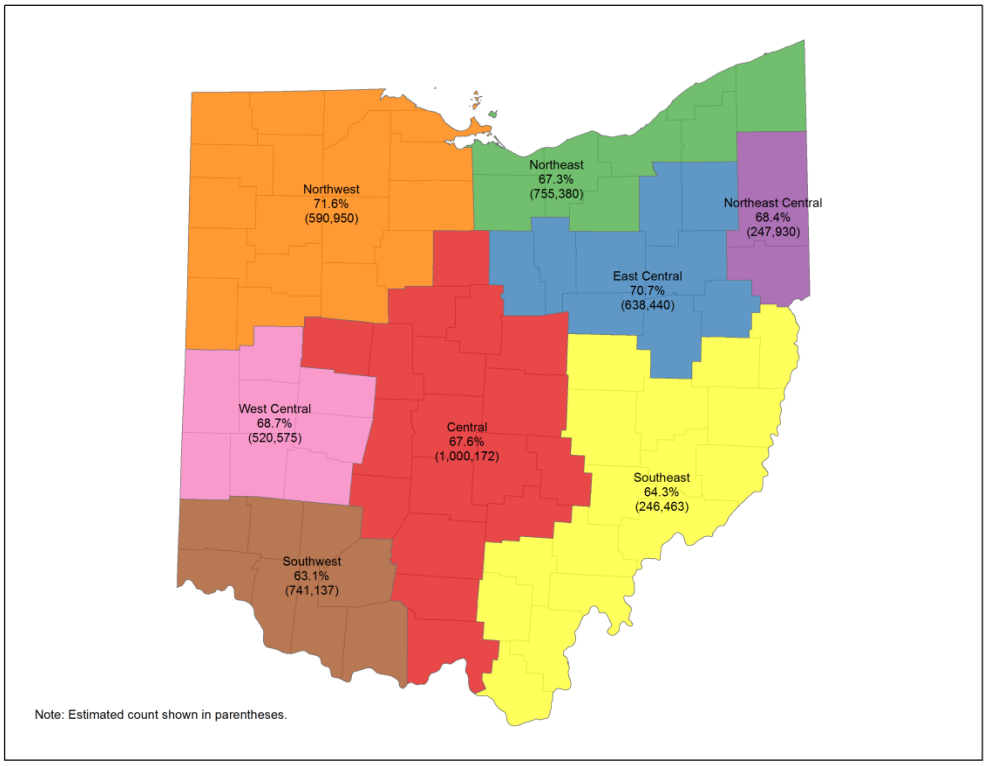
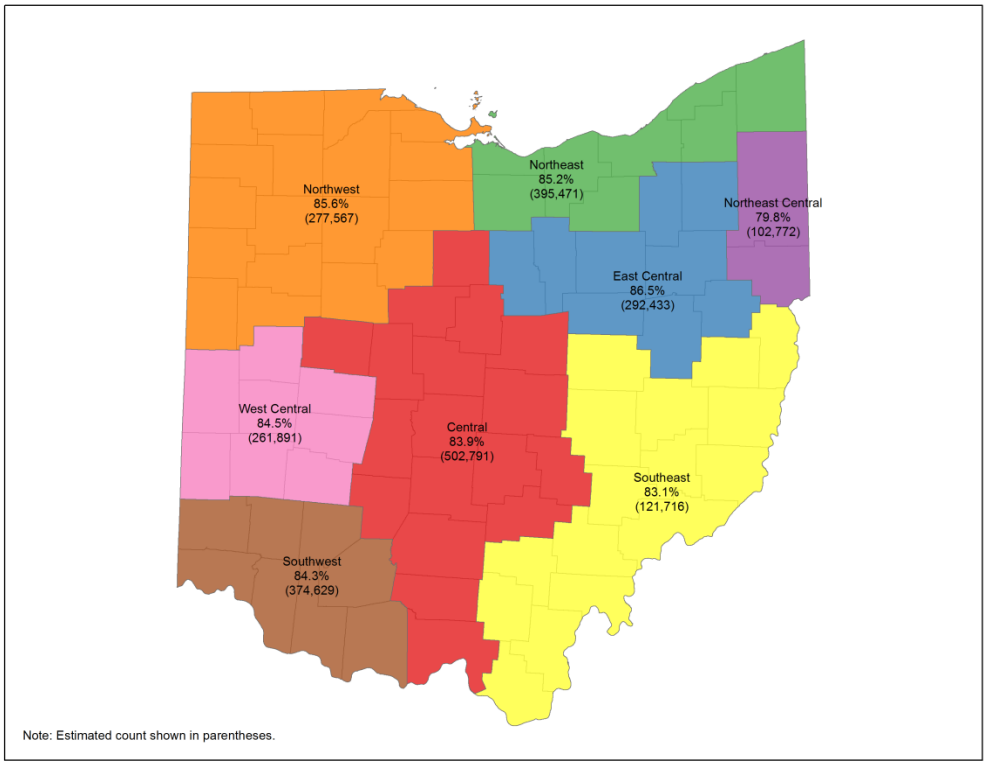


