Ohio | Department of Medicaid

Medicaid and Appalachian Ohio Health, Socioeconomic Status, and Ecological OMAS Assessment Study

October 10, 2018

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Executive Summary

(a) What is the Medicaid and Appalachian Ohio Health, Socioeconomic Status, and Ecological OMAS Assessment Study?

The Medicaid and Appalachian Health, Socioeconomic Status, and Ecological OMAS Assessment study was completed by Ohio University's Voinovich School of Leadership and Public Affairs with assistance from the Ohio Department of Medicaid (ODM) and the Ohio Colleges of Medicine Government Resource Center (GRC). The study was undertaken to address foundational information about health statuses (medical, mental, dental), health risks (e.g., substance use, chronic disease, disability, etc.), determinants of health, health care services access, health care utilization, unmet health needs, health burdens, and socioeconomic indicators. The populations of comparative interest were Medicaid recipients versus those not on Medicaid (including the uninsured) residing in each of Ohio's four county types: Appalachia, metropolitan, rural non-Appalachian, and suburban counties.

(b) How was the Medicaid and Appalachian Ohio Health, Socioeconomic Status, and Ecological OMAS Assessment Study conducted?

The study combined quantitative statewide and county survey data analysis with qualitative data gathered from nine semi-structured interviews/focus groups conducted in selected locations (counties) in Appalachian Ohio. Secondary data sourced from the U.S. Census Bureau's American Community Survey (ACS), Small-area Income and Poverty Estimates, Small-area Health Insurance Estimates, University of Wisconsin Population Health Institute's County Health Rankings (2018), and the Ohio Hospital Association were used to establish historical socioeconomic and health contexts that describe populations of counties and the four county types.

Data from the 2017 Ohio Medicaid Assessment Survey (OMAS) was the primary source for this study, supplemented by a few measures from past surveys (for trend analysis) and data gathered from the focus groups and semi-structured interviews (yielding a total of 40 adults ages 21-62 and covered by Medicaid) conducted in Ashtabula, Belmont, Guernsey, Highland, Lawrence, Mahoning, Muskingum, Noble, Ross, Scioto, and Tuscarawas counties. The 2017 OMAS data include survey responses from 39,711 adults and 9,202 children, via adult proxy interviews, in Ohio.

(c) What are the key findings of the Medicaid and Appalachian Ohio Health, Socioeconomic Status, and Ecological OMAS Assessment Study?

Social Determinants of Health

Compared to the rest of Ohio, Appalachia has:

- The lowest percentage of adults 19-64 years old with at least a Bachelor's degree (15.8%);

- The lowest labor force participation rate (55.6%);

- The highest unemployment rate (6.7%); and

- The highest poverty rate at or below 138% of the Federal Poverty Level (FPL) (35.2%).

Within Appalachia, Medicaid enrollees (19-64 year-old) were more likely than non-Medicaid to:

- Report difficulties paying for rent/mortgage (25.7% versus 15.5%), food (34.2% versus 19.2%), or debt (37.1% versus 26.3%) over the last 12 months;

- However, they were just as likely to report having trouble paying medical bills (28.3% versus 29.4%).

Health Status

Compared to other regions in Ohio, Appalachians 19-64 years of age are more likely to:

- Report poor or fair health status (24.2%);

- Have high blood pressure/hypertension (32.3%);

- Have diabetes (13.1%); and

- Have higher rates of obesity for adults 19-64 years of age (40.7%), and for children 0 to 18 years-old (26.3%),

Within Appalachia, Medicaid recipients 19-64 years old are also more likely than non-Medicaid to:

- Have a disability (46% versus 19.2%), to have greater health needs such as needing special therapy (16.7% versus 6.5%), long-term daily assistance (20.6% versus 10.2%), counseling (29.1% versus 8.1%), and other forms of assistance; and

- Appalachian children on Medicaid are, in particular, more likely to have a disability (36.4% versus 19.6 %), to be relying upon prescription pills (25.5% versus 11.4%), struggling with a developmental disability (17.7% versus 6.4%), and to have activity limitations (28.3% versus 15.5%).

Health Insurance Coverage:

- The percentage of uninsured low-income (annual family income at or below 138% FPL) Appalachian adults 19-64 years old has dropped sharply from 32.4% in 2012, to 12.8% in 2017. Uninsured rates have also dropped for low-income Appalachian children (ages 0 to 18 years with annual family income at or below 200% FPL), from 6.6% in 2012 to 3.8% in 2017 – the primary shift is due to Medicaid enrollment.

Access and Utilization of Healthcare:

- Among adults age 19-64 years old, Appalachians (34%) and rural non-Appalachians (38%) report the greatest difficulty accessing needed medical care during weekends/holidays/in the evening hours, which is in contrast to 31% of metropolitan and 32% of suburban.

- Appalachian Medicaid recipients cite transportation (24.6%), an inability to find a provider (19.6%) and provider unavailability (25.9%) as challenges when trying to access health care. Cost is cited as a barrier far more often by the non-Medicaid group as much in Appalachia (63.4% vs. 29.4%) as in the other county types.

- Medicaid enrolled adults (48.3%) and children (23.8%) in Appalachia are more likely than non-Medicaid enrolled adults (23.3%) and children (5.8%) to have visited an emergency room one or more times in the past 12 months.

I. Introduction

The creation of the Appalachian Regional Commission (ARC) in 1965 was prompted by the recognition that, on average, the people of Appalachia had not "matched his counterpart in the rest of the United States as a participant in the Nation's economic growth" (Appalachia: A Report by the President's Appalachian Regional Commission, 1964: xv). At the time, with an annual federal poverty rate (FPL) threshold of $3,000, one in three Appalachian families subsisted on $3,000 or less as compared to one in five in the rest of the nation. The unemployment rate stood at 7.1% for Appalachia, compared to a milder 5.0% for the rest of the nation, a gulf driven largely by declines in mining and agriculture during 1950-1960 that were not offset by gains in the manufacturing, construction, and service sector. In the same period, employment increased 15% in the rest of the United States (Appalachia: A Report by the President's Appalachian Regional Commission, 1964: 4:7). Appalachian high-school completion rates (32%) lagged that of the nation (42%), as did the quality of housing (26.6% needed major repairs versus 18.1% for the nation), savings and investments, retail commercial activity, an economy heavily reliant on resource extraction, and receipt of more federal welfare assistance than the rest of the nation (Appalachia: A Report by the President's Appalachian Regional Commission, 1964: 8:13). The report also mentioned the ravages of natural resource extraction, e.g., strip mining and overcultivation yielding periodic rainwater runoffs that flooded entire valleys, and the impacts of acid mine drainage on fish and game. Although health outcomes-focused studies of that era are hard to come by, excess mortality rates due to stomach, lip, mouth, and throat cancer were recorded for Appalachian communities (Guidotti, 1979).

More than half a century has passed since this portrayal of the Appalachian people and yet little has changed in the region's socioeconomic fortunes. Since 1964 a steady stream of reports have documented a continuing cycle of economic decline that, when coupled with environmental degradation, has generally led to worse health outcomes for Appalachians than their peers in other regions of the nation (Krometis et al., 2017). For example, the region has long recorded excess all-cause mortality, higher prevalence of obesity, smoking, physical inactivity, coronary heart disease (Barnett et al. 2000), worse oral health (Krause et al., 2012), lower utilization of cancer screening, and barring the metropolitan portions of Appalachia, limited access to cardiovascular care (Halverson et al. 2004), higher prevalence of mental health disorders, smoking, primary abuse of opiates and synthetics (Zhang et al., 2008), and a culture of despair (Glassmeier and Farrigan, 2003). Disparities in health care costs, coverage, and access have also been documented for Appalachian counties (Singh et al., 2017; Lane et al., 2012). Add to this mix the recently imposed burden of "diseases of despair" and yet again, Appalachian counties continued to carry the resulting mortality burden far more than the non-Appalachian counties (Meit, 2017).

While this state of affairs is hardly news, it begs the question of where precisely Appalachia stands today vis-a-vis the rest of Ohio. It is not known how Appalachian Ohioans differ from the rest of the state in terms of health care access, utilization, insurance coverage, health risk behaviors, outcomes, and unmet needs. In the past decade major shifts occurred in health care, most notably with passage of the 2010 Patient Protection and Affordable Care Act (ACA) and

the 2014 Ohio Medicaid expansion. Extending health insurance coverage should have enabled far greater access to and utilization of health care, particularly for those who rely on Medicaid. The recession of 2008 and the more recent opioid epidemic further pushed unemployment rates to near-record (Mortensen and Chen 2013; Currie et al. 2018; Ghertner and Groves 2018).

These structural changes to both the health care and the socioeconomic landscapes warrant a close examination of the health status, behaviors, access to/utilization of health care, and the socioeconomic conditions of Ohioans. This analysis is the primary motivation for this study, and we pose a number of questions:

- What does health insurance coverage look like now?
- What disease burdens now exist?
- How much, if any, disparity exists in coverage, utilization, behaviors, and outcomes between Appalachians and non-Appalachians?
- How much, if any, disparity exists between those covered by Medicaid versus those not on Medicaid?

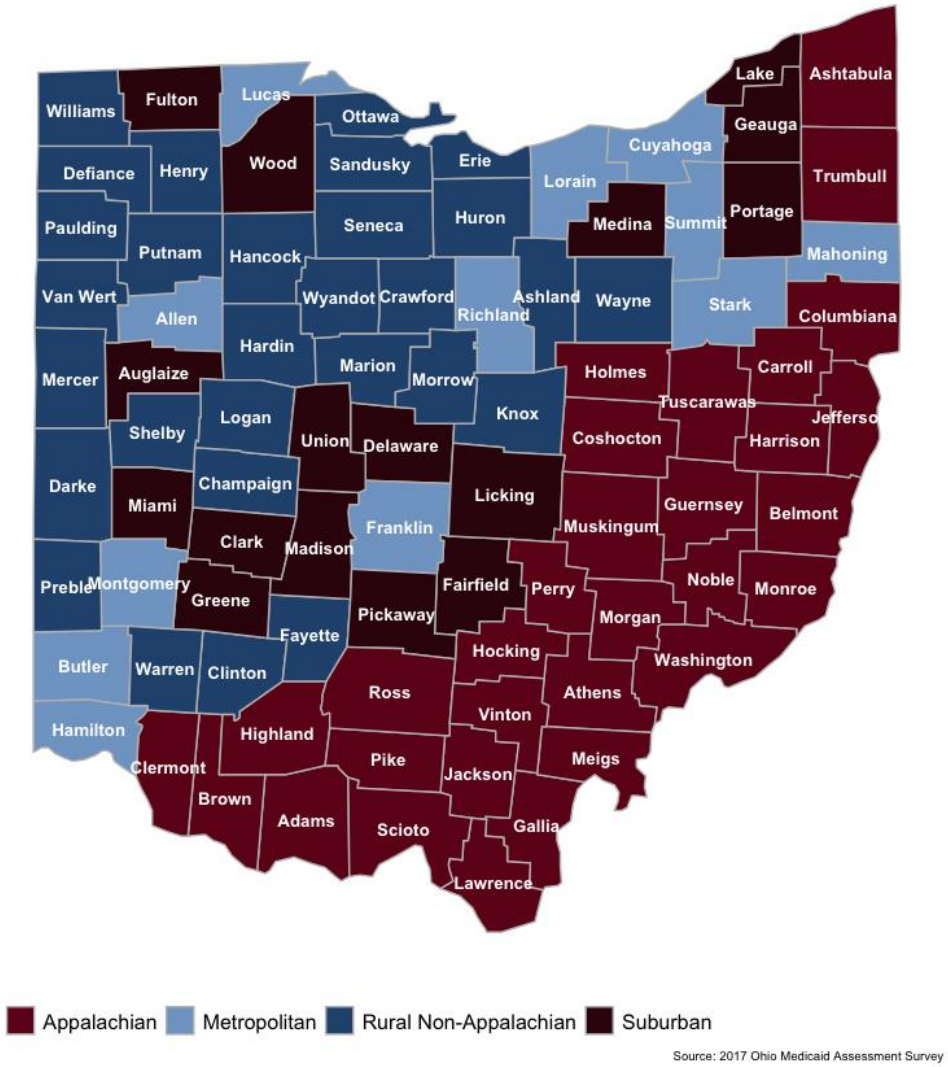
These questions were answered by conducting: (i) broad analyses of secondary data sources that shed light on health and socioeconomic trends, and (ii) a close analysis of the leading primary survey data series focused on Ohioans per se: the 2017 (and to a limited extent earlier years) Ohio Medicaid Assessment Survey (OMAS). Focus groups were also conducted across Appalachia to complement insights gleaned from the survey data analysis. This input allowed a richer, nuanced understanding of Appalachian Ohioan's health experiences than would not result from survey data alone.

In the following pages, a portrait of changes in time and differences in demographics, socioeconomic, and health-related measures are presented. Where possible, all analysis were conducted by grouping Ohio counties into the four county type groupings used by the Ohio Medicaid Assessment Survey: Appalachian, rural non-Appalachian, metropolitan, and suburban (see Figure 1). Note that for purposes of this study, and following OMAS' practice, Mahoning County was treated as a metropolitan county rather than as an Appalachian county. These county type classifications were established in 1997, the first iteration of the survey series, with assistance from demographers from the United States Bureau of Census Chicago Regional Office.

This exploration of secondary data was the backdrop for the core analysis that drove this study: analysis of the 2017 OMAS data. Specifically, we conducted univariate and bivariate analyses of specific survey items, focusing on the core data source for this report (2017 OMAS), while also highlighting trends in particular survey items by drawing upon estimates from earlier surveys. All survey items were analyzed statewide, then by county type, and lastly by Medicaid status

within each county type. An individual was defined as a member of the Medicaid group if he/she was on (i) Medicare and Medicaid or (ii) Medicaid but no Medicare.[1]

Figure 1: Counties Grouped into the four OMAS County Types (2017)



Given the limitations of univariate and bivariate analyses, specifically the inability to control for demographic, socioeconomic, health insurance coverage, and other factors known to shape health outcomes and behaviors, multivariate statistical models were also fit to allow for control of a variety of factors. This report closes with conclusions and policy considerations.

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[1] This definition is in line with that used by the online database of the Ohio Medicaid Assessment Survey (OMAS), and subsumes those with unknown insurance coverage and the uninsured into the non-Medicaid group.

II. A Profile of Ohio, County Types, and Counties

This report begins with a data-driven portrait of the populations that call the state and its county types their home. This profile was built from a variety of sources including the American Community Survey (ACS) (2102-2016), the U.S. Census Bureau's Population Estimates through 2016 (vintage July 1, 2017), and data compiled by the Population Reference Bureau for the Appalachian Regional Commission (ARC).

Population Size and Composition

As of July 1, 2017, the majority of 11,614,373 Ohioans (working-aged adults, seniors, and children) lived in the metropolitan counties (a total of 6,320,205 persons or 54.7% of the state's population). In contrast, less than 2 million called Appalachia home (1,861,094 to be precise, comprising 15.2% of the state's total population). Rural non-Appalachia and the suburban counties comprise 13.2% (1,589,557) and 17% (1,822,200) of Ohio's population, respectively. Furthermore, since 2010, total population size in both Appalachia and rural non-Appalachia declined somewhat while metropolitan and suburban counties recorded slight increases.[2]

The relative distribution of age groups was very similar across county types: those ages 19-24 comprised the smallest share of the population (393,268), while those ages 25-64 comprised the majority (6,044,240) of the population.[3] Females made up a slight majority of the population in each county type, and the metropolitan counties were home to the majority of both the Hispanic and non-Hispanic non-white population groups.[4]

Housing Units and Households

At the time of the survey, Ohio's population was scattered across 5,146,944 housing units, although only 4,601,449 (89.4%) of these units were occupied. Housing unit-status in terms of occupancy and occupant (owner versus renter) was generally similar across the four county types (see Figure 2). However, the composition of the housing stock showed some marked differences. In particular, mobile homes comprised 11.6% of the Appalachian housing units, more than double the share (5.6%) of mobile homes in rural non-Appalachia, and substantially more than in metropolitan (1.3%) and suburban counties (3.5%). This pattern remained even when the focus was narrowed to occupied housing units: 10.6% of the Appalachian population in occupied housing units lived in mobile homes versus 4.3% of rural non-Appalachians, 2.9% of the suburban, and 1.2% of the metropolitan population.

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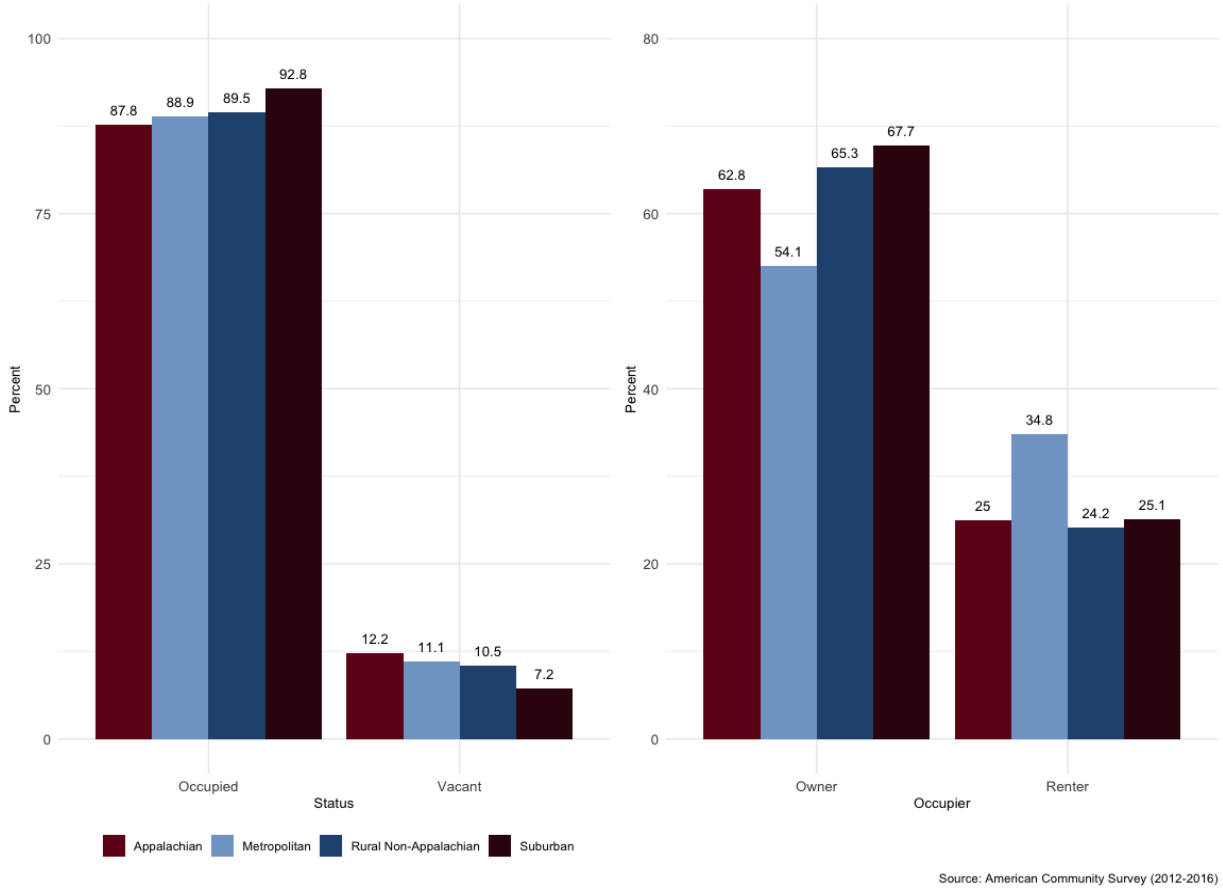
[2] See Appendix A, Tables A2 and A3.

[3] See Appendix A, Figure A1.

[4] See Appendix A, Figure A2.

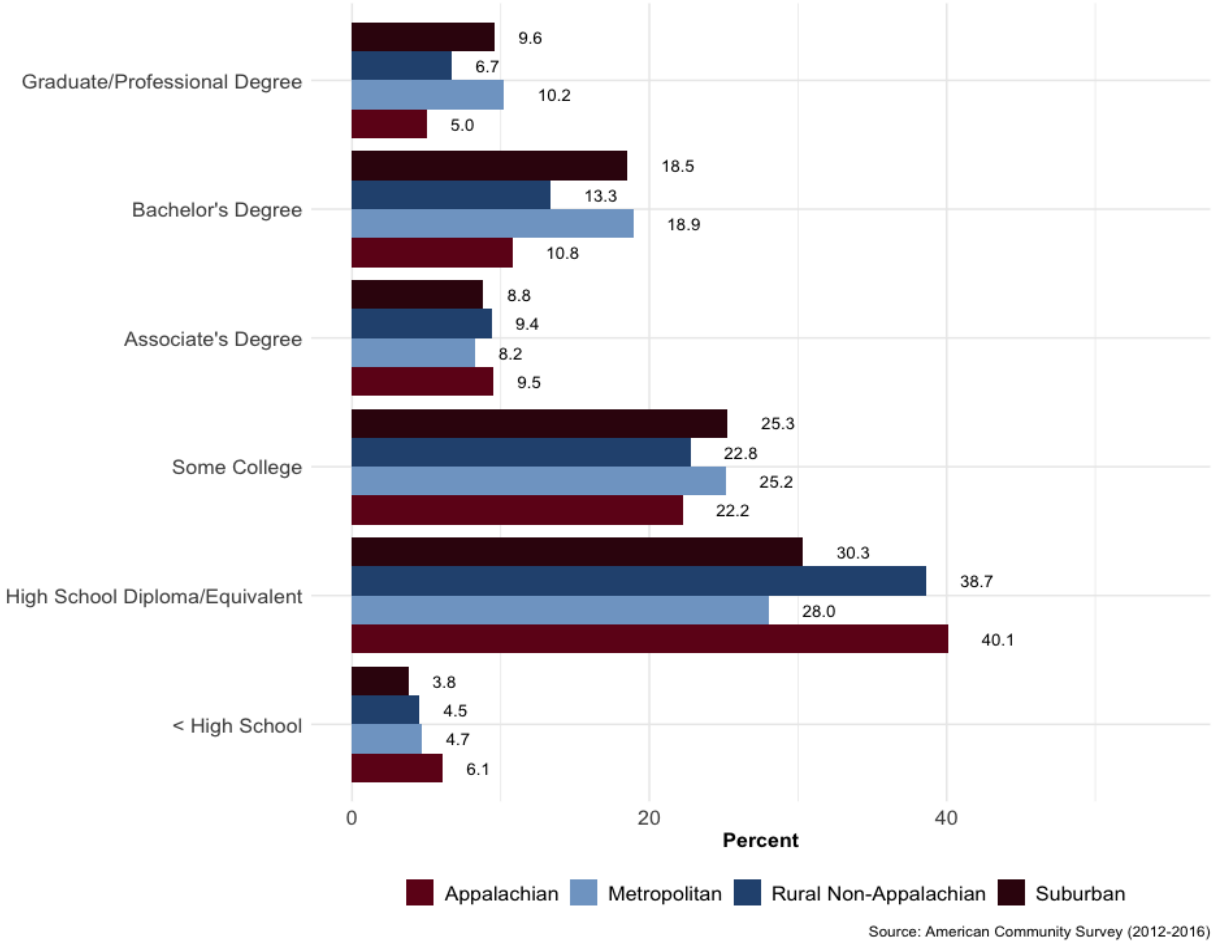
Figure 2: Distribution of Housing Units by Vacancy and Occupier Status (percentages) (2012-2016)



Educational Attainment

Educational attainment of Ohioans differed considerably across the region, with Appalachians ages 18-64 exhibiting markedly lower levels of educational attainment (see Figure 3). Specifically, the majority of Appalachians in this age group earned a high school diploma or equivalent (40.1%). followed by an associate's degree (22.2%). Appalachians ages 18-64 were also the least likely to hold a graduate or professional degree (5%) or a bachelor's degree (10.8%).