Table 7.8: The prevalence of having a usual source of care and a personal doctor or nurse among children by Medicaid service region and Medicaid coverage status.

All children	%	90% CI	Count	90% CI
Northwest	85.6	(82.8 - 88.4)	277,567	(258,397 - 296,737)
Northeast	85.2	(82.7 - 87.8)	395,471	(370,709 - 420,232)
Northeast Central	79.8	(75.4 - 84.2)	102,772	(92,279 - 113,266)
East Central	86.5	(83.7 - 89.2)	292,433	(272,358 - 312,507)
Central	83.9	(81.6 - 86.3)	502,791	(473,628 - 531,954)
West Central	84.5	(81.6 - 87.4)	261,891	(242,272 - 281,511)
Southwest	84.3	(81.8 - 86.9)	374,629	(350,702 - 398,555)
Southeast	83.1	(79.3 - 87.0)	121,716	(110,256 - 133,176)
Medicaid children				
Northwest	88.2	(85.0 - 91.3)	175,049	(160,129 - 189,970)
Northeast	89.0	(86.3 - 91.7)	256,344	(235,621 - 277,068)
Northeast Central	86.6	(82.3 - 90.9)	52,435	(46,277 - 58,593)
East Central	89.3	(86.3 - 92.3)	173,885	(159,634 - 188,135)
Central	89.8	(87.5 - 92.0)	327,001	(303,217 - 350,785)
West Central	85.3	(82.1 - 88.6)	149,780	(135,988 - 163,572)
Southwest	88.0	(85.3 - 90.7)	245,583	(226,796 - 264,369)
Southeast	85.5	(81.1 - 89.9)	54,232	(47,282 - 61,181)

Figure 7.6: The estimated prevalence of having a usual source of care and a personal doctor or nurse among children by Medicaid service region.



8. KEY CONSIDERATIONS

In this section we discuss key considerations that stem from our report findings.

i. **Early adoption of PCMH recognition or accreditation was primarily in urban and suburban areas with most locations in and around Cincinnati, Columbus, and Cleveland**. Resources could be targeted to better enable distribution of PCMH oriented service providers to rural and urban areas of need. Different dynamics outside of urban markets may affect the spread of PCMH accreditation.

ii. **Provider engagement is an area with great potential for improvement**. While a majority of adults and children had a personal doctor or nurse that they identified with, few reported care that suggested active provider engagement – such as sending out appointment reminders.

iii. **While a majority of adults and children had a personal doctor or nurse that they identified with, a significant proportion of Ohio's adults and children still did not**. Approximately a third of adults 19-64 years and a sixth of children did not have a non-E.R. usual source of care and a personal doctor or nurse. While this proportion is lower in Ohio than in other states, it represents a large population of Ohioans who might benefit from participation in a PCMH. Health system entities, insurers, and government entities could concentrate efforts to increase basics services consistent with the PCMH model.

9. DISCUSSION

In this report we measured care consistent with a patient-centered medical home through the perspective of the individual user. This approach was in contrast to estimating how many people were served by recognized or accredited PCMH facilities. In pre-testing survey questions, the OMAS research team found that in general the average person was not aware of the concept of PCMH, and therefore would not know if he or she received care from a recognized or accredited PCMH. Focusing on the patient experience, we measured which survey respondents reported a high level of care as judged by PCMH standards, which may be more informative than knowing the accreditation of an individual's place of care.

The CCW-PCMH measure developed for this report consisted of 7 components: 1) usual source of care, 2) usual source of care from a clinic, health center, doctor's office, or hospital outpatient department, 3) personal doctor or nurse, 4) health care visit in the past year, 5) enhanced access, 6) specialist care and coordination, and 7) provider engagement (for adults) or provider appointment reminders (for children). These components consisted of one or several questions from the survey instrument.

We found that CCW-PCMH was not typical for adults or children and was not the standard of care for any demographic group, place of care, or geographic region. As the PCMH model advances, patient and provider engagement will influence the success of PCMH implementation.

9.1 Limitations

The CCW-PCMH measure we developed was only a proxy variable for PCMH. It was limited to patient experiences and perceptions and by the 2012 OMAS survey questions. If PCMH is measured in future iterations of the OMAS we suggest several refinements to the PCMH survey questions and measures. First, questions such as those in the enhanced access component asking about the respondent's ability to get care on nights and weekends are only asked to the respondent if he or she indicated that he or she needed care on nights and weekends in the past year. We suggest adding a hypothetical question for those who didn't need care on nights or weekends asking about their confidence in getting care if he or she needs it. This would allow us to evaluate the enhanced access domain for a greater number of people in the sample.

We also suggest that additional questions be considered, giving more detail concerning the patient's interaction with his/her provider. These questions would better allow us to evaluate PCMH engagement for both the provider and the patient. Questions concerning patient-provider communication, provider knowledge of patient's medical history, and time spent with provider would add more depth to the PCMH measure.

More information about OMAS, including the data and electronic versions of reports and research briefs, is available online at:
http://grc.osu.edu/omas/

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Appendix

Table A.1: Survey questions used in the CCW-PCMH measure.

CCW-PCMH component	Adult questions	Child questions
Usual source of care	usual_a: Is there one place that you usually go to when you are sick or need advice about your health?	usual_c: Is there a place that he/she usually goes when he/she is sick or you need advice about his/her health?
Usual source of care is a clinic, health center, doctor's office, or hospital outpatient department	f67_2_rec : What kind of place is it? Is it a clinic or health center, a doctor's office or HMO, a hospital emergency room, a hospital outpatient department, or some other place?	n137a, n137a2_rec: What kind of place is it? Is it a clinic or health center, a doctor's office or HMO, a hospital emergency room, a hospital outpatient department, or some other place?
Personal doctor or nurse	f67a1: Do you have one or more persons you think of as your personal doctor or nurse?	n137b: Do you have one or more persons you think of as his/her personal doctor or nurse?
Health care visit in the past year	e59: Not including overnight hospital stays, visits to hospital emergency rooms, home visits, or telephone calls, about how long has it been since you last saw a doctor or other health care professional about your own health?	m131: Not including overnight hospital stays, visits to hospital emergency rooms, home visits, or telephone calls, about how long has it been since he/she last saw a doctor or other health care professional about his/her health? m130: Since his or her birth/During the past 12 months did he/she receive a well-child checkup?