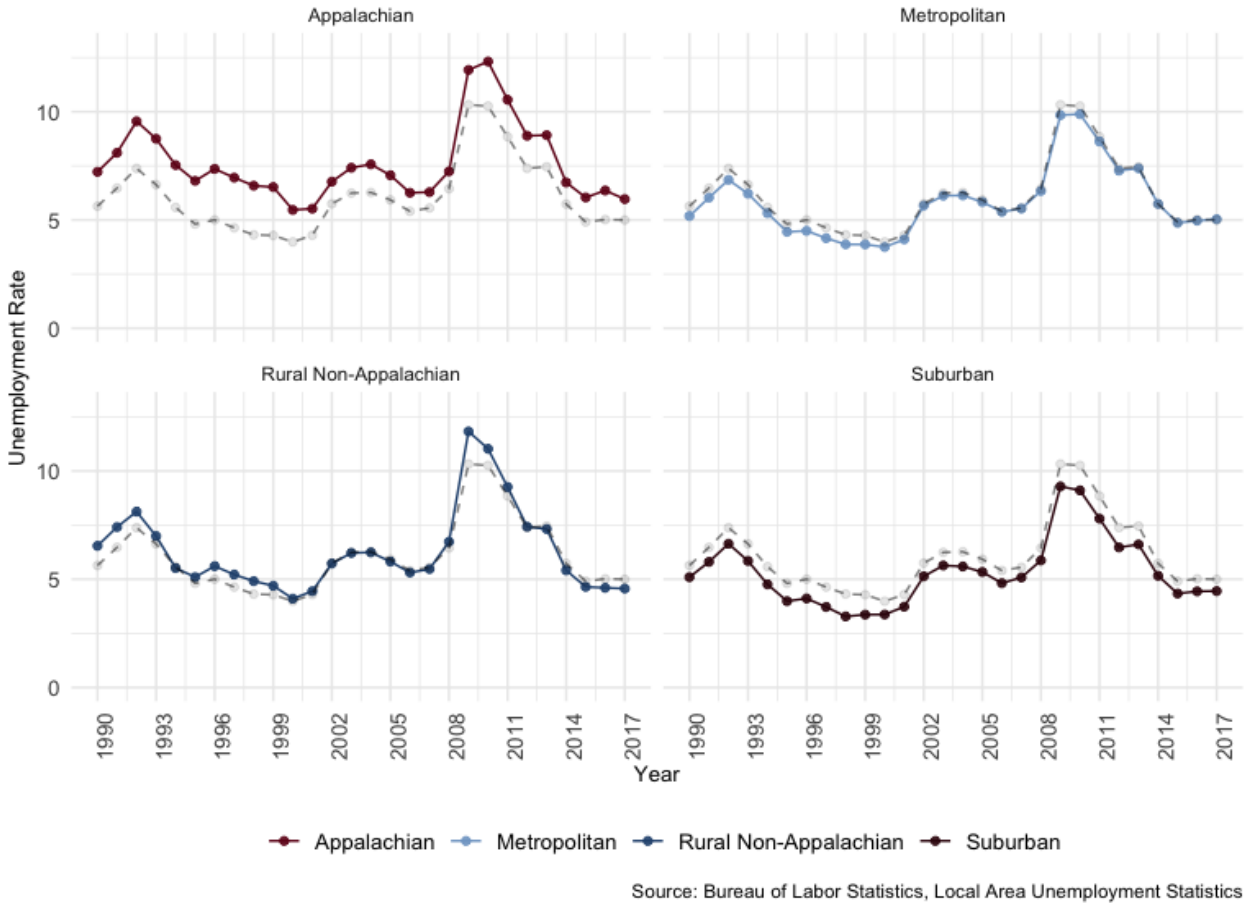
Figure 3: Educational Attainment of 18-64 year-olds by OMAS County Type Classifications (percentages) (2012-2016)



Unemployment and Labor Force Participation

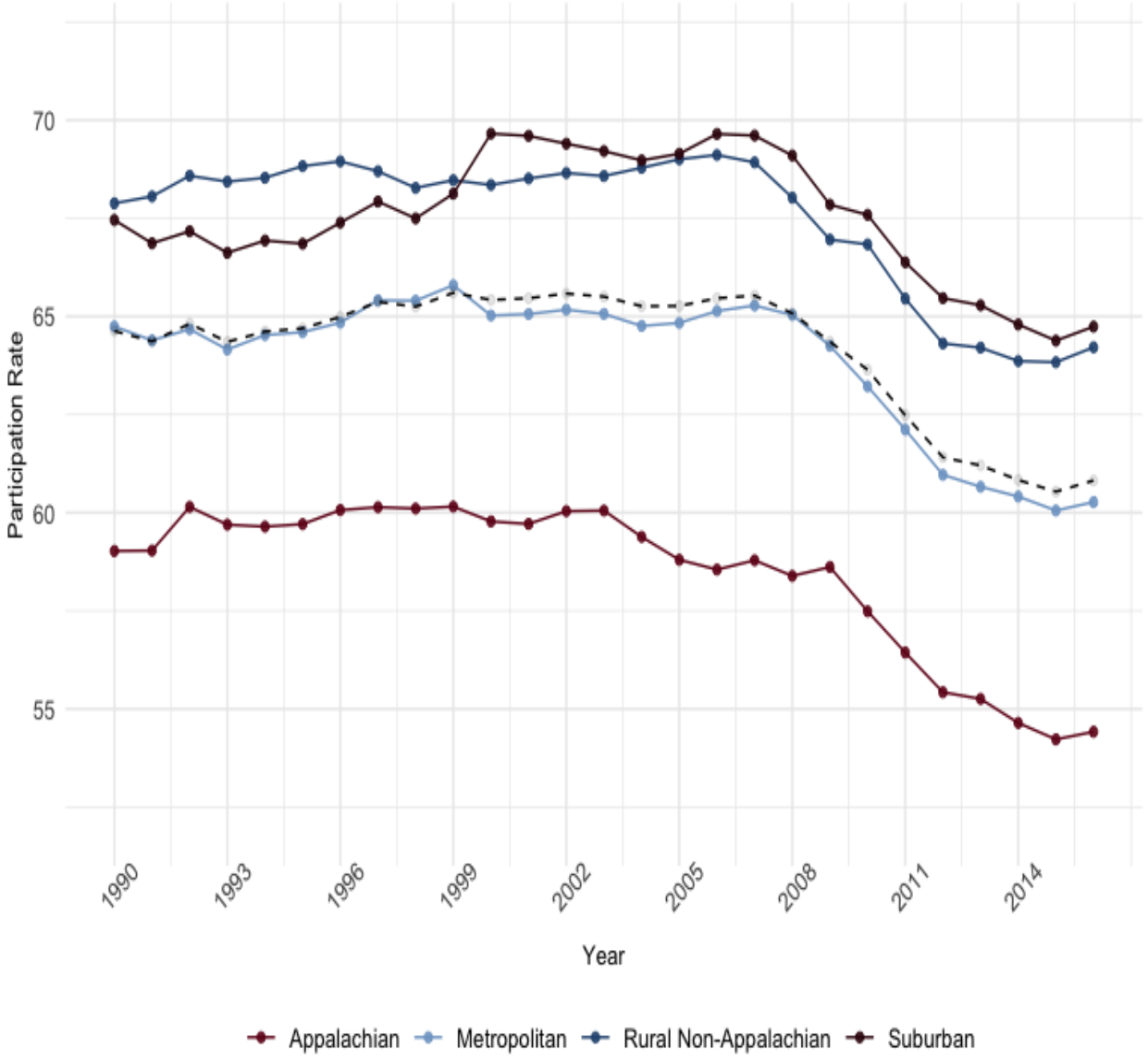
As is evident in Figure 4, Appalachia experienced unemployment rates higher than the state average; note that the dashed black line in Figure 4 reflects the state unemployment rate. All county types saw unemployment peak in 2010 (due to the 2008 recession) but the Appalachian rate peaked at almost 15% of the civilian labor force. Appalachia also had a consistently higher unemployment rate vis-a-vis the other county types, except for 2009 when its rate was similar to that of rural non-Appalachia. Recent 2017 estimates showed Appalachia at 6.7%, again well above the state's unemployment rate of 5.1%.

Figure 4: Unemployment Rate of 16 years or Older Persons by OMAS County Type Classifications (1990-2017)



Although the unemployment rate is commonly referenced as an indicator of the health of the labor market, the labor force participation rate—measured as the ratio of the number of employed and unemployed people in the labor force to the civilian non-institutional population ages 16 and over—is important because it shows the percentage of the population that is either working or actively seeking work. As is evident from Figure 5, labor force participation rates trended downward with the state rate at 62.9%, as of July 2018. Appalachia exhibited consistently lower labor force participation rates than the other county types, with a 2017 level of (55.6%), in sharp contrast to metropolitan counties' 62.1%, suburban counties' 64.4%, and rural non-Appalachian counties' 63.6%. While exploring the causes (both supply-side and demand-side) of these declines falls beyond the scope of this report, the likely impacts of these declines are readily understood: greater economic disparities and generally worsening living standards in Appalachia.

Figure 5: Labor Force Participation Rate of 16 years or Older Persons by OMAS County Type Classifications (1990-2016)



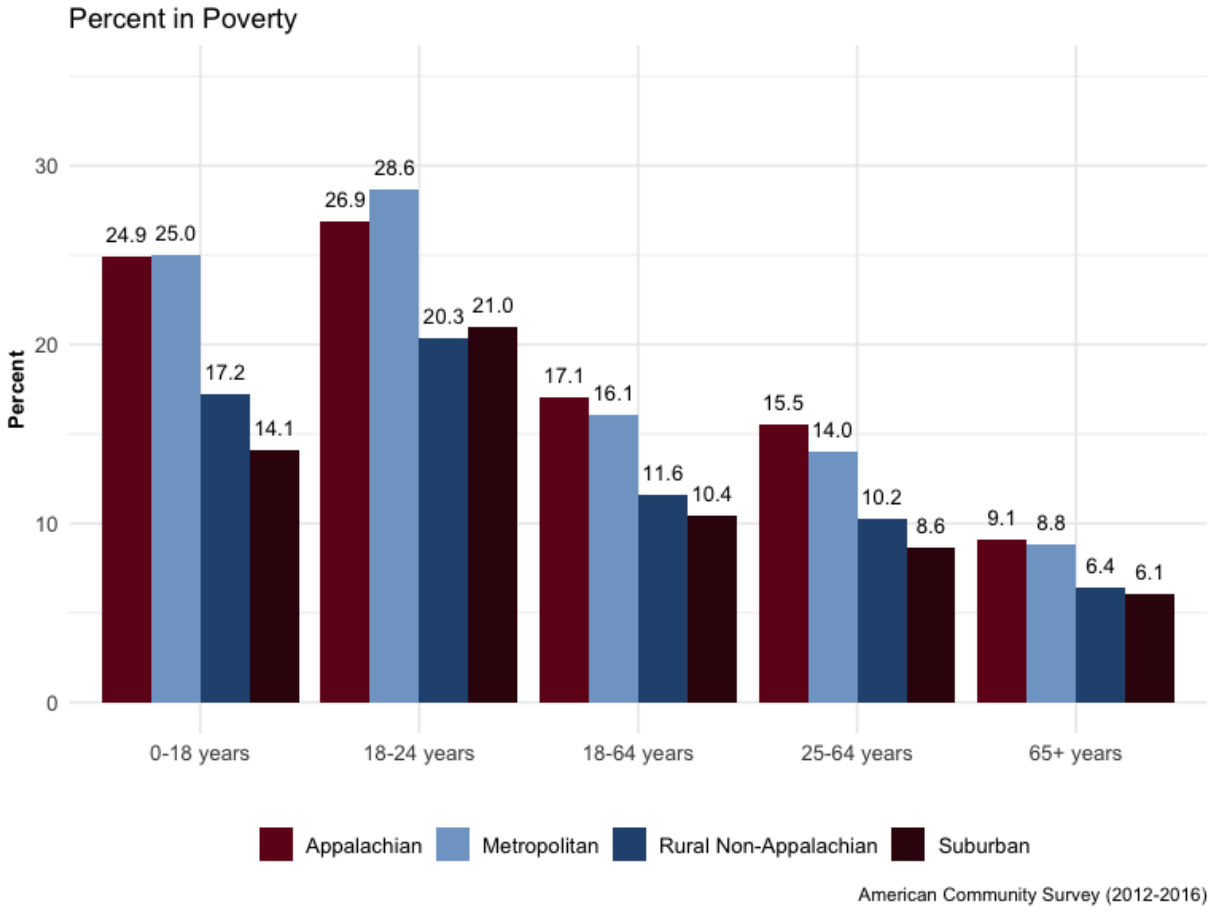
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics

Poverty

The current and potential widening poverty gaps in the near future are reflected in the Census Bureau's Small-Area Income and Poverty Estimates (SAIPE) data that show poverty rates in Appalachia and in the metropolitan counties to be well above those in the suburban and rural

non-Appalachian counties.[5] Examining poverty using an alternative data source, the 2012-2016 American Community Survey (ACS), makes it abundantly clear that Appalachia fared as badly as the metropolitan counties. In particular, 17.5% of Appalachians were living in poverty (as defined by the ACS). Those in metropolitan counties were a close second at 17%, with the rural non-Appalachian counties at 12.1% and the suburban counties at 10.6%. Disaggregating these estimates by age groupings showed a generally similar pattern; either Appalachia or the metropolitan counties experienced the highest poverty burden for a given age group (see Figure 6).

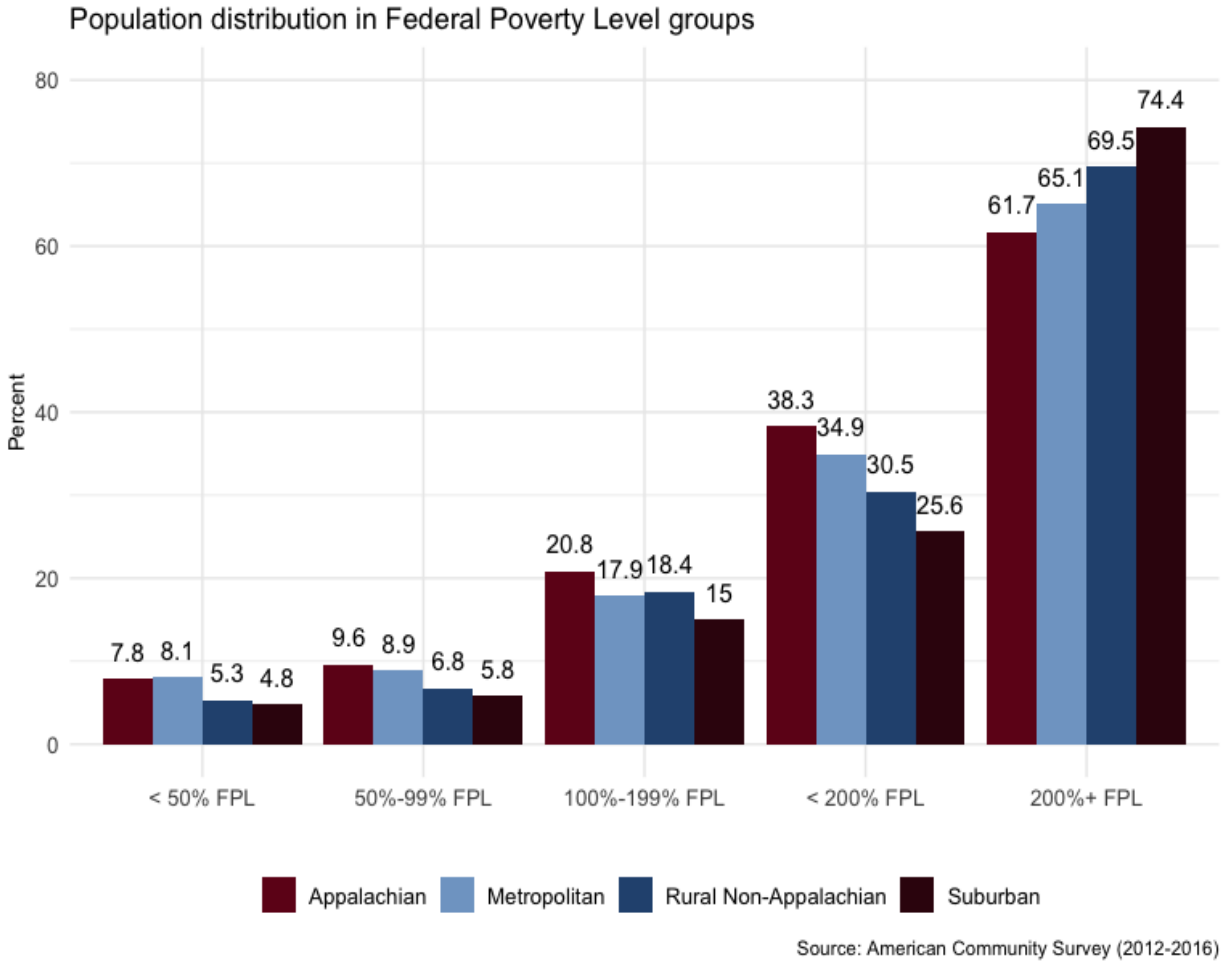
Figure 6: Percentage in Poverty by Age Group and OMAS County Type Classifications (2012-2016)



[5] See Appendix B, Figures B2 through B5.

Income-to-poverty ratios painted a similar picture (see Figure 7): the largest share of Appalachia's population (38.3%) was in the < 200% FPL bracket, well in excess of suburban counties (25.6%), rural non-Appalachian counties (30.5%), and metropolitan counties (34.9%).

Figure 7: Percentage of Population in Federal Poverty Level Brackets (by OMAS County Type Classifications) (2012-2016)



Breaking down the less-than-50% of FPL (extremely impoverished; Shaefer and Edin, 2017) population by age groups showed that both Appalachian and the metropolitan counties had relatively more 18-64 year-olds and 0-17 year-olds in the 50% or below FPL bracket than rural non-Appalachian and suburban counties (see Table 1).

Table 1: Percentage of the Population in the Less than 50% Federal Poverty Level (by Age Group and OMAS County Type Classifications)

Region	< 18 Years	18–64 Years
Metropolitan	12.3	7.8
Appalachian	12.3	7.7
Rural non-Appalachian	8.0	5.2
Suburban	6.4	4.9

Similarly, mean household and family incomes were lowest in Appalachia. The difference between Appalachia (mean household income = $58,724, mean family income = $68,611) and rural non-Appalachia (mean household income = $67, 265, mean family income = $78,482), the county type with mean incomes the least above Appalachia's, was about $10,000 for households and families, respectively.[6] The gap between Appalachian ($68,611) and the suburban counties was a staggering $24,301 in mean family income (suburban = $92,912) and $20,439 in mean household income (suburban = $78,713).

Health Outcomes, Behavior, and Access

Two popular health-related secondary data sources are: (1) the Center for Disease Control and Prevention's (CDC) county-level small-area estimates to assess diabetes prevalence, obesity and physical activity; and (2) the 2018 edition of the University of Wisconsin Population Health Institute's County Health Rankings (CHR). These sources measure and track years of potential life lost (YPLL) before age 75, percentage of adults reporting fair or poor health, average number of physically unhealthy days reported, average number of mentally unhealthy days reported, percentage of live births with low birth weight (< 2,500 grams), teen pregnancy rates, and the number of primary care physicians, dentists, and mental health providers per 100,000 persons, respectively.[7]

Any of these measures show that Appalachian and metropolitan residents invariably fared worse than their fellow suburban and rural non-Appalachian Ohioans. For example, 75% of the population in Appalachian counties exceeded the state average of 7,734 years lost, as compared to 12.5% of suburban, 39% of rural non-Appalachian, and 58% of metropolitan

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[6] Ohio's mean family and household incomes (in current dollars) are $82,269 and $68,341, respectively.

[7] The County Health Rankings mixes data of differing vintages. Years of potential life lost were for 2014-2016, percent reporting fair/poor health (2016), physically/mentally unhealthy days (2016), live births with low birth weights (2010-2016), teen pregnancy rates (2010-2016), primary care physicians (2015), dentists (2016), mental health providers (2017). Some of these CHR measures were derived via multi-level small-area modeling approaches that controlled for a respondent's age, sex, and race/ethnicity, county-level poverty, as well as county- and state-level contextual effects (for details, see Zhang et al. 2014; 2015).

counties.[8] Similarly, some 77% of Appalachian counties reflected the average number of physically unhealthy days in the past 30 days that exceeded the state average of 4.0. In stark contrast, only 7% of suburban counties, 21% of rural non-Appalachian counties, and 33% of metropolitan counties did so. Moreover, for the measure of mentally unhealthy days, no suburban or metropolitan county exceeded the state average of 4.3 days, but 48% of Appalachian counties and 7% of rural non-Appalachian counties exceeded this average.[9]

The Opioid Crisis

Although the opioid crisis has dominated news reports recently, warning signs of an emerging drug problem in Appalachia were evident as early as 2008. In particular, Zhang et al.'s (2008) sweeping study of Appalachian disparities in mental health, substance abuse, and access to treatment noted, among other points: (1) methamphetamine use was lower in Appalachia than popularly believed (although use rates were rising), and (2) the primary abuse of other opiates and synthetics seemed to be a key issue in Appalachia with "the proportion of admissions for primary abuse of other opiates and synthetics [being] considerably higher [in Appalachia] than in the U.S. … [and having] more than doubled from 3.49% in 2000 to 7.54% in 2004" (Zhang et al., 2008: 117-134).

Recently released data from the Ohio Hospital Association shed light on the extent and spatial distribution of overdoses in Ohio. Although these data likely underrepresented the true count of opioid encounters per capita (given data suppression rules in effect for counties with sub-20,000 populations and/or counties with fewer than 11 encounters), the opioid epidemic clearly worsened in all four county types but most so in the metropolitan counties (see Figure 8). Unintentional drug overdose rates (per 10,000 persons) also rose in recent years: the metropolitan and Appalachian counties recorded higher death rates than the rest of the state (see Figure 9).

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[8] see Appendix B, Figure B17.

[9] See Appendix B, Figures B18 and B19.