CCW-PCMH component	Adult questions	Child questions
Enhanced access	In the last 12 months, ... fh01: did you phone your provider's office with a medical question during regular office hours? fh02: when you phoned your provider's office during regular office hours, how often did you get an answer to your medical question that same day? fh03: did you need medical assistance for yourself during evenings, weekends, or holidays? fh04: how often were you able to get the medical assistance you needed from your provider's office during evenings, weekends, or holidays? fh05: have you needed medical assistance right away? fh06: how many days did you usually have to wait for an appointment when you needed medical assistance right away?	Since his/her birth/during the past 12 months, … pcmh_2: how many days did you usually have to wait for an appointment from his/her provider when he/she needed care right away? pcmh_3: how often were you able to get the care he/she needed from his/her provider's office during evenings, weekends, or holidays?

CCW-PCMH component	Adult questions	Child questions
Specialist care and coordination	f67d: During the past 12 months, did you need to see a specialist? f67e: How much of a problem, if any, was it for you to see a specialist? fh07: During the past 12 months, how often did anyone in your provider's office seem informed and up-to-date about the care you got from specialists?	Since his/her birth/during the past 12 months, ….. k4q24,k4q25: did he/she see/need to see a specialist? k4q25: how much of a problem, if any, was it for him/her to see a specialist?
Provider engagement	In the last 12 months, ….. fh08: did you and anyone in your provider's office talk at each visit about all the prescription medicines you were taking? fh09: did anyone in your provider's office ask you if there was a period of time when you felt sad, empty, or depressed?	
Provider appointment reminders		pcmh_4: Since his/her birth/During the past 12 months, did you get any reminders about his/her care from his/her provider's office between visits?

Table A.2: Percent of adults 19-64 years meeting CCW-PCMH components and individual questions.

CCW-PCMH components and individual questions	**Overall %**	**Overall % among those w/out a legitimate skip**	**Medicaid %**	**Medicaid % among those w/out a legitimate skip**
Component 1: Usual source of care				
Yes	90.2	--	92.0	--
No	9.0	--	7.0	--
Component 2: Usual source of care is a clinic, health center, doctor's office, or hospital outpatient department				
Yes	81.1	89.9	75.5	82.1
No	7.9	8.8	15.3	16.6
Legitimate skip	9.8	--	8.0	--
What kind of place is it? Is it a clinic or health center, a doctor's office or HMO, a hospital emergency room, a hospital outpatient department, or some other place?				
Clinic or health center	15.5	17.2	22.1	24.0
Doctor's office	61.5	68.2	46.3	50.4
Hospital emergency room	6.1	6.8	13.4	14.6
Hospital outpatient department	4.1	4.5	7.1	7.7
Some other place	1.6	1.8	1.4	1.6
Legitimate skip	9.8	--	8.0	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
Component 3: Personal doctor or nurse				
Yes	69.2	85.7	63.0	84.0
No	11.4	14.1	11.8	15.7
Legitimate skip	19.3	--	24.9	--
Do you have one or more persons you think of as your personal doctor or nurse?				
Yes, one person	47.4	58.8	39.9	53.2
Yes, more than one person	21.8	27.0	23.1	30.8
No	11.4	14.1	11.8	15.7
Legitimate skip	19.3	--	24.9	--
Component 4: Health care visit in the past year				
Yes	85.5	--	91.6	--
No	13.2	--	6.3	--
Component 5: Enhanced access				
Yes	27.2	71.8	25.6	62.1
No	10.7	28.2	15.7	37.9
Legitimate skip	62.2	--	58.7	--
In the last 12 months did you phone your provider's office with a medical question during regular office hours?				
Yes	31.6	46.8	34.2	55.7
No	35.6	52.8	26.6	43.4
Legitimate skip	32.5	--	38.6	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
When you phoned your provider's office during regular office hours, how often did you get an answer to your medical question that same day?				
Never	1.5	4.9	2.3	7.0
Sometimes	3.8	12.1	5.3	15.7
Usually	8.8	27.9	7.6	22.6
Always	17.3	54.9	18.3	54.5
Legitimate skip	68.5	--	66.4	--
In the last 12 months did you need medical assistance for yourself during evenings, weekends, or holidays?				
Yes	14.7	21.7	21.6	35.2
No	52.6	77.9	39.3	63.9
Legitimate skip	32.5	--	38.6	--
How often were you able to get the medical assistance you needed from your provider's office during evenings, weekends, or holidays?				
Never	4.2	28.7	6.1	28.8
Sometimes	2.5	17.0	3.8	18.1
Usually	2.3	16.1	3.6	16.9
Always	4.6	31.7	7.0	33.1
Did not try	0.9	6.4	0.6	2.6
Legitimate skip	85.4	--	78.7	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
In the last 12 months have you needed medical assistance right away?				
Yes	14.9	22.0	23.0	37.4
No	52.6	77.9	38.2	62.2
Legitimate skip	32.5	--	38.6	--
How many days did you usually have to wait for an appointment when you needed medical assistance right away?				
Same day	6.5	43.9	8.0	35.2
1 day	2.9	19.2	4.4	19.4
2 to 3 days	2.8	18.8	5.5	24.2
4 to 7 days	1.0	6.8	1.6	7.0
More than 7 days	1.1	7.4	2.9	12.8
Did not try to make an appointment	0.5	3.0	0.2	0.8
Legitimate skip	85.2	--	77.4	--
Component 6: Specialist care and coordination				
Yes	23.5	78.6	23.2	72.7
No	6.4	21.4	8.7	27.3
Legitimate skip	70.1	--	68.1	--
During the past 12 months, did you need to see a specialist?				
Yes	40.7	--	46.8	--
No	59.1	--	52..7	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
How much of a problem, if any, was it for you to see a specialist?				
Big problem	7.5	18.4	10.7	23.0
Small Problem	5.8	14.2	9.2	19.7
Not a Problem	27.3	67.0	26.8	57.3
Legitimate skip	59.3		53.2	
During the past 12 months, how often did anyone in your provider's office seem informed and up-to-date about the care you got from specialists?				
Never	2.7	9.2	2.9	9.4
Sometimes	3.7	12.5	5.3	17.0
Usually	7.8	26.1	7.0	22.5
Always	14.6	48.9	15.3	49.4
Did not see a specialist	0.4	1.4	0.1	0.3
Legitimate skip	70.2	--	68.9	--
Component 7: Provider engagement				
Yes	24.8	36.9	30.6	50.8
No	42.4	63.1	29.7	49.2
Legitimate skip	32.8	--	39.7	--
In the past 12 months did you and anyone in your provider's office talk at each visit about all the prescription medicines you were taking?				
Yes	44.8	66.3	45.7	74.4
No	22.2	32.9	15.3	24.9
Legitimate skip	32.5	--	38.6	

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
In the past 12 months did anyone in your provider's office ask you if there was a period of time when you felt sad, empty, or depressed?				
Yes	28.2	41.8	35.4	57.6
No	38.2	56.5	25.5	41.6
Legitimate skip	32.5	--	38.6	--

Table A.3: Percent of Children Meeting CCW-PCMH Components and Individual Questions