Figure 8: Opioid Overdose Encounters per 10,000 persons (by OMAS County Type Classifications and Year) (2008-2017)

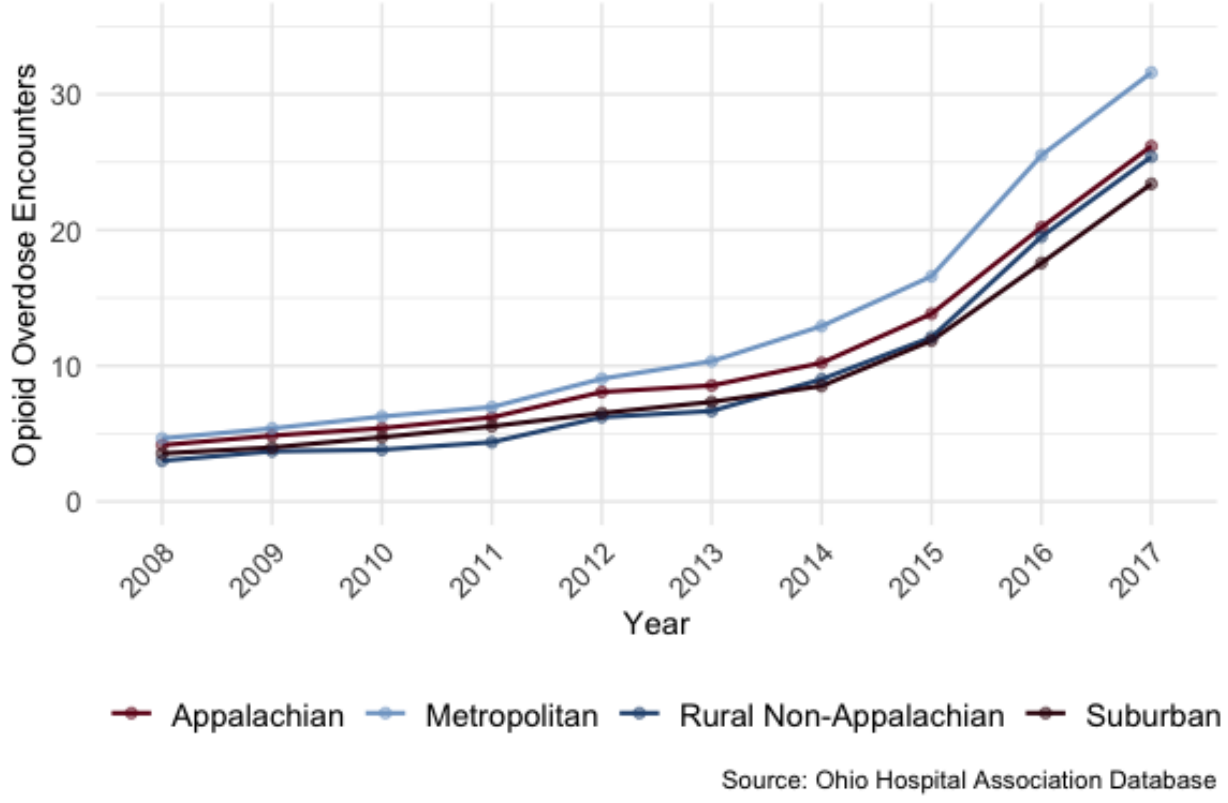
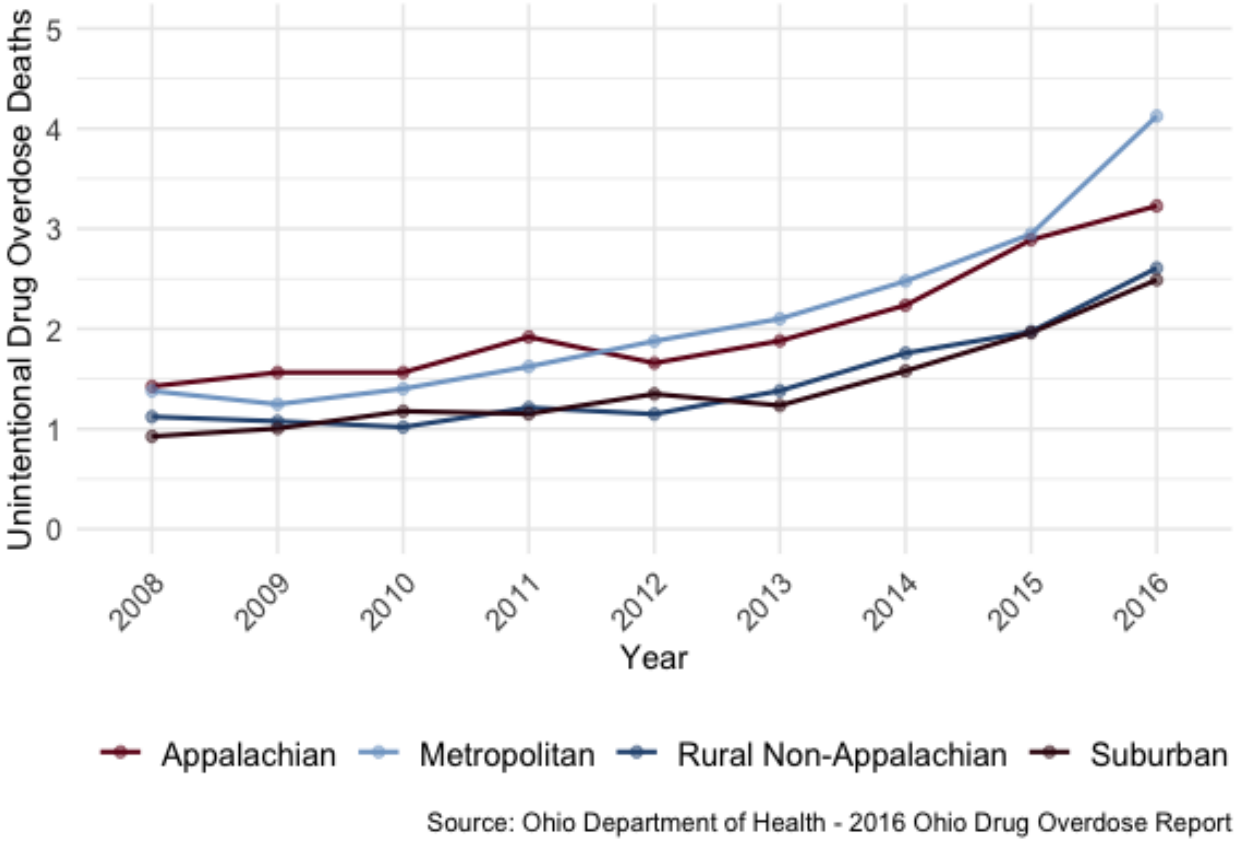


Figure 9: Number of Unintentional Drug Overdose Deaths per 10,000 persons (by County Type and Year) (2008-2017)



In brief, no matter what metric one examined, the cumulative burden of lower educational attainment, high unemployment, and high poverty set Appalachia apart from the rest of Ohio. The metropolitan counties were the only group that fared worse on some measures, but even in these instances the metropolitan-versus-Appalachia gap tended to be rather small. These data are, however, limited in their ability to shed light not only on the granular details of health behaviors, outcomes, health insurance coverage, access to and utilization of care of Ohioans in each county type but also on the extent to which socioeconomic and demographic factors influence behaviors and outcomes.

How do health-related behaviors, outcomes, access to and utilization of care differ across Ohio? Do Appalachians experience more unmet health needs than their fellow Ohioans in other county types and if so, in what domains? How has expanded health insurance influenced Appalachians' health? The following sections of this report engages these and other questions by relying on 2017 OMAS data, selected survey data from earlier years, and data from focus groups conducted across Appalachian Ohio, collected in April and May of 2018.

The Ohio Medicaid Assessment Survey

The Ohio Medicaid Assessment Survey (OMAS) is an Ohio-specific assessment that provides health care access, utilization, and health status information about residential Ohioans at the state, regional, and local levels, with a concentration on Ohio's Medicaid, Medicaid-eligible, and non-Medicaid populations. A complex-designed stratified random-digit dial telephone survey first fielded in 1998, OMAS is in its seventh iteration and is the primary source for tracking the state's health system and Ohioans' health status and health behavioral risk over time.

The 2017 OMAS data that are the backbone of this study included responses from 39,711 adults (and information on 9,202 children by adult proxy) to wide-ranging questions on health and insurance coverage. This report turns next to these data and begins with simple explorations of key survey domains embedded within the 2017 survey: (1) health insurance, (2) access to and quality of care, (3) utilization of health care, (4) health outcomes, (5) health behaviors, (6) unmet needs, and (7) financial barriers. [10]

Given the large number of survey items in the 2017 OMAS, this report does not present tabulations or visualizations for all survey items, focusing instead on items that are of primary interest and reflect interesting county type differences. Further, this report presents all tables of statewide and county type estimates in Appendix A and selects county indicators in Appendix B; both accompany this study. In the sections that follow, this report presents tables and figures for estimates derived for adults (ages 19-64) and children (ages 0-18) in the Medicaid versus non-Medicaid groups in each of the four county types. This is in line with this study's central focus on (i) the Medicaid subpopulation, and (ii) county type differences. It is important to note that all OMAS 2017 estimates reported here exclude "Don't Know" and "Refused" responses, leading to marginal differences between our estimates and those that might be available via the OMAS Dashboard.

Health Insurance

A pressing question in this report is the extent to which the combination of the Affordable Care Act and Ohio's Medicaid expansion increased the percentage of the population with health insurance coverage. [11]

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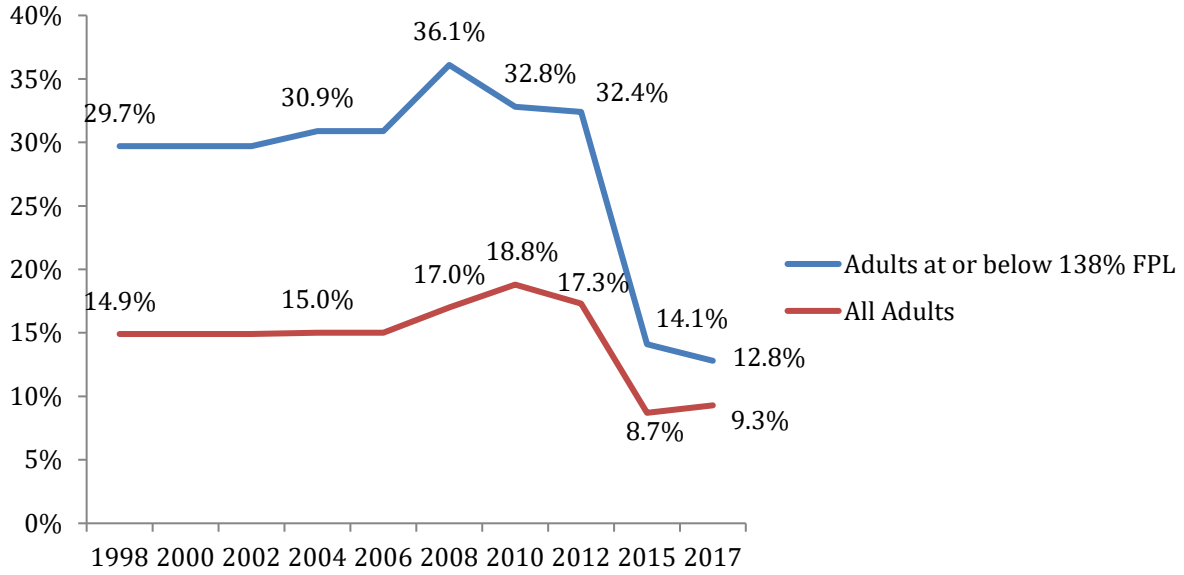
[10] The OMAS employs a complex weighting scheme that differs for adults versus children; hence, we use the weighting protocol appropriate for a given subpopulation of interest (i.e., adult weights for adult-specific questions and child weights for child-specific questions). This report employs Stata's (version MP 15.1) well-established *svy* routines—designed for complex survey data—for all multivariate analyses. This report employs R (version 3.5.1) for all visualizations and survey-weighted frequency tabulations.

[11] Although this report discusses the OMAS survey-weighted responses to gauge the percentage of adults and children with health insurance by survey-year, respectively, composite estimates that reflect a blend of model-based small-area and design-based (i.e., survey-weighted) estimates are listed in Appendix B. It is important to remember that small-area estimates offer greater precision

As evident from Figure 10, the percentage of Ohioans ages 19-64 without health insurance dropped sharply since 2012, from a high of 18.8% in 2010 to a low of 8.7% in 2015. The reduction in uninsured adults was even greater for adults ages 19-64 at or below 138% FPL, from a high of 32.8% in 2012 to 12.8% in 2017. The percentage of children without health insurance dropped as well since 2012 but less precipitously, falling from 4.8% in 2012 to 3.3% in 2017.

Figure 10: Percentage of Uninsured Ohio Adults Ages 19-64 (1998-2017)



Although these summary estimates are valuable in and of themselves, the data gathered from the focus groups allow for a richer understanding of Appalachians' experiences with Medicaid. In particular, many focus group participants were grateful for Medicaid coverage, emphasizing that having health insurance kept them alive, and that they could take their children "to the doctor when they are sick, instead of the emergency room." Many pointed out that without coverage, the emergency room or foregoing care altogether were their only options. Notably, some working focus group participants mentioned that Medicaid allowed them to get coverage for their spouse and children since they were ineligible for employer-sponsored coverage.

> I think it's a blessing. I had a brain aneurysm and my bill was $240,000, and my helicopter bill was 10 grand. Medicaid covered that so I am very blessed to have that.
>
> Knowing that you have a guaranteed insurance, you get good care. When you don't have insurance or insurance, [the care is] not that good. Then you have hospitals and doctors not wanting to provide the best care for you. So I think it's a lot easier having it. You are more willing to go to a doctor when you have insurance, versus not having it.

than do design-based survey estimates, especially in the presence of small samples within particular counties and more so when these areal responses contain a zero direct estimate of the outcome of interest (Li et al., 2017).

Primary Health Insurance Coverage Type

Statewide, 51.2% of insured adults ages 19-64 had employer-sponsored coverage, followed by 19.2% with Medicaid but no Medicare as their primary coverage. In contrast, 43.9% of Ohio's children (ages 0-18) were primarily covered by employer-sponsored coverage, with another 42.9% primarily covered by Medicaid but no Medicare (see Table 2).

Table 2: Respondents' Insurance Coverage Type – Adults (Ages 19-64) versus Children (Ages 0-18) (2017)

Coverage Type	Adult % (Std. Error)	Child % (Std. Error)
Employer-sponsored Coverage	51.2 (0.4)	43.9 (0.6)
Medicare, no Medicaid	4.6 (0.2)	0.7 (0.1)
Medicaid, no Medicare	19.2 (0.3)	42.9 (0.6)
Medicaid and Medicare	2.8 (0.1)	1.7 (0.2)
Other directly purchased	4.1 (0.2)	2.5 (0.2)
Unknown	3.9 (0.2)	2.5 (0.2)
Other	2.6 (0.1)	1.5 (0.1)
Exchange Coverage	2.2 (0.1)	0.9 (0.1)
Uninsured	9.3 (0.2)	3.3 (0.2)

Source: 2017 Ohio Medicaid Assessment Survey

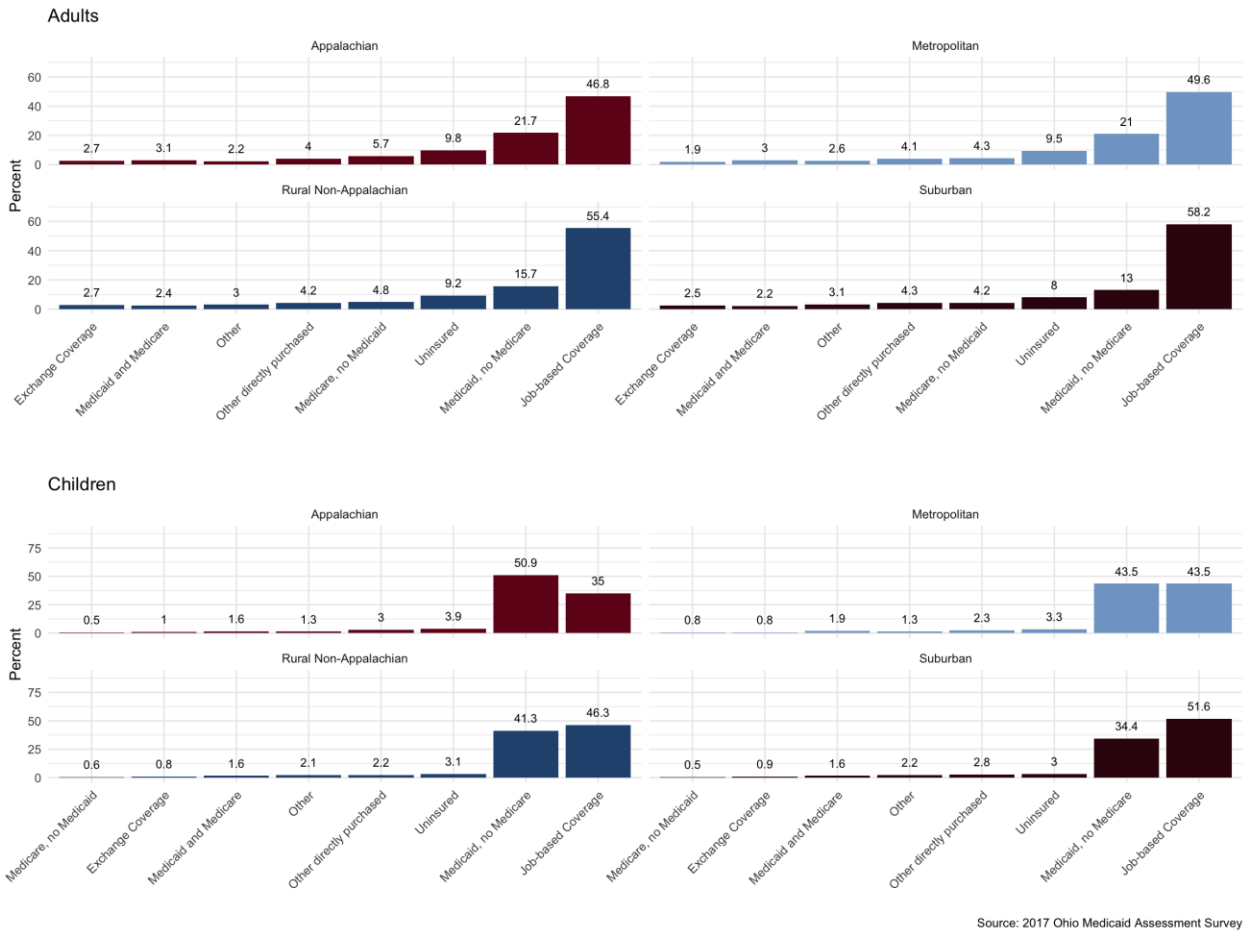
Although this pattern of the majority of adults ages 19-64 being covered by employer-sponsored coverage also applied across the four county types, Appalachia had the second-lowest rate of employer-sponsored coverage (49.6%). The metropolitan counties had the lowest rate at 46.8%, followed by the rural non-Appalachian counties at 55.4% and the suburban counties at 58.2%.[12]

For Appalachian children, however, employer-sponsored coverage (35%) was well below Medicaid but no Medicare (50.9%). In the metropolitan counties, the Medicaid but no Medicare rate equaled the employer-sponsored coverage rate at 43.5%, but employer-sponsored coverage dominated Medicaid no Medicare coverage in the other two county types. Specifically, in rural non-Appalachia 46.3% of children had employer-sponsored coverage versus 41.3% with Medicaid no Medicare, whereas suburban counties had 51.6% children with employer-sponsored coverage versus 34.4% with Medicaid no Medicare coverage (see Figure 11; also Appendix Table A6(b)). Independent of coverage type, statewide, a majority of respondents indicated that their plans covered dental (79%), vision (77.2%) and prescriptions

[12] See Appendix A, Table A6(a).

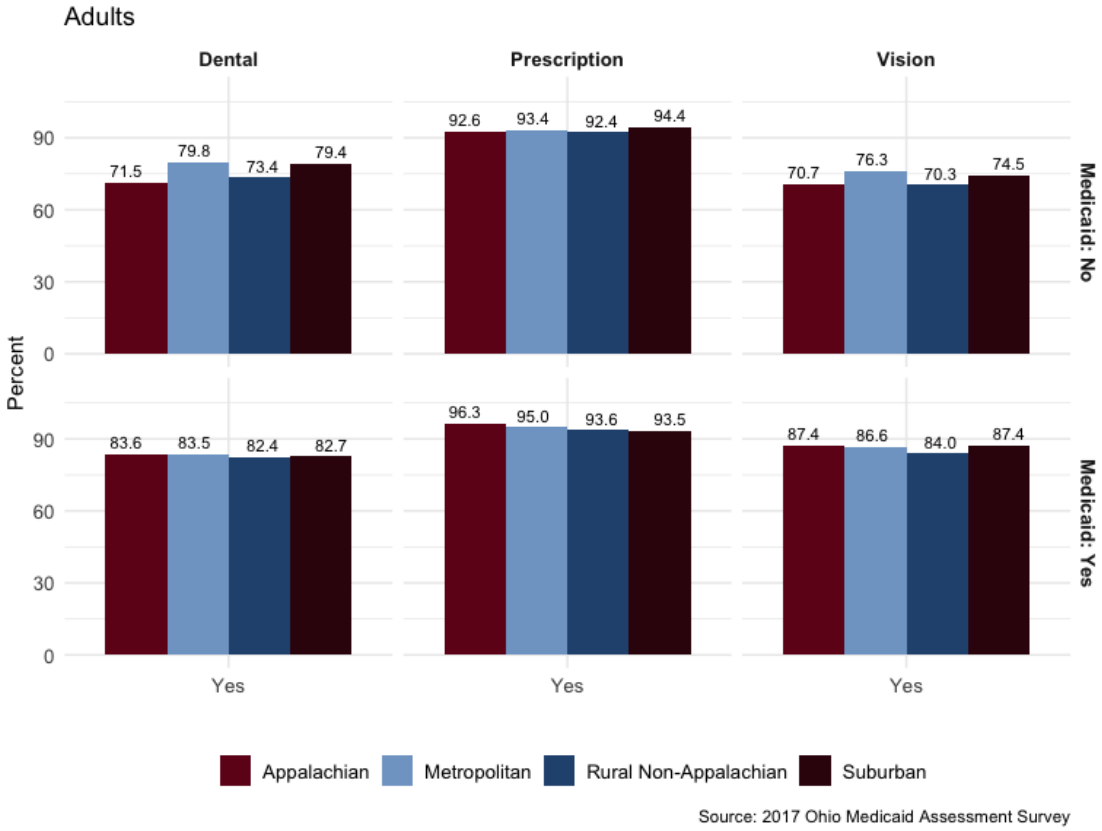
(93.7%), respectively.[13] Although prescription coverage rates seemed to be very similar across counties, Appalachia and rural non-Appalachia did show relatively lower dental and vision coverage (see Appendix A, Figure A4). Looking at coverage by Medicaid status and region showed adult (ages 19-64) Medicaid recipients in the metropolitan counties and Appalachia to be more likely to have dental and/or, prescription and/or, vision coverage (see the bottom panel of Figure 12) than the non-Medicaid group.

Figure 11: Distribution of Respondents' Insurance Coverage Type, by County Type and Population Group (percentages) (2017)



[13] See Appendix A, Table A7.

Figure 12: Distribution of Dental, Prescription, and Vision Coverage for Adult (19-64 years old) Respondents by County Type and Medicaid Status (percentages) (2017)



Duration of Coverage

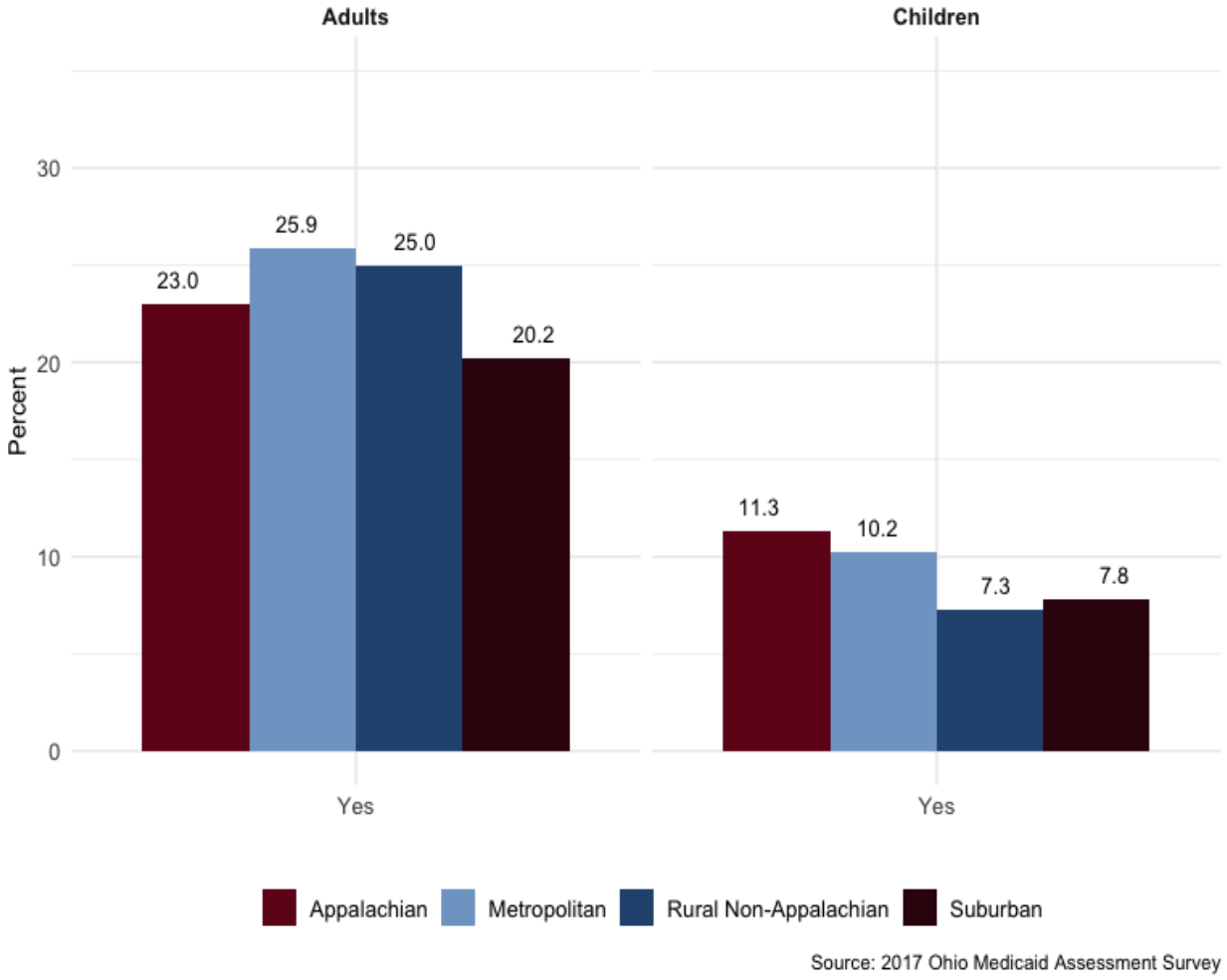
On average, more than 79% of the adult respondents (ages 19-64; both statewide and per county type) indicated that their current coverage had been in place for more than 1 year.[14]

Almost 10% of the children, but a sizable 24.5% of adult ages 19-64, indicated that they had been out of coverage in the last 12 months.[15] Some variation was evident across county types, with a larger percentage of Appalachian (11.3%) and metropolitan (10.2%) children reported to have been without coverage in the last 12 months than children in the rural non-Appalachian (7.3%) and suburban (7.8%) county types (see Figure 13).

[14] See Appendix A, Table A8, Figure A5(a), .and Figure A5(b).

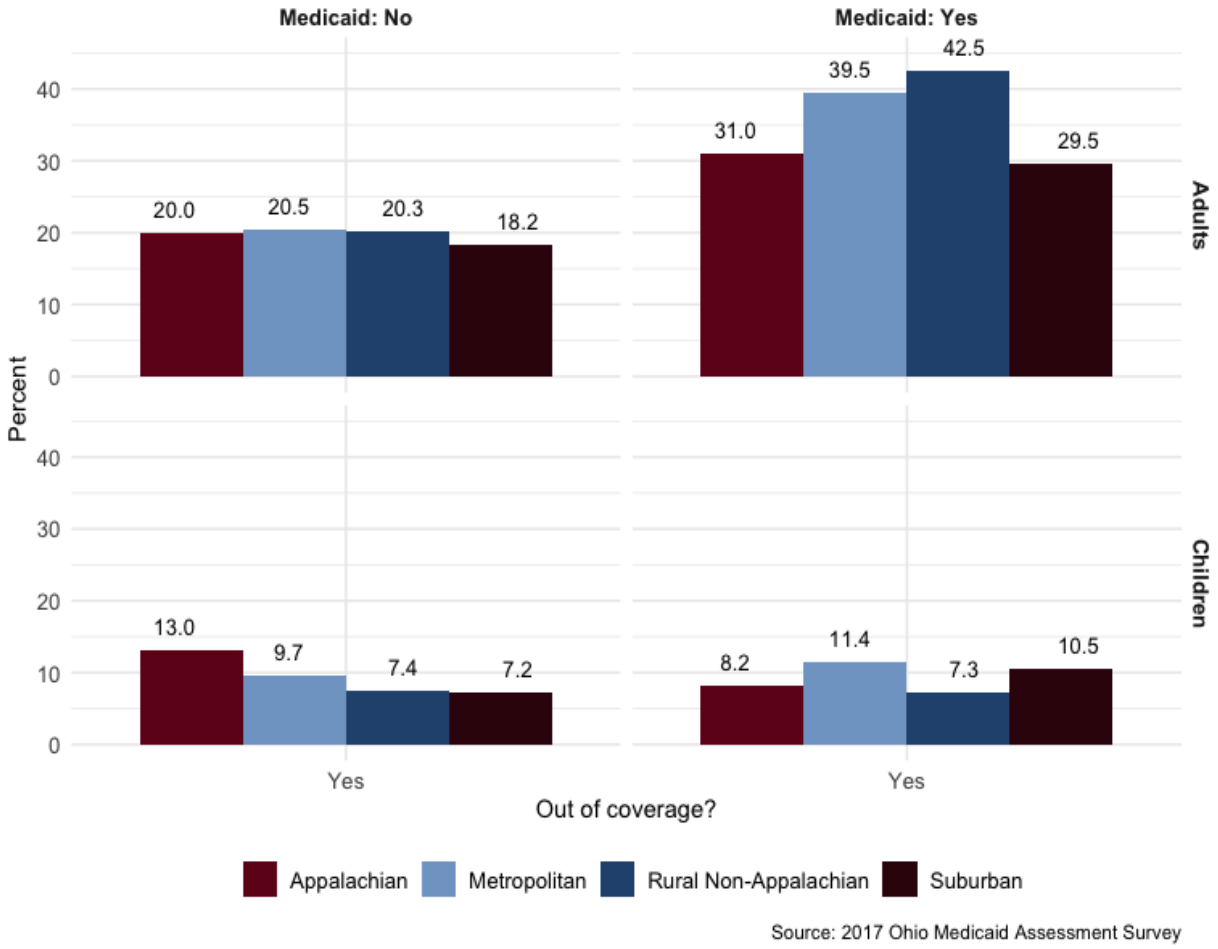
[15] See Appendix A ,Table A9.

Figure 11: Percentage of Respondents Reporting they were Ever out of Coverage in the Last 12 Months, by County Type and Population Group (2017)



Adults in the suburban counties (20.2%) were least likely to have been without coverage in the last 12 months than adults in the metropolitan (25.9%), Appalachian (23%), and rural non-Appalachian (25%) counties (see Figure 13). Once we adjust for Medicaid status, 31% of Appalachian adults and 8.2% of Appalachian children reported having been without coverage in the last 12 months (see Figure 14). Notably, adult Medicaid respondents were far more likely to have been without coverage in the last 12 months than the non-Medicaid group in all four county types.

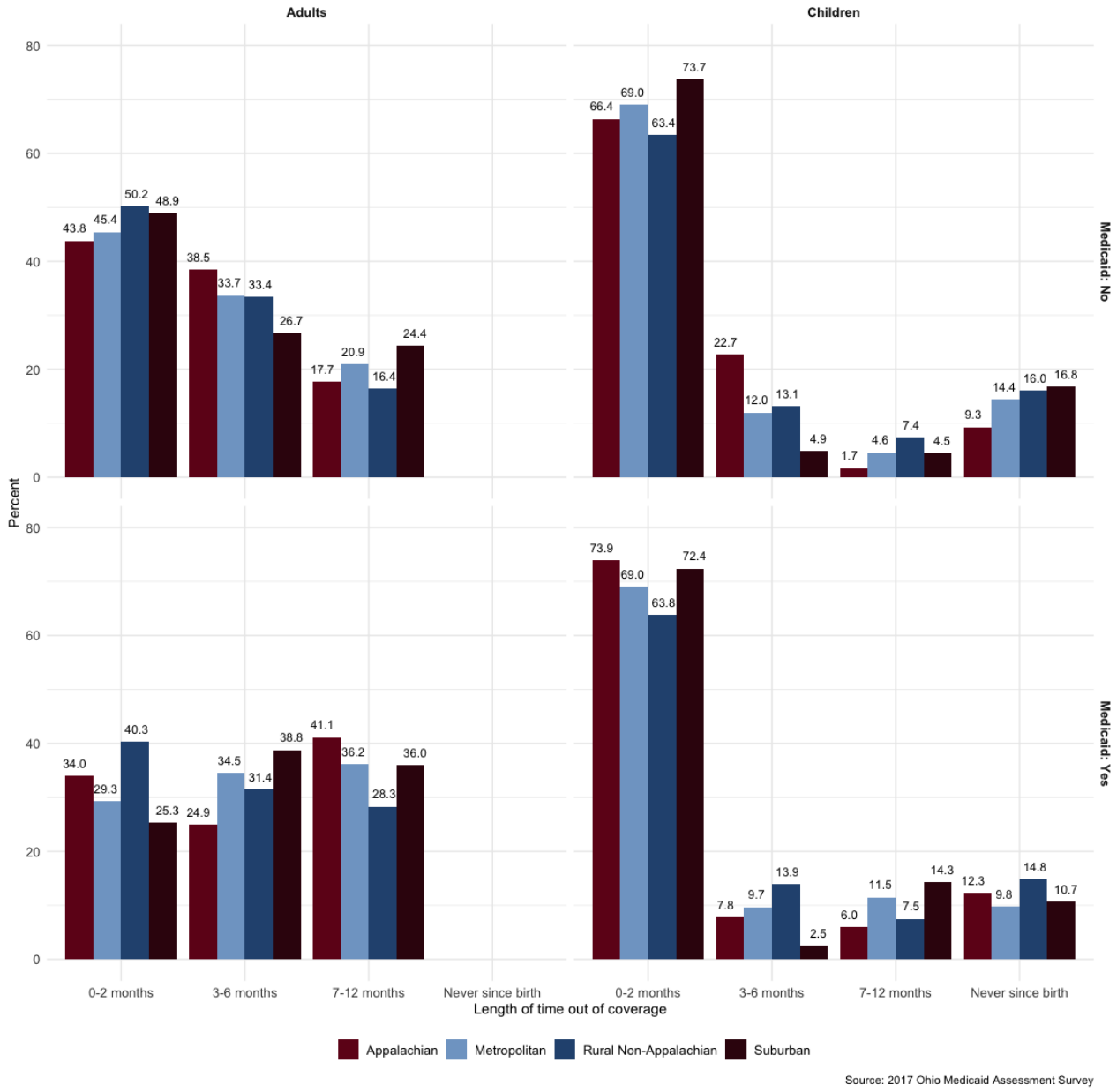
Figure 14: Percentage of Respondents Reporting they were Ever out of Coverage in Last 12 Months, by County Type, Medicaid Status, and Population Group (2017)



In the duration of time they were without coverage, children and adults were, on average, most likely to be without coverage for 0-2 months.[16] Once Medicaid status and county type were accounted for, Appalachian children with Medicaid were the most likely (73.9%) to have been out of coverage for 0-2 months (see Figure 15), while Appalachian adults with Medicaid were the most likely (41.1%) to have been without coverage for 7-12 months.

[16] See Appendix A, Table A10(a).

Figure 15: Percentage of Respondents Reporting the Length of Time they were Without Coverage (by Group, Medicaid Status, and County Type) (2017)



Many focus group participants said they had been long-term Medicaid enrollees, and a number of them said they first received Medicaid when they were pregnant with their first child, or started on Medicaid when they had a physical or mental health emergency. A few also mentioned enrolling after passage of the Affordable Care Act and Ohio Medicaid Expansion. Enrollment, however, was not always easy, some said. A few had to complete the paperwork many times, call repeatedly, or endure long wait times either at the local Job and Family

Services office or while on hold over the phone. Several also indicated they were unhappy with losing coverage if their income rose or they failed to submit the qualifying paperwork on time.

> They cut me off for some unknown reason, so that drives me crazy. I called and reapplied; I did the whole phone interview. So I had an appointment today at 11:00; they called me yesterday and said, "It's not going through." Called welfare, they said "you're eligible." I called back, then they run my number, I'm not eligible. I wish there was an easier way to contact them and get it resolved- quickly!
>
> My shop closed, so I lost my job a year ago now. A little more than a year. And then my last day was in March, at the end of March. My daughter broke her arm at the beginning of May, so we had no insurance. When I went there since I wasn't working, and my husband was only working part time, they said I was qualified too. I have three kids.

Employer/Union Coverage

A large majority—over 76% of the respondents statewide and at minimum 73% within a given county type—also reported that their employer/union offered health insurance coverage[17] but Medicaid recipients in Appalachia were the least likely (47.2%) to have access to these plans (see Table 3).

Table 3: Percentage of Adult (19-64 years old) Respondents Indicating their Employer/Union does (or does not) Offer a Health Insurance Plan (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Offers Plan?	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	No	22.6 (1.2)	19.6 (0.6)	22.1 (1.1)	19.6 (1.0)
No	Yes	77.4 (1.1)	80.4 (0.6)	77.9 (1.1)	80.4 (1.0)
Yes	No	52.8 (1.7)	44.4 (3.2)	42.9 (3.6)	51.2 (3.8)
Yes	Yes	47.2 (1.7)	55.6 (3.2)	57.1 (3.6)	48.8 (3.8)

Source: 2017 Ohio Medicaid Assessment Survey

[17] See Appendix A, Tables A11 and A12.

Some 88% or more (statewide and regionally) indicated that their employer/union plan tended to cover the employee and her/his family.[18] Most (88%) also indicated they were currently eligible for the plan offered by their employer/union.[19] When asked why they were not participating in the plan offered, at least 78% of nonparticipants mentioned access to other health insurance coverage as the reason.[20] However, Appalachian Medicaid recipients not participating in employer-sponsored plans were by far the most likely (81.5%) to cite costs as a reason for declining to participate in these plans (see Table 4). Most (79%) statewide and at least 79% per region also worked 30 hours or more per week; fewer, though yet a majority (60% on average) of Medicaid recipients worked 30 or more hours per week.[21]

Table 4: Percentage of Adult (19-64 years old) Respondents Indicating they are Not Participating in Employer-sponsored Plans Because of Cost (by Medicaid Status and County Type) (2017)

Medicaid	County Type	No % (Std. Error)	Yes % (Std. Error)
No	Appalachian	54.8 (3.7)	45.2 (3.7)
Yes	Appalachian	18.5 (5.5)	81.5 (5.5)
No	Metropolitan	60.0 (1.9)	40.0 (1.9)
Yes	Metropolitan	32.0 (3.3)	68.0 (3.3)
No	Rural non-Appalachian	62.0 (3.1)	38.0 (3.1)
Yes	Rural non-Appalachian	25.8 (6.1)	74.2 (6.1)
No	Suburban	61.7 (3.1)	38.3 (3.1)
Yes	Suburban	24.5 (7.3)	75.5 (7.3)

Source: 2017 Ohio Medicaid Assessment Survey

[18] See Appendix A, Tables A13 and A14(a); see also A14(b) for breakdowns by Medicaid status and Region.

[19] See Appendix A, Tables A15, A16(a), and A16(b).

[20] See Appendix A, Tables A17 through A20(b).

[21] See Appendix A, Tables A21, A22(a) and A22(b).

Access to and Quality of Care

Statewide, 98.3% of children and 91% of adults (19-64 years old) appeared to have one place they went when they were sick or in need of health advice, and similarly generally high levels of access were evident for all county types regardless of Medicaid status.[22]

Some 76% of adults and 86% of children also appeared to have one or more persons they thought of as a personal doctor/nurse, with few differences by Medicaid status and/or county type.[23] On average, 87% of adults and 95% of children in Ohio had seen this service provider within 12 months before being interviewed, and this generally high level of service provider visits holds across county types as well.[24] However, breaking down the county type variation by Medicaid status highlighted an interesting finding: Appalachian children on Medicaid were the most likely (97.3%) to have seen their medical service provider in the last 12 months (see Figure 16).[25]

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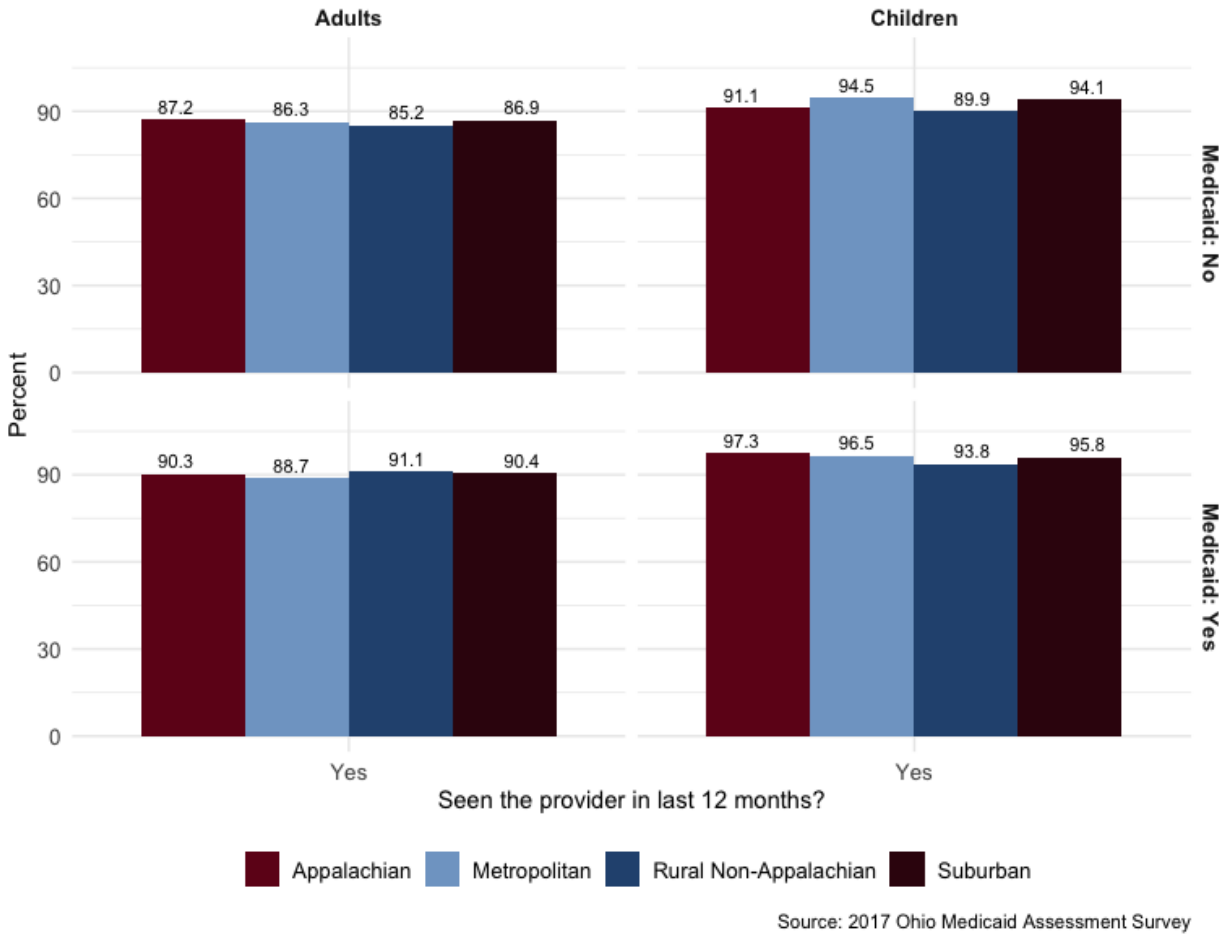
[22] See Appendix A, Tables A27, A28(a) and A28(b).

[23] See Appendix A, Tables A29, A30(a) and A30(b).

[24] See Appendix A, Tables A31 and A32(a).

[25] Replacing Medicaid status by low-income status does not alter this finding; 96.7% of low-income Appalachian children (the largest share of any group by far) report having seen their provider in last 12 months.

Figure 16: Percentage of Respondents indicating they (or their Child) had seen a Health Care Provider in the last 12 months (by Medicaid Status and OMAS County Type Classifications) (2017)



Medical Assistance Needs Outside Regular Hours

On average, one in five (25.6%) Ohio adults ages 19-64 reported needing medical assistance during evenings, weekends, or holidays, and this ratio held across county types as well.[26] However, in each county type, a larger segment, at least 35% on average, of the Medicaid group expressed this need (see Table 5).[27]

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[26] See Appendix A, Tables A33 and A34(a).

[27] Replacing Medicaid by income groups does not alter this pattern; low-income adult respondents are more likely to report a need for medical assistance outside of normal business hours.

Table 5: Percentage of Adult (19-64 years old) Respondents Indicating in the past 12 Months they Needed Medical Assistance for Themselves During Evenings, Weekends, or Holidays (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No % (Std. Error)	Yes % (Std. Error)
No	Appalachian	75.8 (1.3)	24.2 (1.3)
Yes	Appalachian	63.8 (2.4)	36.2 (2.4)
No	Metropolitan	77.5 (0.7)	22.5 (0.7)
Yes	Metropolitan	63.1 (1.4)	36.9 (1.4)
No	Rural non-Appalachian	79.6 (1.2)	20.4 (1.2)
Yes	Rural non-Appalachian	65.3 (2.8)	34.7 (2.8)
No	Suburban	76.8 (1.2)	23.2 (1.2)
Yes	Suburban	61.8 (3.1)	38.2 (3.1)

Source: 2017 Ohio Medicaid Assessment Survey

Unfortunately, however, one in three adults and a similar proportion of children reported an inability to get the medical assistance they needed on weekends, holidays, or in the evening hours, beyond routine work week office hours (see Table 6).