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
Component 1: Usual Source of Care				
Yes	97.2	--	97.2	--
No	1.3	--	1.7	--
Component 2: Usual care is a clinic, health center, doctor's office, or hospital outpatient department				
Yes	93.2	95.9	91.5	94.2
No	3.8	3.9	5.4	5.5
Legitimate skip	2.8	--	2.8	--
What kind of place is it? Is it a clinic or health center, a doctor's office or HMO, a hospital emergency room, a hospital outpatient department, or some other place?				
Clinic or health center	14.3	14.5	22.4	22.8
Doctor's office	76.8	78.6	65.4	66.9
Hospital outpatient department	2.1	2.2	3.2	3.3
Hospital emergency room	2.7	2.8	4.3	4.4
Some other place	1.6	1.7	2.1	2.1
Legitimate skip	1.4	--	1.3	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
Component 3: Personal doctor or nurse				
Yes	84.7	90.4	79.3	86.3
No	8.3	8.9	11.5	12.6
Legitimate skip	6.3	--	8.2	--
Do you have one or more persons you think of as your personal doctor or nurse?				
Yes, one person	61.6	65.8	55.0	59.9
Yes, more than one person	23.0	24.6	24.3	26.5
No	8.3	5.9	11.5	12.6
Legitimate skip	6.3	--	8.2	--
Component 4: Health care visit in the past year				
Yes	95.6	--	96.6	--
No	3.1	--	1.9	--
Component 5: Enhanced access				
Yes	51.4	62.6	44.0	56.9
No	30.8	37.4	33.4	43.1
Legitimate skip	17.8	--	22.6	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
Since his/her birth/during the past 12 months how many days did you usually have to wait for an appointment from his/her provider when he/she needed care right away?				
Same day	53.2	62.9	45.4	57.4
1 day	14.7	17.4	14.9	18.9
2 to 3 days	8.5	10.1	10.3	13.0
4 to 7 days	1.9	2.2	2.6	3.3
More than 7 days	1.8	2.1	2.7	3.4
Did not try to make an appointment	3.7	4.4	2.5	3.2
Legitimate skip	15.5	--	20.9	--
Since his/her birth/during the past 12 months how often were you able to get the care he/she needed from his/her provider's office during evenings, weekends, or holidays?				
Never	22.5	26.6	23.4	29.6
Sometimes	11.2	13.2	11.5	14.5
Usually	11.1	13.1	10.6	13.4
Always	27.6	32.6	24.9	31.5
Did not need care right away	11.1	13.2	8.1	10.2
Legitimate skip	15.5	--	20.9	--
Component 6: Specialist care and coordination				
Yes	30.2	93.0	31.3	90.3
No	2.3	7.0	3.4	9.7
Legitimate skip	67.5	--	65.3	--

CCW-PCMH components and individual questions	Overall %	Overall % among those w/out a legitimate skip	Medicaid %	Medicaid % among those w/out a legitimate skip
During the past 12 months, did you need to see a specialist?				
Yes	32.9	--	35.3	--
No	65.8	--	63.3	--
How much of a problem, if any, was it for you to see a specialist?				
Big problem	2.3	7.0	3.4	9.7
Small Problem	5.3	16.4	6.1	17.5
Not a Problem	24.9	76.4	25.2	72.4
Legitimate skip	67.4		65.2	
Component 7: Provider appointment reminders				
Yes	56.1	68.0	54.6	70.7
No	26.4	32.0	22.7	29.3
Legitimate skip	17.6	--	22.7	--

A.4 Defining Programs within Medicaid Coverage

We attempted to classify survey respondents who were covered by Medicaid into specific Medicaid programs based on their responses, mainly the Healthy Families or Healthy Start program or the Aged, Blind, Disabled (ABD) program. The logic we used was as follows:

1) Respondents were directly asked which Medicaid plan they were covered by.
    a. If he or she responded as Healthy Families of Healthy Start, then we classified him or her as such.
    b. If he or she responded as ABD or any sort of Waiver, then we classified him or her as ABD.
    c. Otherwise go to 2).
2) We next made several assumptions based on eligibility to programs.
    a. If he or she had a child covered by Medicaid and his or her income was at or below 90% of the FPL, then we classified him or her as Healthy Families or Healthy Start.
    b. If she was pregnant in the past 12 months, then we classified her as Healthy Families or Healthy Start.
    c. If he or she had a disability as determined by the proxy definition, then we classified him or her as ABD.
    d. Otherwise go to 3).
3) If still unclassified we made several further assumptions.
    a. If he or she had a child covered by Medicaid, then we classified him or her as Healthy Families or Healthy Start.
    b. If he or she was between the ages of 19 and 21 and his or her income was at or below 50% of the FPL, then we classified him or her as Healthy Families or Healthy Start.
    c. If he or she was age 65 years or older, then we classified him or her as ABD.
4) If still unclassified, we classified them as “Unknown”.