Table 6: Percentage of Respondents Indicating they (or their Child) Received Needed Medical Assistance during Evenings, Weekends, or Holidays (Adults are 19-64 years old) (2017)

Group	Response	Percentage (Std. Err.)
Adults	Never	32.8 (1.0)
Adults	Sometimes	17.9 (0.8)
Adults	Usually	19.0 (0.8)
Adults	Always	30.3 (1.0)
Children	Never	33.8 (0.7)
Children	Sometimes	14.8 (0.6)
Children	Usually	16.0 (0.5)
Children	Always	35.4 (0.7)

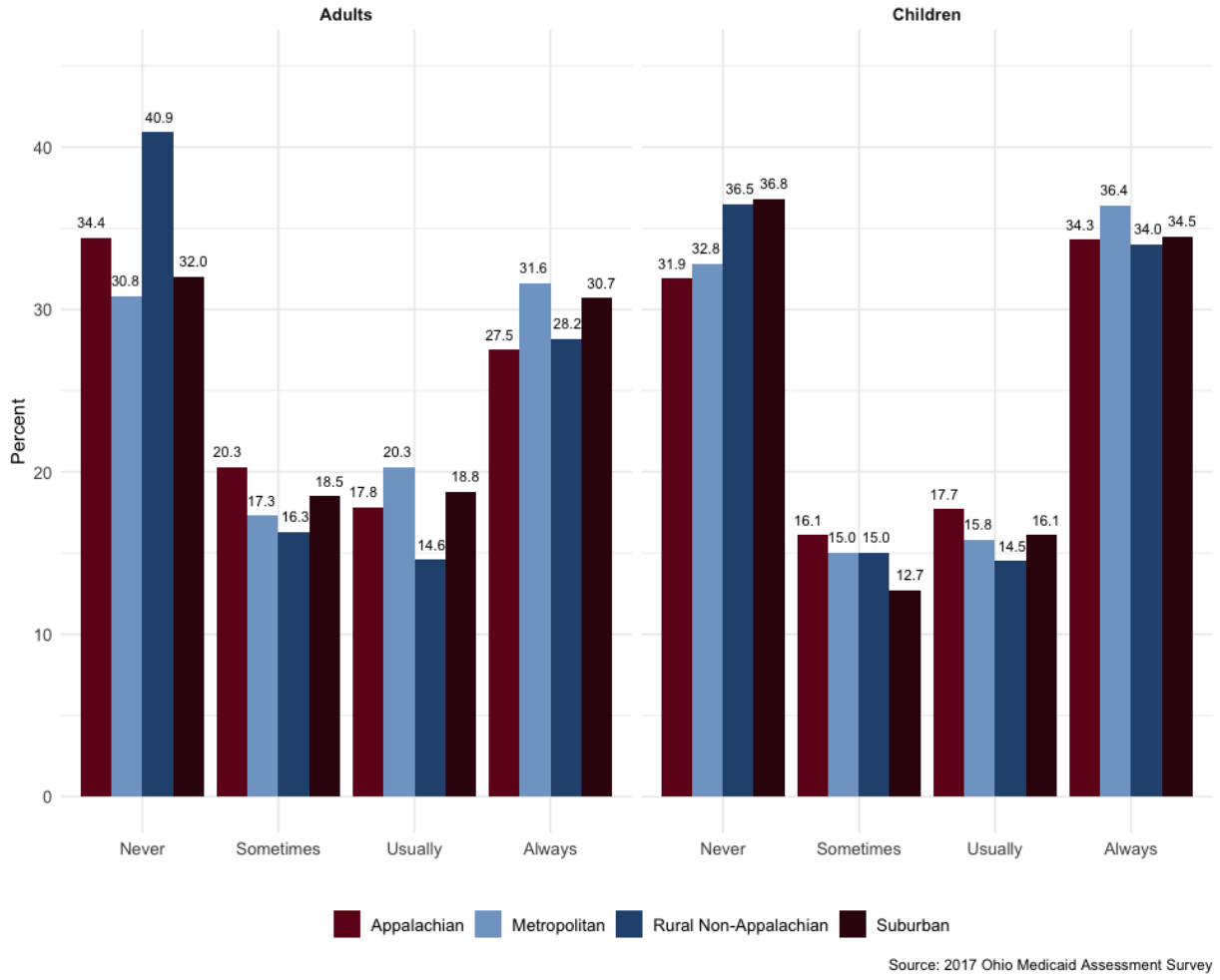
Source: 2017 Ohio Medicaid Assessment Survey

County type differences were visible as well: in both Appalachian and rural non-Appalachian counties, about 34.4% and 40.9% of adults reported an inability to receive this needed care, in contrast to 30.8% and 32% of metropolitan and suburban adults, respectively (see Figure 17). However, it is noteworthy that Appalachian (27.4%) and suburban (27.1%) adults covered by

Medicaid were the least likely to say they never received needed care beyond routine work week office hours (not shown in Table 6 or Figure 17).[28]

In the case of children, however, suburban residents were most likely to indicate that their child did not receive a needed service while Appalachians were the least likely to report that their child did not receive a needed service (see Figure 17). For children covered by Medicaid, however, a different pattern emerged: rural non-Appalachian children were the most likely to say they never received needed care (39.4%), followed by suburban (35.1%), Appalachian (32.3%), and metropolitan (29.4%) children (not shown in Table 6 or Figure 17).[29]

Figure 17: Percentage of Respondents Indicating they (or their Child) Received Needed Medical Assistance during Evenings, Weekends, or Holidays (by County Type and Population Group; Adults are 19-64 years old) (2017)



[28] See Appendix A, Table A35(b).

[29] See Appendix A, Table A35(c).

This positive experience with access for Appalachian adults on Medicaid was also reflected in the focus groups, but the experiences were tied to place. Specifically, two factors seemed to shape their experience with access to care: (1) Availability of health providers in their area who accepted patients with Medicaid insurance; and (2) the managed care organizations (MCOs) and their network of providers. For example, some focus group participants reported ready access to primary care providers and other specialty care (i.e., vision, behavioral health, and dentistry) and that their MCO typically covered their chosen provider. However, in other areas, participants perceived few providers willing to accept Medicaid and hence expressed great difficulty and frustration getting the care they or their family members needed. Additionally, a few said that some providers accepted Medicaid insurance through one of the MCOs but not others.

> "I know certain areas are, like certain types of Medicaid, are better in certain areas. Like when I lived in Dayton, Molina, there's a lot of [providers] up there that take Molina. But when I lived in Meigs County, nobody down there takes Molina. Everybody there takes CareSource."
>
> "I don't know how it all works, but essentially they [MCOs] are exactly the same if you look at the benefits they provide…But must not really be if some doctors accept one and not the other."
>
> "Like I said, there's some places, like that doctor I was seeing and absolutely loved her, and then all of a sudden I couldn't see her anymore because Molina wasn't paying…It's *hard*. It just makes you not want to go to a doctor and I don't unless I absolutely have to."
>
> "I was literally going to New Lex[ington] for dental, for me and my kids. Concord for my doctor because there was no doctor in town taking me and my kids."

Another source of confusion and frustration for participants involved the differences between MCOs, including who was on the MCO provider panel, what services were covered, and which pharmacies accepted their MCO. Some participants indicated that they changed MCOs so that they could remain with their health care provider. Other participants talked about different services and medications that were covered by one MCO but not by another. Participants also believed that each MCO had its own practice regarding approvals for specific tests and procedures.

> "It would be helpful to have a directory for the different programs, the providers. You think these providers are changing all the time. Now I take Molina, now I'm taking Care Source, now I'm taking Paramount. So I mean if there was a better way too of keeping track of who is taking what and where you can go to get."

Contacting Provider and Receiving Appointments

Both statewide and across county types, on average 47% to 48% of adults reported contacting their provider to set up an appointment for an illness, injury, or condition for which they needed care right away. Most (34% at minimum) received an appointment for the same day or had to wait a day at most.[30]

A larger majority of Medicaid enrollees reported similar contacts, varying from a high of 62.6% for rural non-Appalachians to a low of 59% for metropolitan residents (see Table 7). Disaggregating the regional wait times by Medicaid status revealed rural non-Appalachian (29.5%) and Appalachian Medicaid recipients (29.2%) to be the most likely to receive a same day appointment, followed by suburban (27.9%) and metropolitan residents (27.5%).[31]

Table 7: Percentage of Adult (19-64 years old) Respondents Indicating in the past 12 months they Contacted Health Care Provider's Office to get an Appointment for an Illness, Injury, or Condition that they Needed Care for Right Away (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No % (Std. Error)	Yes % (Std. Error)
No	Appalachian	54.9 (1.5)	45.1 (1.5)
Yes	Appalachian	39.8 (2.4)	60.2 (2.4)
No	Metropolitan	54.0 (0.8)	46.0 (0.8)
Yes	Metropolitan	41.0 (1.5)	59.0 (1.5)
No	Rural non-Appalachian	54.5 (1.5)	45.5 (1.5)
Yes	Rural non-Appalachian	37.4 (2.9)	62.6 (2.9)
No	Suburban	54.9 (1.4)	45.1 (1.4)
Yes	Suburban	40.4 (3.1)	59.6 (3.1)

Source: 2017 Ohio Medicaid Assessment Survey

Quality of Care Provided and Care Source

Statewide and across county types, providers appeared to always spend enough time with both adults (67.2%) and children (77.6%). Appalachians were just as likely to report that their provider "always" spent enough time as were residents of other regions, but this report observed some difference within Appalachia by Medicaid status: only 65.7% of the Medicaid

[30] See Appendix A, Tables A36(a), A36(b), A37(a) and A37(b)

[31] See Appendix A, Table A37(c).

group responded "always," versus 71.6% of the non-Medicaid group.[32] Interestingly, these adult cross-Medicaid differences were about 1% in the other three county types. This report found larger differences across county types for children, where Medicaid recipients reported "always" at least 3% less than non-Medicaid recipients.[33]

The survey participants reported the preponderance of providers always explained medical issues in an easy-to-understand manner, and this was evident for both adults (78.3%) and children (84.8%) statewide and across regions.[34] However, accounting for Medicaid status showed that Medicaid recipients within each county type were slightly less likely to respond "always" relative to the non-Medicaid group; among adults the differences were less than 2%, except for suburban residents: 74.7% of the Medicaid group responded affirmatively versus 80.6% of the non-Medicaid group.[35]

In terms of where they sought care, approximately 90.5% of children and 76.4% of adults in Ohio usually go for care at a doctor's office/health center (see Table 8). This generally high rate of seeking care at a doctor's office or health center held true across county types (see Table 9). Some 12.2% of Appalachian residents sought care at urgent care facilities.

Table 8: Distribution of Place Where Respondents (or their Children) usually go for Care (by Population Group; Adults are 19-64 years old) (2017)

Group	Response	Percentage (Std. Error)
Adults	A doctor's office or health center	76.4 (0.4)
Adults	Hospital ER	7.9 (0.2)
Adults	Some other place	5.6 (0.2)
Adults	Urgent care	10.0 (0.3)
Children	A doctor's office or health center	90.5 (0.4)
Children	Hospital ER	3.0 (0.2)
Children	Some other place	2.1 (0.2)
Children	Urgent care	4.4 (0.3)

Source: 2017 Ohio Medicaid Assessment Survey

[32] See Appendix A, Table A38(a) and A38(b).

[33] See Appendix A, Tables A38(c) and A38(d).

[34] See Appendix A, Tables A39(a) and A39(b).

[35] See Appendix A, Tables A39(c) and A39(d).

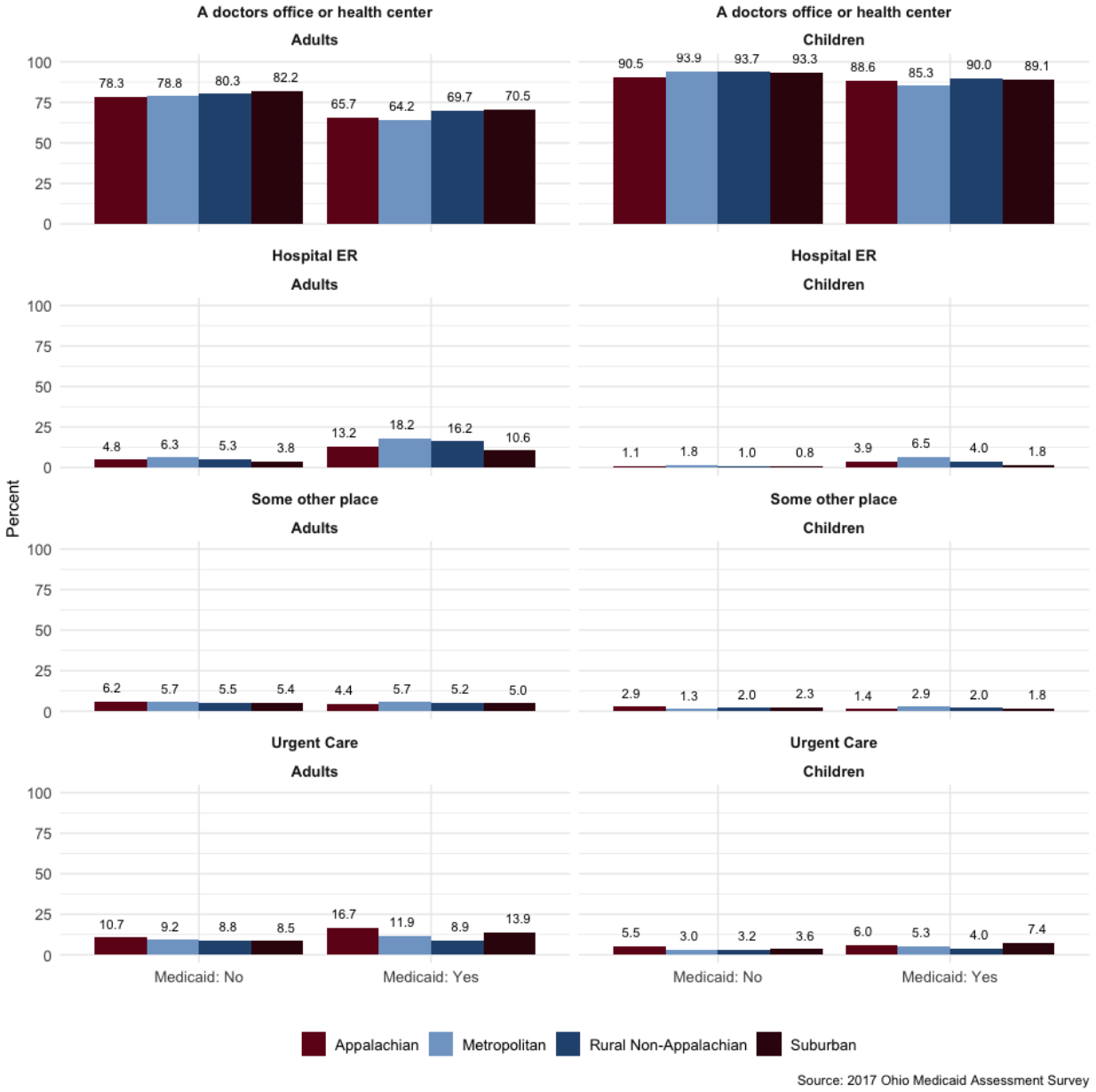
Table 9: Distribution of Place Where Respondents (or their Children) usually go for Care (by Population Group and County Type; Adults are 19-64 years old) (2017)

Group	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
Adults	A doctor's office or health center	75.1 (0.9)	75.2 (0.5)	78.5 (0.9)	80.4 (0.8)
Adults	Hospital ER	6.9 (0.5)	9.2 (0.3)	7.3 (0.6)	4.9 (0.5)
Adults	Some other place	5.7 (0.5)	5.7 (0.3)	5.4 (0.5)	5.4 (0.5)
Adults	Urgent care	12.2 (0.7)	9.9 (0.3)	8.8 (0.6)	9.3 (0.6)
Children	A doctor's office or health center	89.5 (1.0)	90.0 (0.5)	92.1 (0.8)	91.8 (0.9)
Children	Hospital ER	2.6 (0.5)	3.9 (0.4)	2.3 (0.4)	1.2 (0.3)
Children	Some other place	2.1 (0.4)	2.0 (0.2)	2.0 (0.4)	2.1 (0.4)
Children	Urgent care	5.8 (0.7)	4.1 (0.3)	3.6 (0.5)	4.9 (0.7)

Source: 2017 Ohio Medicaid Assessment Survey

Medicaid status revealed some interesting variations. In particular, and as is evident from Figure 18, Medicaid recipients within each region were less likely to usually go to a doctor's office or health center. For example, only 65.7% of adult Appalachian Medicaid recipients reported going to a doctor's office or health center versus 78.3% of non-Medicaid Appalachians. Smaller but similar differences exist for children in each county type by Medicaid status.

Figure 18: Percentage of Place Where Respondents (or their Children) usually go for Care (by Population Group, Medicaid Status, and County Type; Adults are 19-64 years old) (2017)

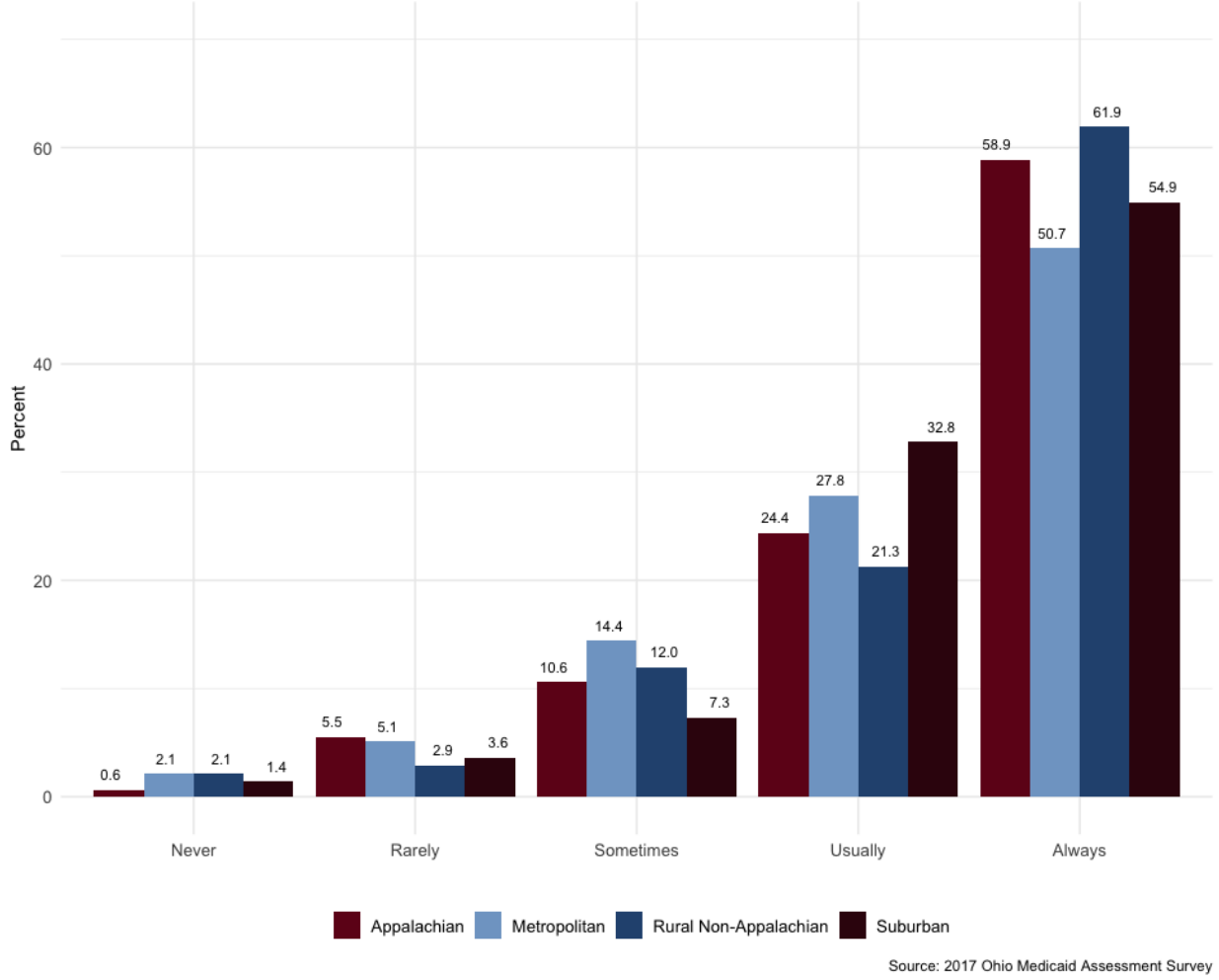


Almost 28% of adults reported that they needed professional help coordinating care or referrals among different health care providers and services that their child/children needed; this need was greatest in the metropolitan (29.3%) and Appalachian counties (28.3%).[36] Eighty-one point three percent of Ohio adults reported being able to receive this coordination for their child

[36] See Appendix A, Table A41(a)

either "usually" or "always".[37] Regionally, however, some differences were evident (see Figure 19).

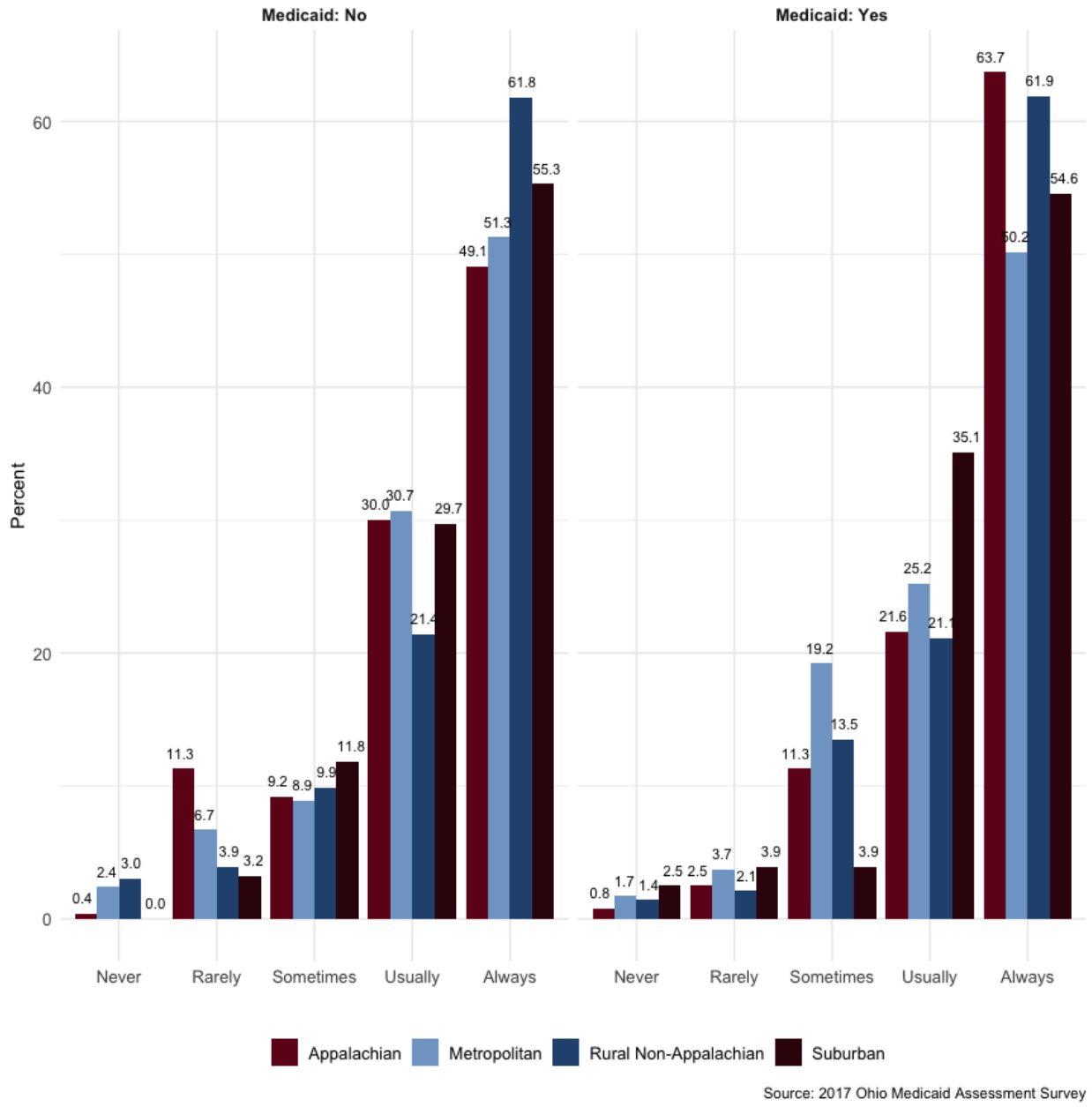
Figure 19: Percentage of Respondents Indicating How Often they Received Desired Help with Arranging/Coordinating Care for their Child (by County Type) (2017)



Some 63.7% of Appalachian Medicaid recipients were likely to say that they always managed to receive needed help coordinating/arranging care for their child care versus 49.1% of the Appalachian non-Medicaid group (see Figure 20). A sizable gap was evident across regions in the non-Medicaid groups who responded "never" or "rarely": 11.7% of Appalachians versus 4.1% of metropolitan residents, 6.9% of rural non-Appalachians, and 3.2% of suburban residents.

[37] See Appendix A, Table A41(a), A41(b), A41(c), and Table A42(a).

Figure 20: Percentage of Respondents Indicating How Often they Received Desired Help with Arranging/Coordinating Care for their Child (by Medicaid Status and County Type) (2017)



Inability to get dental care for children did not appear to pose significant challenges. Fewer than 5% of respondents statewide indicated that they had trouble getting needed dental care for their child, although Appalachian residents were the most likely to report encountering this difficulty (5.8%).[38] Within each county type, however, Medicaid recipients were far more likely

[38] See Appendix A, Tables A43(a) and A43(b).

to have difficulty accessing dental care than the non-Medicaid group in the same county type (see Table 10).

Table 10: Percentage of Respondents Indicating they were Unable to Get Dental Care for their Child (by Medicaid Status and Region) (2017)

Medicaid	County Type	No % (Std. Error)	Yes % (Std. Error)
No	Appalachian	97.4 (0.6)	2.6 (0.6)
Yes	Appalachian	91.2 1.6)	8.8 (1.6)
No	Metropolitan	97.4 (0.4)	2.6 (0.4)
Yes	Metropolitan	92.6 (0.8)	7.4 (0.8)
No	Rural non-Appalachian	97.4 (0.6)	2.6 (0.6)
Yes	Rural non-Appalachian	91.9 (1.5)	8.1 (1.5)
No	Suburban	98.3 (0.4)	1.7 (0.4)
Yes	Suburban	94.8 (1.2)	5.2 (1.2)

Source: 2017 Ohio Medicaid Assessment Survey

Utilization of Health Care

Not including overnight hospital stays, visits to hospital emergency rooms, home visits, or telephone calls, almost 18.7% of Ohio's adults and 8.4% of children had either never seen a doctor/health care professional or done so more than last 12 months.[39] Across county types, Medicaid recipients, both adults and children were more likely than non-Medicaid recipients to report having seen a doctor or other health care professional within the last 12 months (see Tables 11 and 12).

[39] See Appendix A, Table A44(a) and Table A44(b).

Table 11: Percentage Distribution of Adult (19-64 years old) Respondents' Last Visit (not Including Overnight Hospital Stays, Visits to Hospital Emergency Rooms, Home Visits, or Telephone Calls) to a Doctor or Other Health Care Profession (by OMAS County Type Classifications and Medicaid Status) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Never	0.2 (0.1)	0.2 (0.1)	0.1 (0.1)	0.2 (0.1)
Yes	Never	0.1 (0.1)	0.4 (0.2)	0.2 (0.2)	0.1 (0.1)
No	More than 12 months ago	20.7 (0.9)	19.1 (0.5)	20.6 (0.9)	19.7 (0.9)
Yes	More than 12 months ago	15.1 (1.4)	14.1 (0.8)	12.6 (1.5)	16.2 (1.9)
No	Within last 12 months	79.1 (0.9)	80.7 (0.5)	79.2 (0.9)	80.1 (0.9)
Yes	Within last 12 months	84.8 (1.4)	85.6 (0.8)	87.2 (1.5)	83.7 (1.9)

Source: 2017 Ohio Medicaid Assessment Survey

Table 12: Percentage Distribution of Respondents Reporting their Child's Last Visit (not Including Overnight Hospital Stays, Visits to Hospital Emergency Rooms, Home Visits, or Telephone Calls) to a Doctor or Other Health Care Profession (by OMAS County Type Classifications and Medicaid Status) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Never	0.2 (0.1)	0.2 (0.1)	0.2 (0.1)	0.2 (0.2)
Yes	Never	0.0 (0.0)	0.2 (0.1)	0.1 (0.1)	0.3 (0.2)
No	More than 12 months ago	10.0 (1.4)	8.6 (0.6)	12.3 (1.4)	7.0 (1.4)
Yes	More than 12 months ago	6.8 (1.2)	7.1 (0.7)	7.6 (1.3)	7.3 (1.5)
No	Within last 12 months	89.8 (1.4)	91.2 (0.6)	87.5 (1.4)	92.8 (1.0)
Yes	Within last 12 months	93.2 (1.2)	92.8 (0.7)	92.3 (1.3)	92.3 (1.5)

Source: 2017 Ohio Medicaid Assessment Survey

Frequency of routine check-ups revealed worrisome patterns: almost 22.5% of adults reported they had never gone for a routine check-up or had not gone within the past 12 months.[40] Appalachians fared slightly better than Ohioans in the other county types on this metric—78.7% of Appalachian adults had a routine check-up visit in the last 12 months versus 77.7% of metropolitan, 75.9% of rural non-Appalachian, and 76.8% of suburban residents.[41] However, within each county type, Medicaid recipients reported they were less likely than non-Medicaid recipients to have gone for a routine health check-up in the last 12 months (Table 13).

Table 13: Percentage Distribution of Adult (19-64 years old) Respondents' Last Visit to a Doctor for a Routine Check-Up (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Never	0.2 (0.1)	0.3 (0.1)	0.5 (0.2)	0.5 (0.2)
Yes	Never	0.4 (0.2)	0.2 (0.1)	0.2 (0.2)	0.4 (0.2)
No	More than 12 months ago	19.9 (1.1)	21.9 (0.6)	23.6 (1.1)	22.1 (1.0)
Yes	More than 12 months ago	24.3 (1.8)	22.5 (1.0)	24.3 (2.1)	25.7 (2.4)
No	Within last 12 months	79.9 (1.1)	77.9 (0.6)	75.9 (1.1)	77.4 (1.0)
Yes	Within last 12 months	75.3 (1.9)	77.2 (1.1)	75.5 (2.1)	73.9 (2.4)

Source: 2017 Ohio Medicaid Assessment Survey

Analysis of well-baby check-ups (i.e., a general check-up when the child was neither sick nor injured) revealed that almost 9% of children in Ohio did not have a well-baby check-up.[42] More rural non-Appalachians (12.7%) and Appalachians (11.6%) had never gone for a well-baby check-up versus suburban (8.1%) and metropolitan (7.3%) residents.[43] Within each county type, children in the Medicaid group were also marginally more likely to have never had a well-baby check-up than their non-Medicaid peers.[44]

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[40] See Appendix A, Table A45(a).

[41] See Appendix A, Table A45(b).

[42] See Appendix A, Table A46(a).

[43] See Appendix A, Table A46(b).

[44] See Appendix A, Table A46(c).

Analysis of visits for adults' and children's dental check-ups and vision check-ups showed more infrequent check-ups for adults in particular. Specifically, a sizable 37.5% of adults ages 19-64 and 21.6% of children either have never had a dental check-up or had one more than 12 months ago.[45] Appalachian adults and children were also the least likely to indicate they had a dental check-up within the last 12 months; the Medicaid versus non-Medicaid gap was much greater for children than for adults (see Tables 14 and 15).[46]

Table 14: Frequency Distribution of Adult (19-64 years old) Respondents Dental Check-ups (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Never	0.4 (0.1)	0.7 (0.1)	0.3 (0.1)	0.5 (0.1)
Yes	Never	0.9 (0.3)	0.7 (0.2)	0.9 (0.4)	0.5 (0.2)
No	More than 12 months ago	39.2 (1.1)	32.7 (0.6)	36.6 (1.1)	30.2 (1.0)
Yes	More than 12 months ago	52.2 (1.9)	45.0 (1.1)	51.3 (2.3)	50.9 (2.5)
No	Within last 12 months	60.4 (1.1)	66.6 (0.6)	63.0 (1.1)	69.4 (1.0)
Yes	Within last 12 months	46.9 (1.9)	54.3 (1.1)	47.8 (2.3)	48.6 (2.5)

Source: 2017 Ohio Medicaid Assessment Survey

[45] See Appendix A, Table A47(a).

[46] See Appendix A, Table A47(b).

Table 15: Frequency Distribution of Children's Dental Check-ups Reported by Respondents (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Child does not have teeth	0.0 (0.0)	0.2 (0.1)	0.6 (0.3)	0.3 (0.2)
Yes	Child does not have teeth	0.0 (0.0)	0.4 (0.2)	0.1 (0.1)	0.0 (0.0)
No	Never	6.9 (1.0)	6.7 (0.6)	7.7 (1.0)	7.2 (1.1)
Yes	Never	11.7 (1.7)	10.1 (0.9)	7.9 (1.4)	12.0 (2.0)
No	More than 12 months ago	13.7 (1.6)	9.1 (0.7)	11.9 (1.4)	7.5 (1.1)
Yes	More than 12 months ago	19.7 (1.9)	16.6 (1.1)	18.9 (2.3)	15.1 (2.0)
No	Within last 12 months	79.5 (1.8)	84.1 (0.9)	79.8 (1.7)	85.0 (1.5)
Yes	Within last 12 months	68.5 (2.3)	72.9 (1.3)	73.0 (2.5)	72.9 (2.6)

Source: 2017 Ohio Medicaid Assessment Survey

Statewide, vision checks were more infrequent: only 47.1% of adults and 66.4% of children had their eyes checked within the last 12 months.[47] Although Appalachian adults were the least likely (44.6%), children in these counties were the most likely (67.6%) to have had a vision check within the last 12 months.[48] Across county types, while adults covered by Medicaid were less likely to have had a vision check within the preceding 12 months, children covered by Medicaid were marginally more likely to have had their eyes checked.[49]

Again, the focus group data are useful here to illuminate grounded realities. Participants in most of the focus groups, for example, cited access to dental care as a difficulty. Common challenges encountered included a lack of nearby providers and providers who accepted patients from one MCO but not from others. Additionally, some services were not covered, such as the use of general anesthesia, braces, and types of caps. Focus group participants spoke

[47] See Appendix A, Table A48(a).

[48] See Appendix A, Table A48(b).

[49] See Appendix A, Table A48(c) and A48(d).

about driving long distances to see a dentist. In some areas, obtaining dentures required driving several hours, having teeth pulled, and then not receiving dentures for several months afterward. One notable exception was a dental clinic in Perry County that made dentures on-site and served several nearby counties.

> "We only have one dentist though out here that takes our insurance and he's moved."
>
> "Because if you have Molina Healthcare there's a guy in Conneaut that covers Molina. But if you have Care Source, you'd have to go to Lake County. That's where I go to the dentist. It's confusing and …it's an obstacle for a lot of people to figure out who takes what."
>
> "The only one that we can find that will take Medicaid is in Newark, which I think the last time I timed it was 65 minutes to get there."
>
> "My oldest one, she needs braces. This is working on 4 months of appealing that. They said, "Well you're going to be appealing this for a while. You'll get them but…" Kid has headaches from it. She can hardly eat."
>
> "So, they'll pull your teeth but it could take up to 6 months before they'll make your teeth."

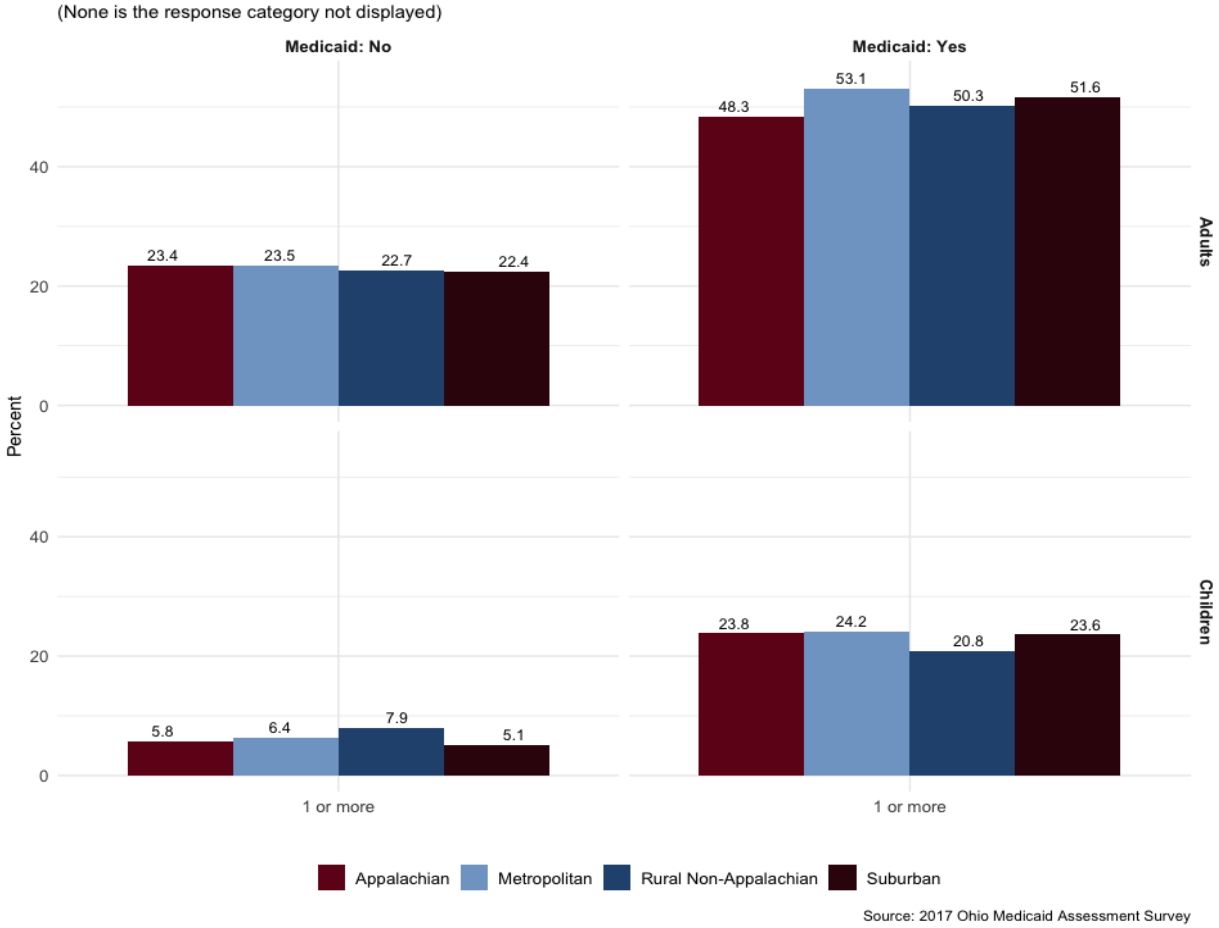
Participants were generally positive about their vision coverage. Comments like "That's easy", and "No problems whatsoever" were typical responses. Some voiced a few concerns about the limitation of eyeglasses every two years, limited frame selections, no coverage for contact lenses, and issues with replacement glasses, especially for children. However, Molina received positive marks in this regard: participants reported that they allowed check-ups and new glasses annually and covered one pair of replacement glasses. Additionally, a couple of participants shared information about more complex optical problems such as insufficient tears and/or cataracts and indicted that their Medicaid coverage covered all of their treatment needs.

Statewide, a sizable 29.4% of adults and 13.9% of children had been admitted to an emergency room in the last 12 months, and roughly the same percentages were evident across county types.[50] However, both children and adults on Medicaid were considerably more likely to have visited an emergency room one or more times in the last 12 months than their non-Medicaid counterparts in the same county type, and the differences were quite substantial. In particular, a Medicaid-receiving adult was twice as likely to have had one or more visits as a non-Medicaid adult, and the ratio was worse for children (see Figure 21). Note, however, this pattern of higher emergency room utilization in the Appalachian and rural non-Appalachian counties may be due to rural versus non-rural differences with the rural counties having (1) more

[50] See Appendix A, Tables A49(a) and A49(b).

occupational hazards and manual labor, (2) a greater lack of comprehensive health care facilities, and (3) reduced hours of operation for health care facilities.[51]

Figure 12: Percentage Distribution of One or More Times an Adult Respondent (19-64 years old) or Child Was in a Hospital Emergency Room within the Last 12 Months (by OMAS County Type Classification, Population Group and Medicaid Status) (2017)



Unmet Health Needs

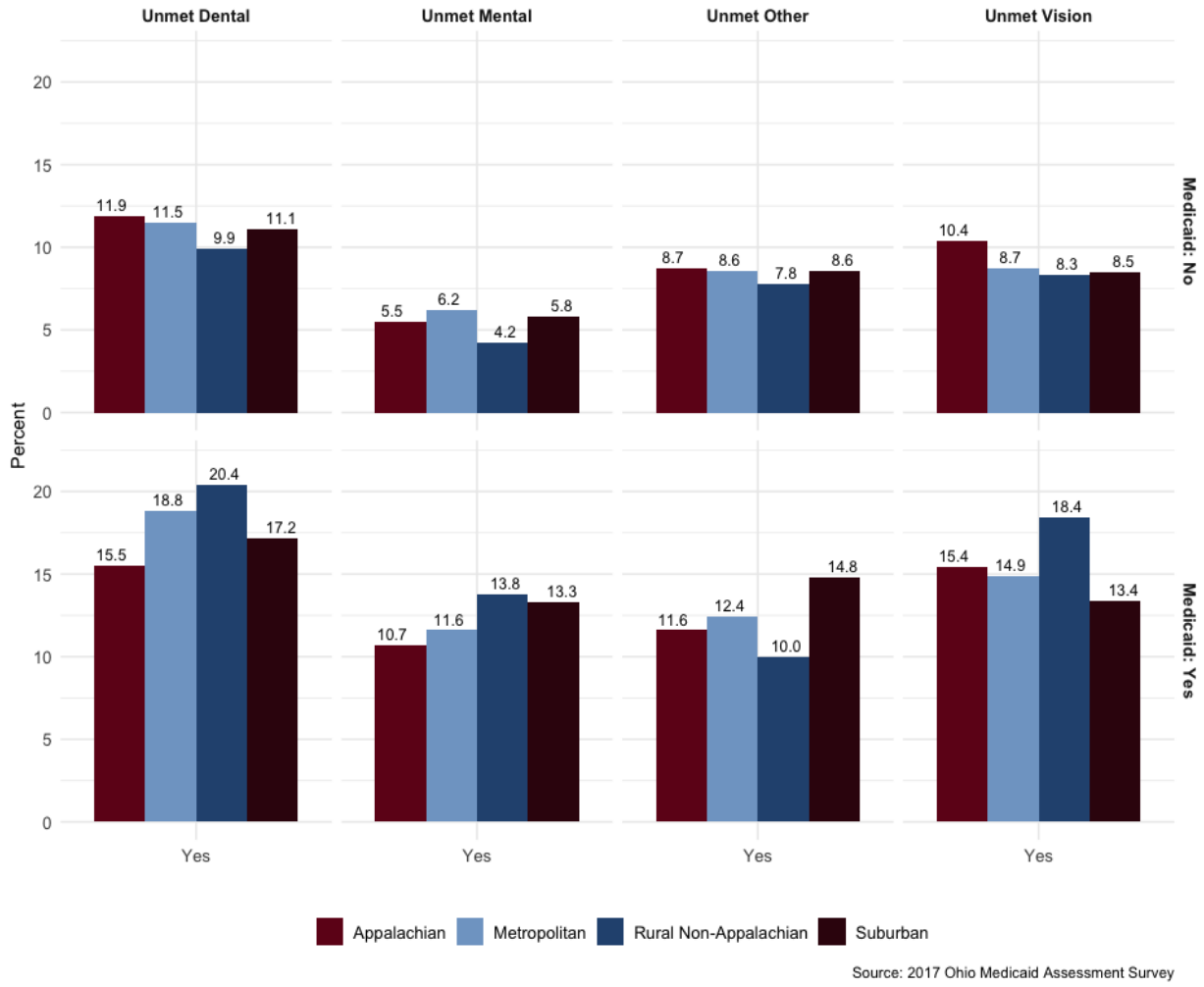
Survey items probed unmet health needs of adults and children, as well as some reasons for unmet needs. Statewide, adults' (ages 19-64) mental needs were often met: only 7.1% of adults indicated they had unmet mental health needs in the last 12 months. Dental needs were unmet most often (12.8%), followed by vision care needs (10.2%), and then other needs (9.2% mentioned needs besides dental, mental, and vision).[52] Although there were negligible

[51] See Chen et al. (2015) and Raven et al. (2016).

[52] See Appendix A, Table 50(A). Replacing Medicaid/non-Medicaid status by income-group status does not alter these findings.

differences in unmet needs by region[53] the more interesting differences were observed across the Medicaid/non-Medicaid groups: Medicaid recipients reported significantly higher levels of unmet needs across the board (see Figure 22).

Figure 22: Percentage Distribution of Adult (19-64 years old) Respondents' Unmet Health Care Needs (by Medicaid Status and OMAS County Type Classifications) (2017)



Almost 28.1% of adults (ages 19-64) indicated that in the last 12 months they delayed/avoided getting needed care, and a majority (55.7%) of those who delayed/avoided getting care identified cost as the reason for the delay.[54] Other barriers referenced were provider unavailability (21.9 %), inability to find a provider (14.8%), and transportation (12.1%). This pattern of responses also held across county types, although a few differences in the reasons

[53] See Appendix A, Table A50(b).

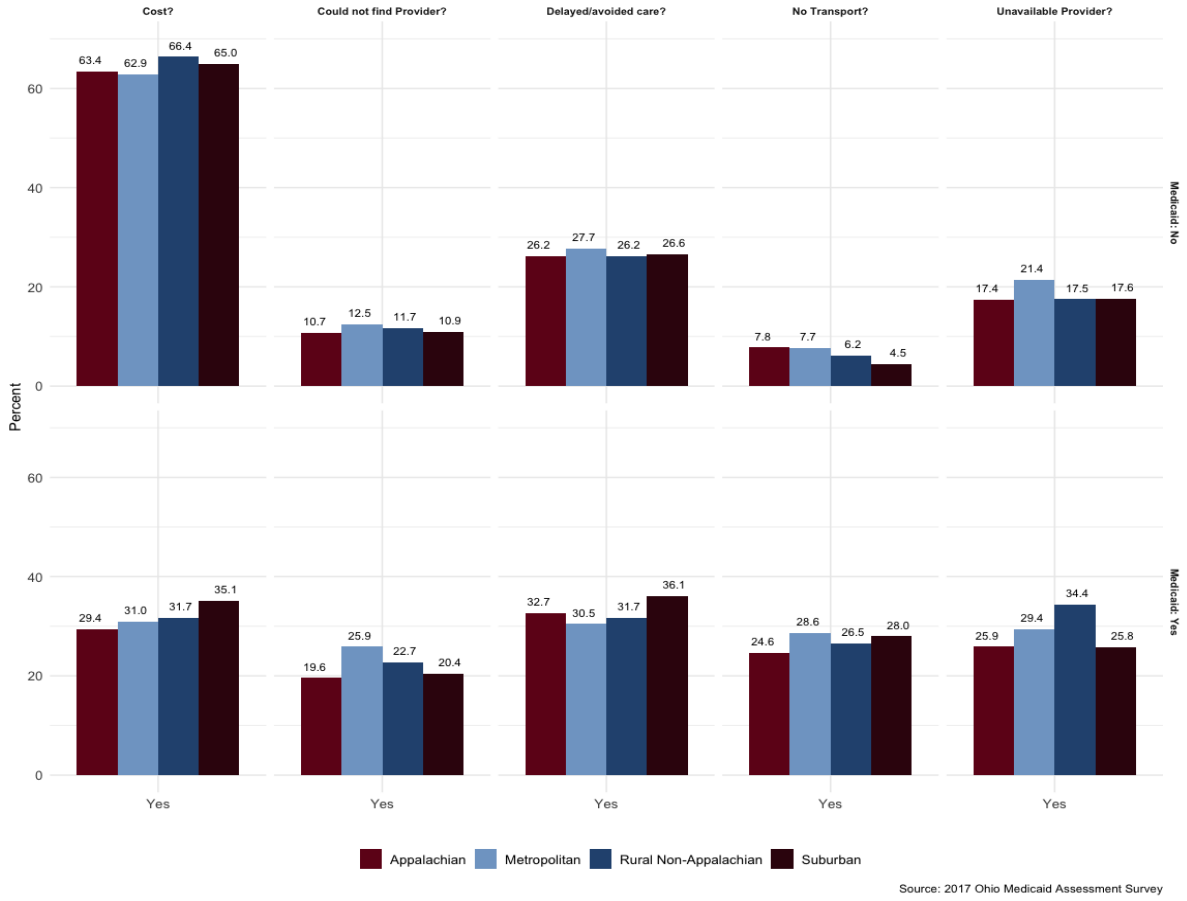
[54] See Appendix A, Table A51(a).

for delayed care are observed.[55] In particular, suburban (59.1%) and rural non-Appalachian (59.1%) respondents listed costs as a barrier more often than did respondents from metropolitan (54.7%) and Appalachian counties (53.5%). Transportation barriers were reported to be an issue slightly more often in metropolitan (13.1%) and Appalachian (12.7%) counties than in rural non-Appalachian (10.5%) and suburban (9.1%) counties.

Disaggregating these responses by Medicaid status revealed important differences. Specifically, the Medicaid group was slightly more likely to delay/avoid getting care than the non-Medicaid group, and this was true across county types: 32.7% of Appalachian Medicaid adults versus 26.1% of Appalachian non-Medicaid, 30.5% of metropolitan Medicaid versus 27.7% of metropolitan non-Medicaid, 31.6% of rural non-Appalachian Medicaid versus 26.1% of rural non-Appalachian non-Medicaid, and 36.1% of suburban Medicaid versus 26.6% of suburban non-Medicaid. Cost was a greater barrier for the non-Medicaid group, but transportation, provider unavailability, and an inability to find a provider were greater barriers for the Medicaid group (see Figure 23).

[55] See Appendix A ,Table A51(b).

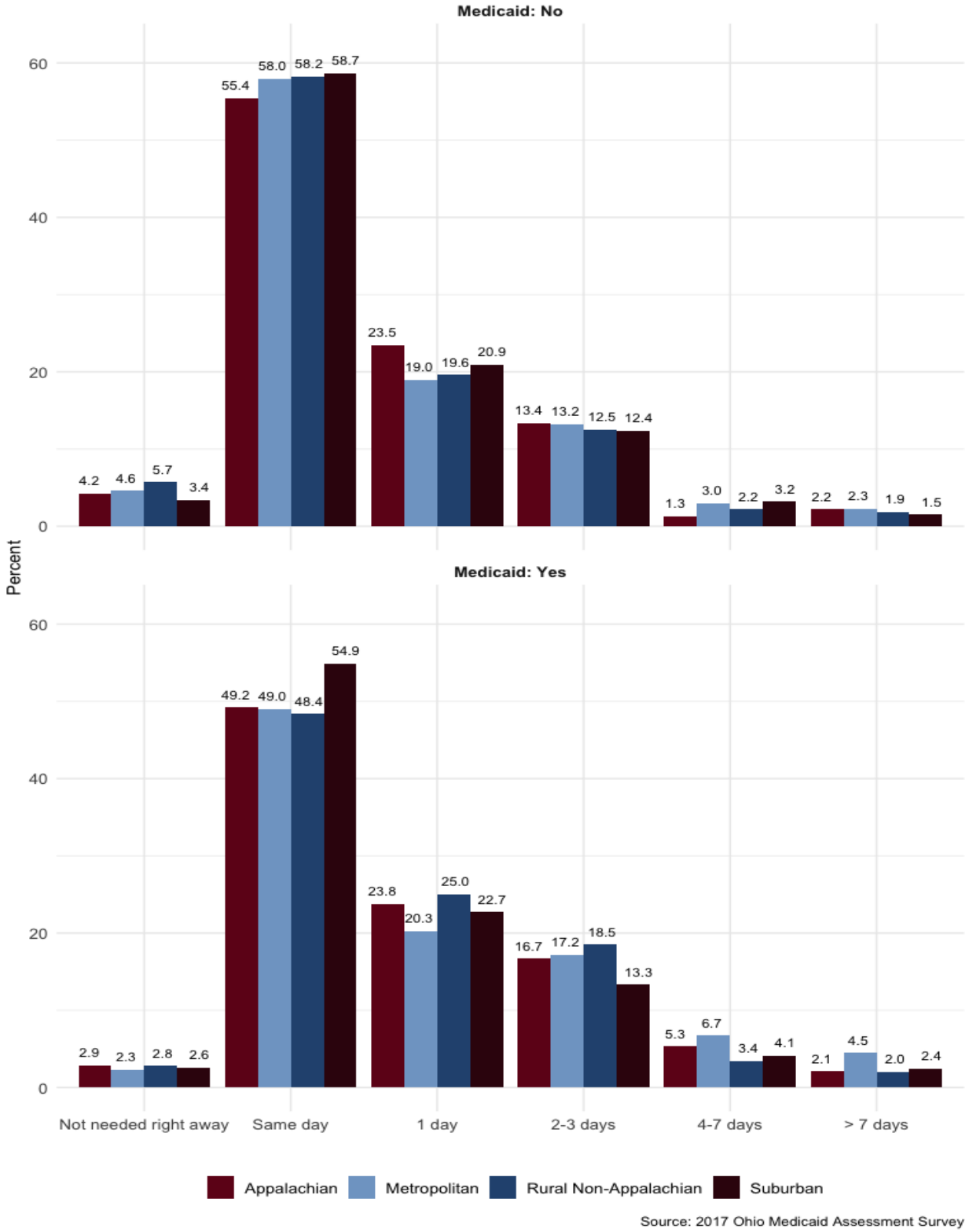
Figure 13: Percentage Distribution of Adult (19-64 years old) Respondents' Reasons for Avoiding/Delaying Getting Care in Last 12 Months (by Medicaid Status and OMAS County Type Classifications) (2017)



Almost 54.4% of adults reported being able to schedule an appointment the same day for their child's health care needs; fewer than 7% indicated they had to wait 4 or more days, and there was negligible regional variation in these rates.[56] Although the Medicaid group appeared to have somewhat differing experiences compared to the non-Medicaid group in each county type, the differences tended to be minimal (see Figure 24).

[56] See Appendix A, Tables A52(a) and A52(b).

Figure 24: Percentage Distribution of Respondent-reported Wait Duration for Child's Appointment When Care was Needed Right Away (by Medicaid Status and OMAS County Type Classifications) (2017)



Financial Hurdles

One in four adults (27.2% of the 19-64 years old) reported that in the last 12 months they had problems paying for medical bills for someone in the family/household.[57] Slightly more Appalachian adults faced this challenge (29.1%) whereas rural non-Appalachian respondents were the least likely to have encountered this difficulty (26.6%). Within each county type, however, Appalachian Medicaid recipients were marginally less likely to say they encountered this challenge (28.3%) than were the non-Medicaid group (29.4%) in Appalachia. However, the Medicaid groups in metropolitan (27.4%) and rural non-Appalachian (30.7%) counties were marginally more likely than the non-Medicaid groups (metropolitan = 26.8% and rural non-Appalachian = 25.7%) to say they had difficulty paying for medical bills.[58] No differences were evident for Medicaid versus non-Medicaid in the suburban counties.

When asked how (and if), over the preceding 12 months, their ability to buy food, pay rent/mortgage, and pay off debt had changed, one in five respondents (21%) indicated that it had become harder to buy food or to pay their rent/mortgage, and one in four (29%) said the same about paying off incurred debt.[59] As Figure 25 conspicuously shows, in comparison to the non-Medicaid group, the Medicaid group was, on average, twice as likely to report increased difficulty in paying for food, paying off incurred debt, and paying the mortgage/rent (18.7%).

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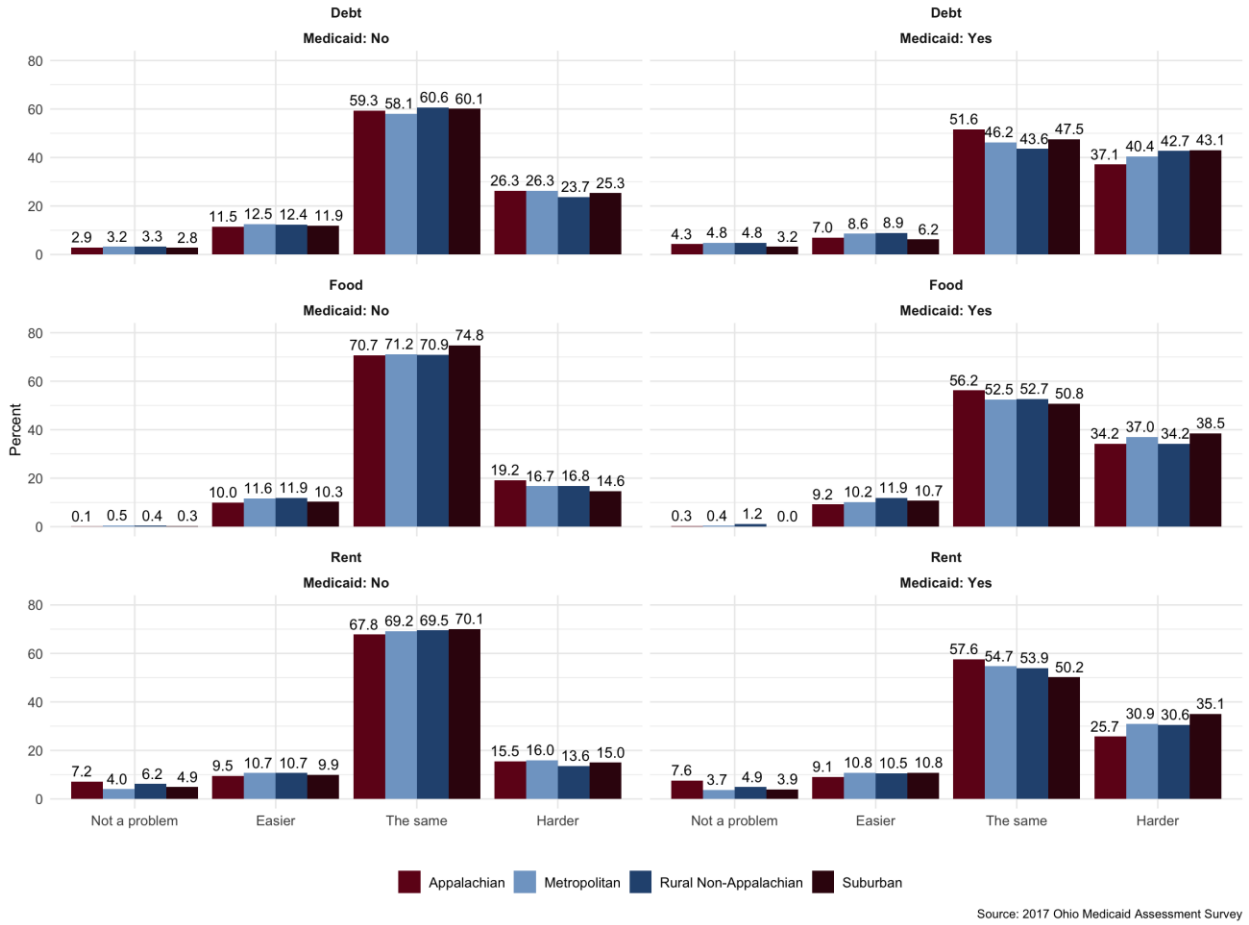
[57] See Appendix A Table A53(a).

[58] See Appendix A Tables A53(b) and A53(c).

[59] See Appendix A, Tables A54(a) and A54(b). Note that there is limited regional variation in this response pattern.

Figure 14: Percentage Distribution of Adult (19-64 years old) Respondents Indicating that in the Past 12 Months Paying for Incurred Debt, Rent, or Food, was Not a Problem, had become Easier, had become Harder, or Stayed the Same (by Medicaid Status and OMAS County Type Classifications)



Health Behaviors

Survey items addressed health behaviors of adults and children, beginning with smoking history. Although one in four (27%) of Ohioans ages 19-64 are current smokers, 31.5% of Appalachian, 26% of metropolitan, 27.2% of rural non-Appalachian, and 25.7% of suburban reported that they currently smoke.[60] The Medicaid groups were, at minimum, twice as likely to be current smokers as non-Medicaid groups (see Figure 26). Appalachians ages 19-64 were also more likely to be daily smokers than their peers in the other county types, and in each county type the Medicaid group was far more likely to smoke daily than the non-Medicaid group.[61]

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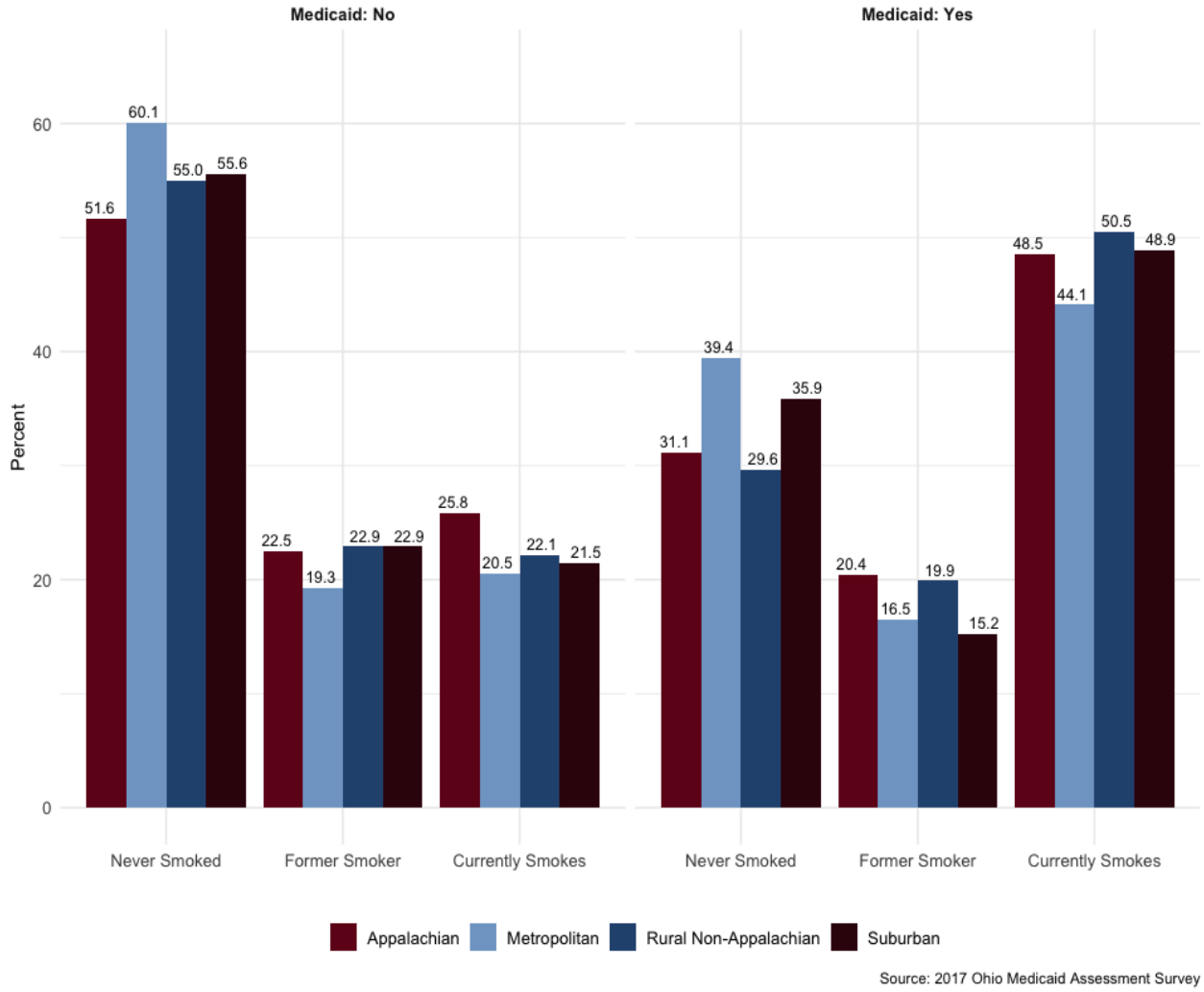
[60] See Appendix A, Tables A56(a), A56(b), A56(c). Replacing Medicaid status with low-income status does not alter this pattern.

[61] See Appendix A, Table A57(b).

Figure 26: Percentage Distribution of Adult (19-64 years old) Respondents' Current Smoking Status (by Medicaid and OMAS County Type Classifications) (2017)



Concerning binge drinking, almost one in four (23.7%) adults ages 19-64 reported binge drinking (i.e., women consuming four or more drinks or men consuming five or more drinks in a single sitting (United States Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance Survey definition) in the past 30 days. Binge drinking was slightly more common in metropolitan (25%) and suburban (22.8%) counties than in Appalachian (21.8%) and rural non-Appalachian (21.6%) counties.[62] Within each county type, the Medicaid groups were noticeably less likely to binge drink than the non-Medicaid group (see Table 16).

[62] See Appendix A, Table A58(a) and A58(b). Replacing Medicaid status with low-income status does not alter the general pattern of these findings.

Table 16: Percentage Distribution of Adult (19-64 years old) Respondents' Binge Drinking in the Past 30 Days (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	No	77.1 (1.0)	73.5 (0. 6)	77.4 (1.0)	75. 8 (1.0)
Yes	No	81.7 (1.5)	80.0 (0.9)	82.9 (1.7)	85.3 (1.8)
No	Yes	22.9 (1.0)	26.5 (0.6)	22.6 (1.0)	24.2 (1.0)
Yes	Yes	18.3 (1.5)	20.0 (0.9)	17.1 (1.7)	14.7 (1.8)

Source: 2017 Ohio Medicaid Assessment Survey

As for children's consumption of 100% fruit juices, almost 33% of adults reported that their child drank no such juices the previous day.[63] However, the Medicaid groups were more likely than the non-Medicaid group to report that the child had two or more glasses (see Table 17).

Table 17: Percentage Distribution of the Number of Glasses/Boxes of 100% Fruit Juice Consumed by Respondents' Child in the Previous Day (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Zero	39.8 (5.2)	40.7 (2.8)	48.2 (5.3)	36.4 (5.1)
Yes	Zero	25.3 (4.5)	24.5 (2.9)	27.3 (5.6)	22.8 (4.8)
No	One	19.9 (4.3)	31.3 (2.7)	21.8 (3.8)	35.6 (5.3)
Yes	One	22.3 (4.1)	23.5 (2.6)	20.2 (4.5)	30.4 (5.8)
No	Two	22.0 (4.5)	16.1 (2.0)	15.1 (3.4)	18.7 (3.5)
Yes	Two	26.1 (4.1)	22.1 (2.6)	31.9 (5.6)	29.2 (5.3)
No	Three or more	18.2 (3.6)	12.0 (1.9)	14.9 (3.0)	9.2 (2.4)
Yes	Three or more	26.3 (3.9)	29.9 (2.8)	20.6 (5.0)	17.6 (4.1)

Source: 2017 Ohio Medicaid Assessment Survey

[63] See Appendix A, Table A59(a) and A59(b). Replacing Medicaid status with low-income status does not alter the pattern of these findings.

In terms of soda/pop consumption, almost one in five Ohio adults (19.2%) reported that their child drank one or more glasses/cans of soda/pop on the previous day. Disaggregated by Medicaid status and by county type, this rate jumped to 31.4% for Appalachian children on Medicaid, 26% for metropolitan children on Medicaid, 29.7% for rural non-Appalachian children on Medicaid children, and 15.6% suburban children on Medicaid (see Table 18).[64] Note the considerably lower rates for the non-Medicaid group in all county types except the suburban counties.

Table 18: Percentage Distribution of the Number of Glasses/Cans of Soda/Pop/other Sweetened Drinks Consumed by Respondents' Child in the Previous Day (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian % (Std. Error)	Metropolitan % (Std. Error)	Rural Non-Appalachian % (Std. Error)	Suburban % (Std. Error)
No	Zero	84.6 (4.2)	90.3 (1.5)	87.9 (4.0)	84.9 (4.3)
Yes	Zero	68.6 (4.7)	74.0 (2.8))	70.3 (5.6)	84.4 (4.0)
No	One	13.4 (4.1)	6.7 (1.3)	8.0 (2.2)	12.4 (4.2)
Yes	One	19.5 (3.8)	12.2 (2.0)	17.7 (4.4)	12.9 (3.7)
No	Two	1.5 (0.9)	1.0 (0.5)	4.2 (3.6)	2.7 (1.6)
Yes	Two	10.0 (3.5)	8.5 (1.7)	8.3 (4.1)	2.7 (1.6)
No	Three or more	0.6 (0.6)	2.0 (0.7)	0.0 (0.0)	0.0 (0.0)
Yes	Three or more	1.9 (1.5)	5.3 (1.6)	3.8 (2.0)	0.0 (0.0)

Source: 2017 Ohio Medicaid Assessment Survey

Health Needs/Challenges

Several survey items probed adults' and children's health challenges, including coping with a developmental disability, a need for prescription pills, and difficulty taking care of oneself. Statewide, almost 28% of children appeared to have a disability, with 19% of children needing/using prescription pills, 18% having trouble learning/understanding/paying attention, and 21% having activity limitations.[65] By county type, the percentage of children with a developmental disability appeared to be slightly higher in both the metropolitan and the Appalachian counties.[66] Relative to the non-Medicaid group, children with Medicaid were

[64] See Appendix A, Tables A60(a) and A60(b). Replacing Medicaid status with low-income status does not alter the general pattern of these patterns.

[65] See Appendix A, Table A61(a).

[66] See Appendix A, Table A62(a).

slightly more likely to have had a developmental disability, need/use of prescription pills, emotional/developmental/behavioral problems, trouble learning/understanding/paying attention, or activity limitations.[67] This pattern of greater health needs of Medicaid-covered children was visible across county types as well.

Ohio's adults appeared to struggle most with the following health-related challenges: (1) needing assistance with domestic tasks (31.3%); (2) needing social/emotional support (29.1%); (3) coping with a disability (23.1%); and (4) requiring help for coordinating health care (19.7%).[68] In comparison to fellow Ohioans in the other county types, Appalachian adults reported a marginally higher need for assistance with day-to-day activities, assistance with domestic care, domestic/personal care/emotional/social assistance, and long-term day-to-day assistance.[69]

As in the case of children in the Medicaid versus non-Medicaid groups, adults covered by Medicaid reported greater health needs than the non-Medicaid group. In particular, Medicaid adults were twice or thrice as likely to have a developmental disability, to need/get special therapy, to need day-to-day assistance, to need/get counseling, to need domestic assistance, or to need social/emotional support.[70]

The focus group data are particularly informative here. Many of the participants said they had sought services for behavioral or mental health issues for themselves or for members of their family for whom they cared, including their own parents, children, or grandchildren. Most indicated they were able to get services within a reasonable time frame, although services were sparse and difficult to access in a few areas. The mental health providers that participants identified were primarily organizations that were part of the community mental health system. Many participants were dealing with significant mental health issues, either personally or with a family member. Some reported challenges with access to psychiatric care or if a family member required hospitalization. Additionally, some had issues because medications were not covered.

> "We have one mental health center. They have a waiting list to see a counselor. You know, so my daughter is 14. She just had a baby in January. I've noticed that she has a little touch of postpartum depression. And I know that, I was 21 when I had my first child. I don't know what it's like to be a teenage mother."

Participants were also queried about their experiences obtaining medication. Many medications required preauthorization, and people perceived that approval times varied a great

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[67] See, for example, Appendix A, Tables A62(c), A62(e), A62(f), A62(h), A62(j), A62(l), A62(n), A62(f2) and A62(i2).

[68] See Appendix A, Table A61(b).

[69] See Appendix A, Tables A62 (q), A62(r), A62(u), A62(v), A62(w), A62(x), and A62(m2).

[70] See Appendix A, Tables A62(b), A62(h), A62(r), A62(t), A62(x), A62(z), A62(h2), and A62(k2).

deal, depending on their MCO. For example, a number of people reported that all of their medications were covered, and they either received their prescriptions by mail or through a local pharmacy. When the MCO required preauthorization, some noted there was a timing issue, in that they had to initiate the preauthorization before their current prescription ran out but not so early in the process that they would be labeled as drug seeking.

Medications for pain, chronic conditions, and for management of a mental disorder were often more challenging to get. One participant wondered why Medicaid would cover her expensive medication for a behavioral health disorder but would not cover her birth control prescriptions.

> "I get mine in little strips, packaged up, morning, afternoon, evening. Mailed to me every month."
>
> "Because sometimes, if you're out of that medicine, and then the preapproval, preauthorization goes farther; then you're sitting there 2 or 3 days without that medicine."
>
> "I have chronic migraines and my doctor would prescribe me a medication and the insurance [didn't] cover it, so [he would say], let's try you on this. Well, then that didn't work. Doctor says, I need you to be on this medicine, so again he had to keep putting in that referral for the insurance to approve it because I had to be on that medication. It was a long process, very long process."

Overall Health Status and Health Conditions

Having explored health behaviors, access, utilization, and quality of care, health insurance coverage, financial hardships, and unmet needs, this report now turns to key outcomes data: the set of health status indicators measured by the survey. This report will begin with the omnibus general health measure: self-reported health status[71] of adults (ages 19-64) and children (ages 0-18).

Overall, 19.7% of adults reported being in poor or fair health, slightly more than the 17% reported in 2015 and the 20% reported in 2015.[72] Children fared better, with 3.8% in poor/fair health, slightly below the 4% reported both in 2015 and in 2012. When these responses were disaggregated by low-income or Group VIII status, however, we saw a positive trend in both groups. For example, the percentage reporting poor/fair health within the low-income group dropped from 37.1% in 2012 to 29.8% in 2017 (see Figure 27). There were few, if any changes in the distribution of the percentage reporting poor/fair health of children over time.

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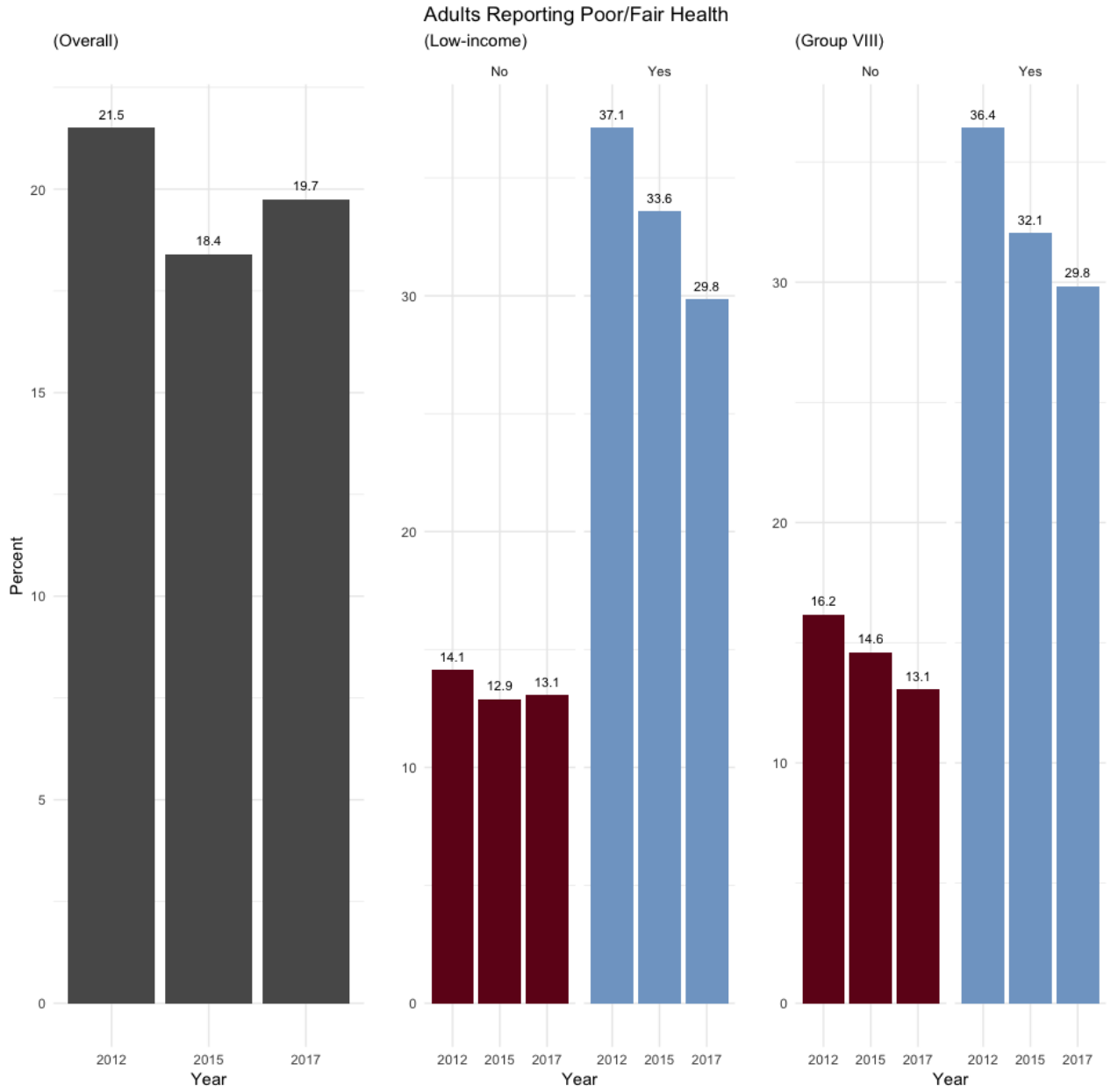
[71] The self-rated health status measure is a valid predictor of general health status and of severe morbidity and mortality. See Idler and Benyamini (1997), Miilunpalo et al. (1997), and Kennedy et al. (1998).

[72] See Appendix A, Table A63(a).

Figure 15: Percentage Distribution of Adult (19-64 years old) Respondents Reporting Poor/Fair Health (by Group and Ohio Medicaid Assessment Survey) (2017)



However, wide variation was observed across county types. In comparison to 16.8% of suburban adults, a sizeable 24.2% of Appalachian adults reported poor/fair health—the highest within any county type by a large margin.[73] Children's health status was very similar across county types. Taking Medicaid status into account showed both adults and children with Medicaid to be far less likely to report poor/fair health than adults and children not on

[73] See Appendix A , Table A63(b).

Medicaid (see Figures 28 and 29), and this pattern held even if Medicaid status was replaced by low-income status.

Figure 16: Percentage Distribution of Adult (19-64 years old) Respondents' Self-Reported Overall Health Status (by Medicaid Status and OMAS County Type Classifications) (2017)

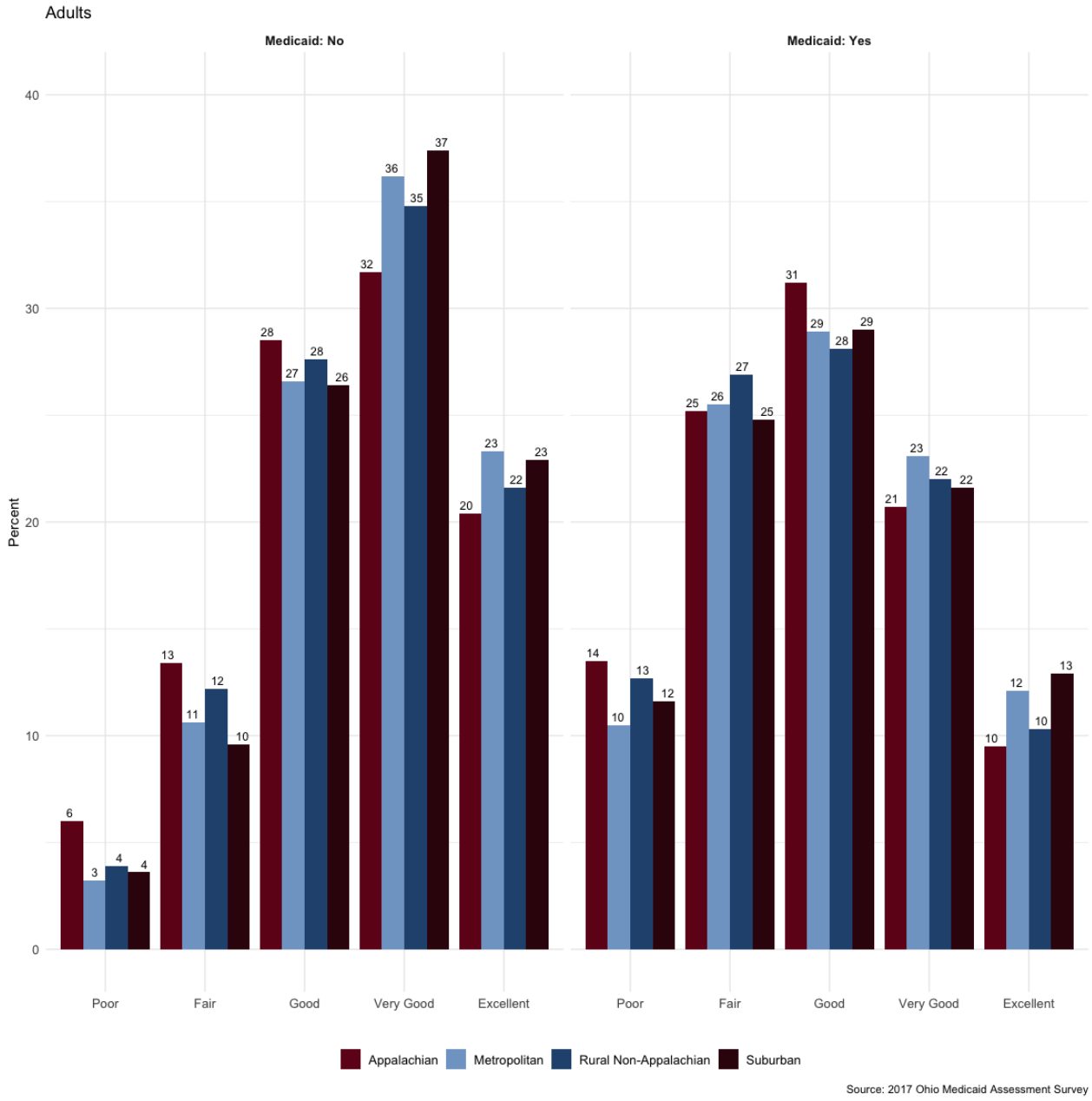
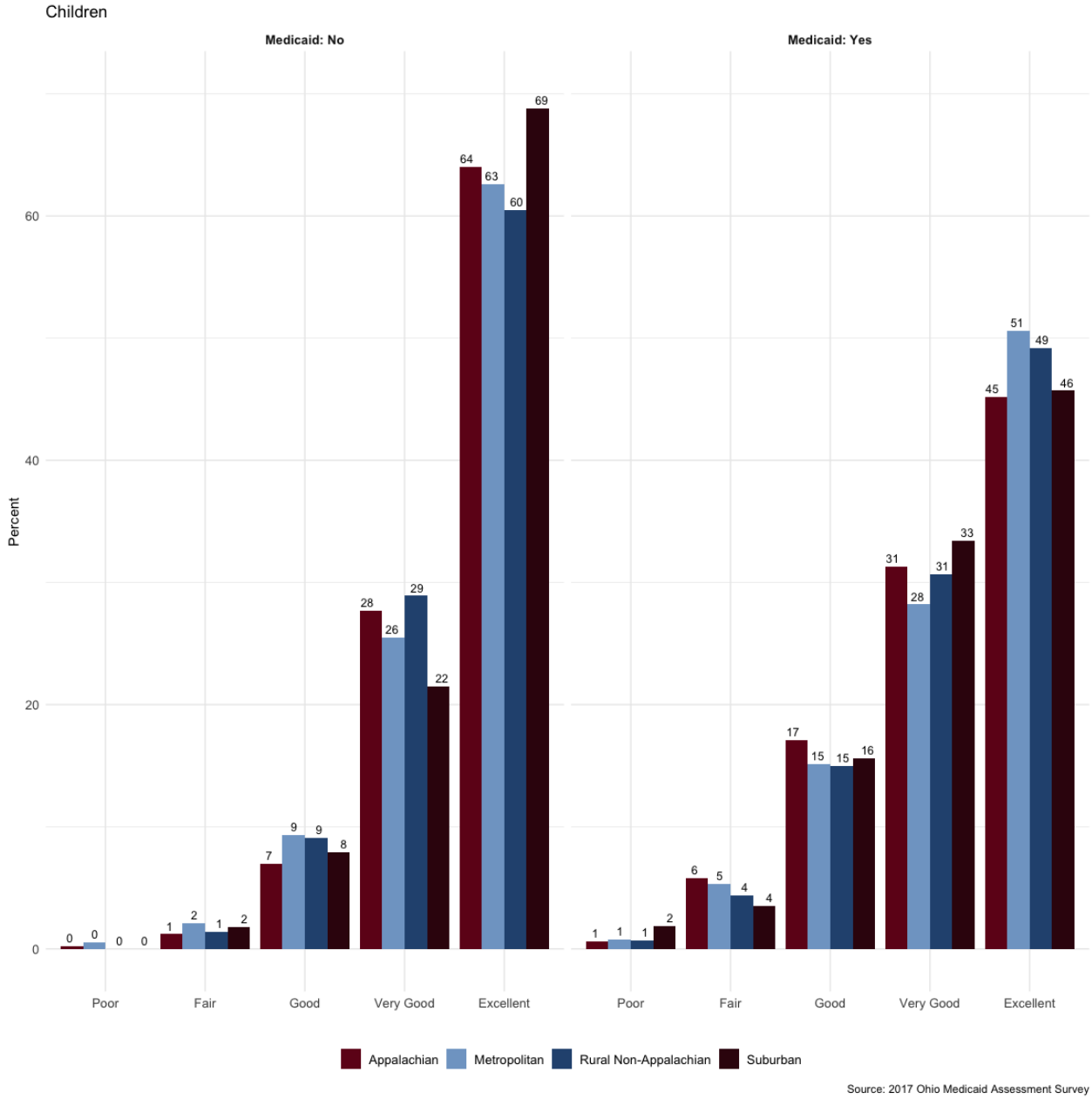


Figure 17: Percentage Distribution of Respondent-reported Children's Overall General Health (by Medicaid Status and OMAS County Type Classifications) (2017)



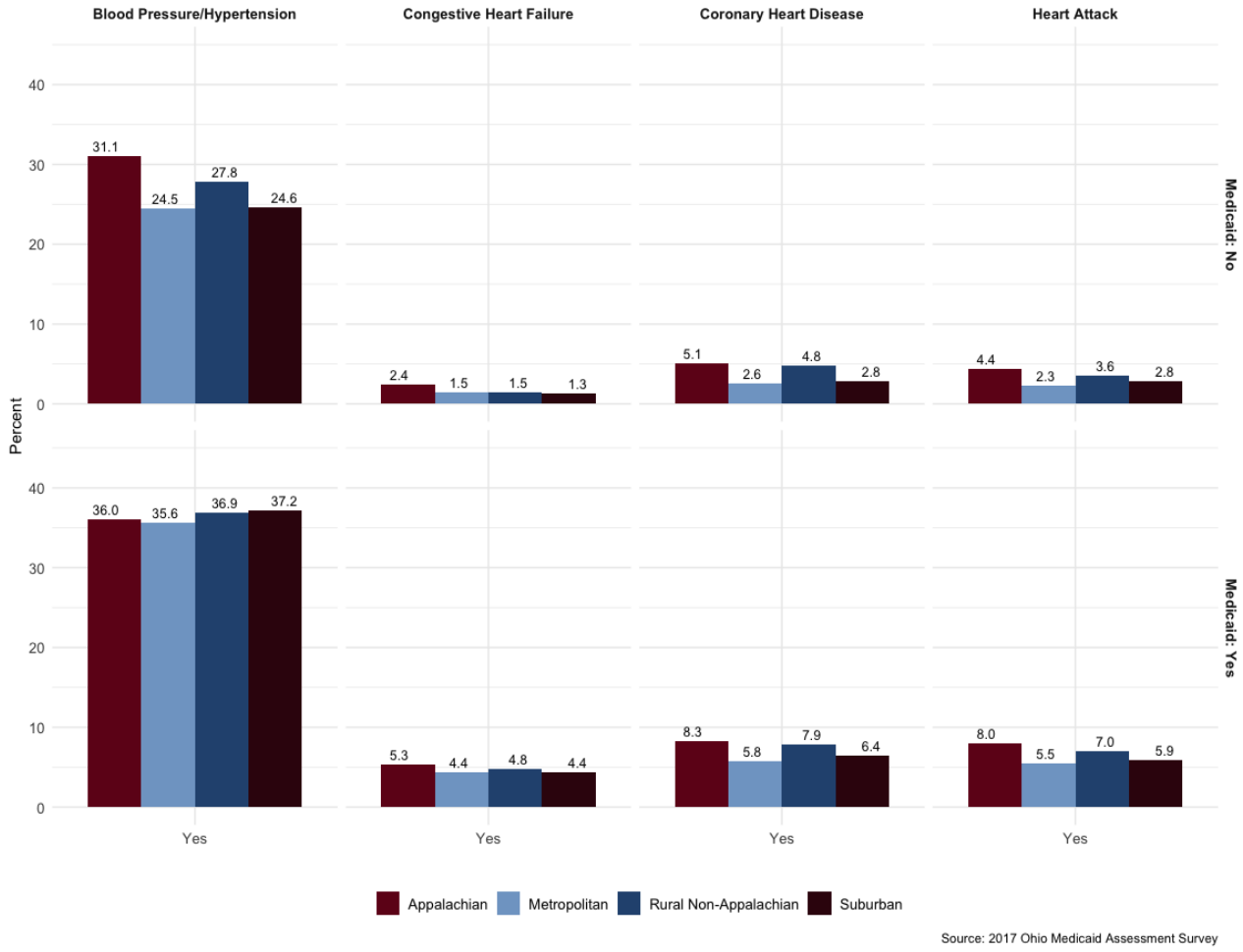
Although only a small percentage of Ohio's adults ages 19-64 reported ever having been told (by a doctor/nurse/health professional) they have/had congestive heart failure (2.3%), coronary heart disease (4%), or had a heart attack (3.6%), more than one in four (28.2%) reported being told they had high blood pressure/hypertension, and some 10.6% reported being told they had diabetes.[74]

[74] See Appendix A, Tables A64(a) and A65(a).

There was considerable county type variation in the prevalence of these conditions, with the highest rates of high blood pressure/hypertension seen in Appalachia (32.3%), and higher rates of coronary heart disease, congestive heart failure, and heart attacks seen in both rural county types than in the metropolitan and the suburban county types.[75] Appalachia had the highest percentage of adults (19-64 years old) diagnosed with diabetes (13.1%).[76]

Taking Medicaid status into account showed higher rates of high blood pressure/hypertension, heart attacks, coronary heart disease, congestive heart failure, and diabetes within the Medicaid subpopulation of adults than in their non-Medicaid peers (see Figures 29 and 30). Replacing Medicaid status with low-income status yielded similar distributions.

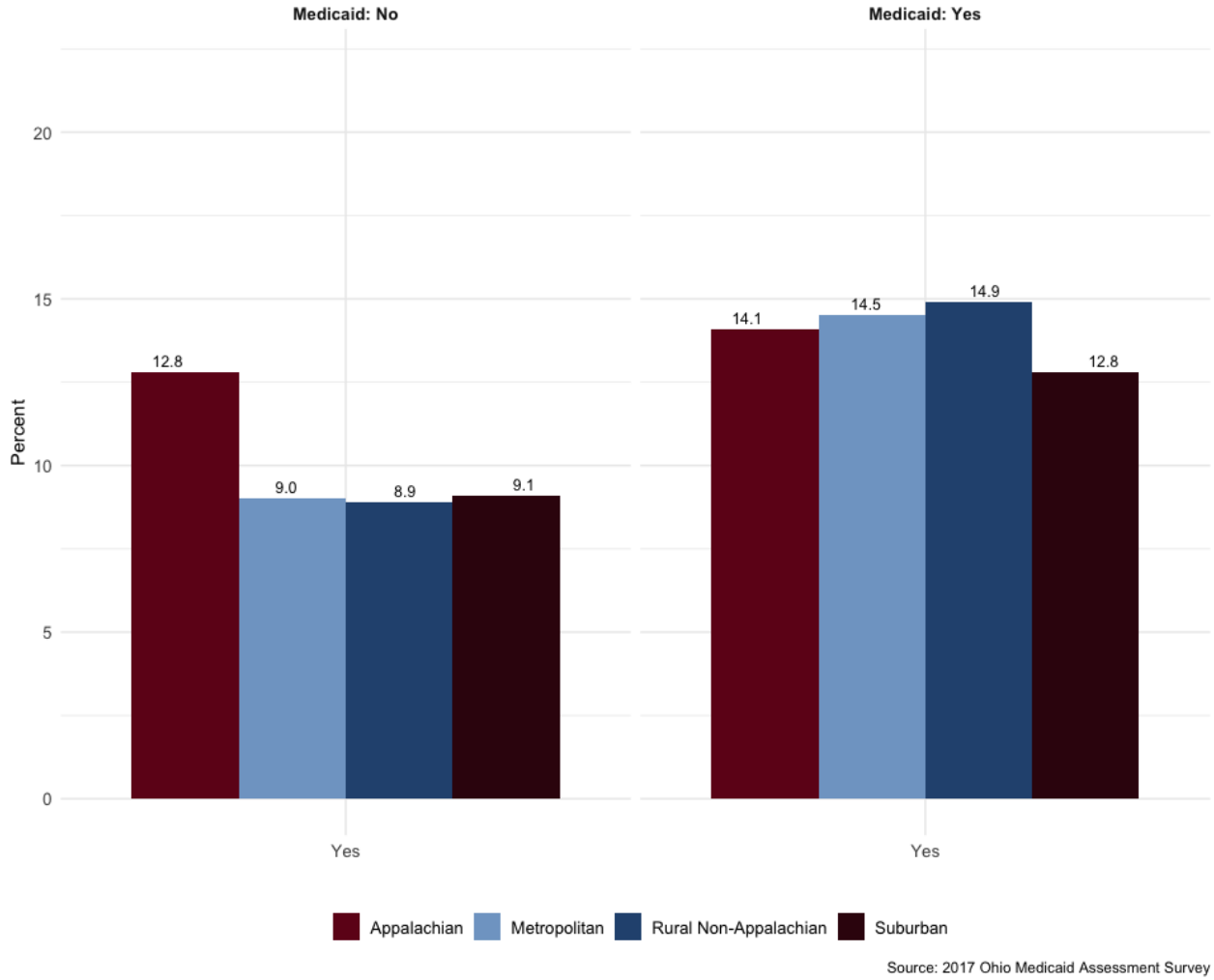
Figure 30: Percentage of Adult (19-64 years old) Respondents who have ever been told they have/had Heart Disease, Heart Failure, Hypertension, Heart Attack (by Medicaid Status and OMAS County Type Classifications) (2017)



[75] See Appendix A, Table A64(b).

[76] See Appendix A, Table A65(b).

Figure 18: Percentage of Adult (19-64 years old) Respondents who have ever been told they have Diabetes (by Medicaid Status and OMAS County Type Classifications) (2017)



Some noteworthy distributions of adults' and children's body mass index (BMI) categories were also found. For example, although a simple majority (52.4%) of children fell within the healthy/normal weight group, one in three Ohio adults ages 19-64 (35.9%) was obese.[77] Appalachia exhibited the highest percentages of obese adults (40.7%) and children (26.3%), respectively.[78] Both adults and children covered by Medicaid seemed, on average, to be more likely to be obese than their non-Medicaid peers (Figure 31). Again, replacing Medicaid status with low-income status did not alter these patterns in any notable manner.

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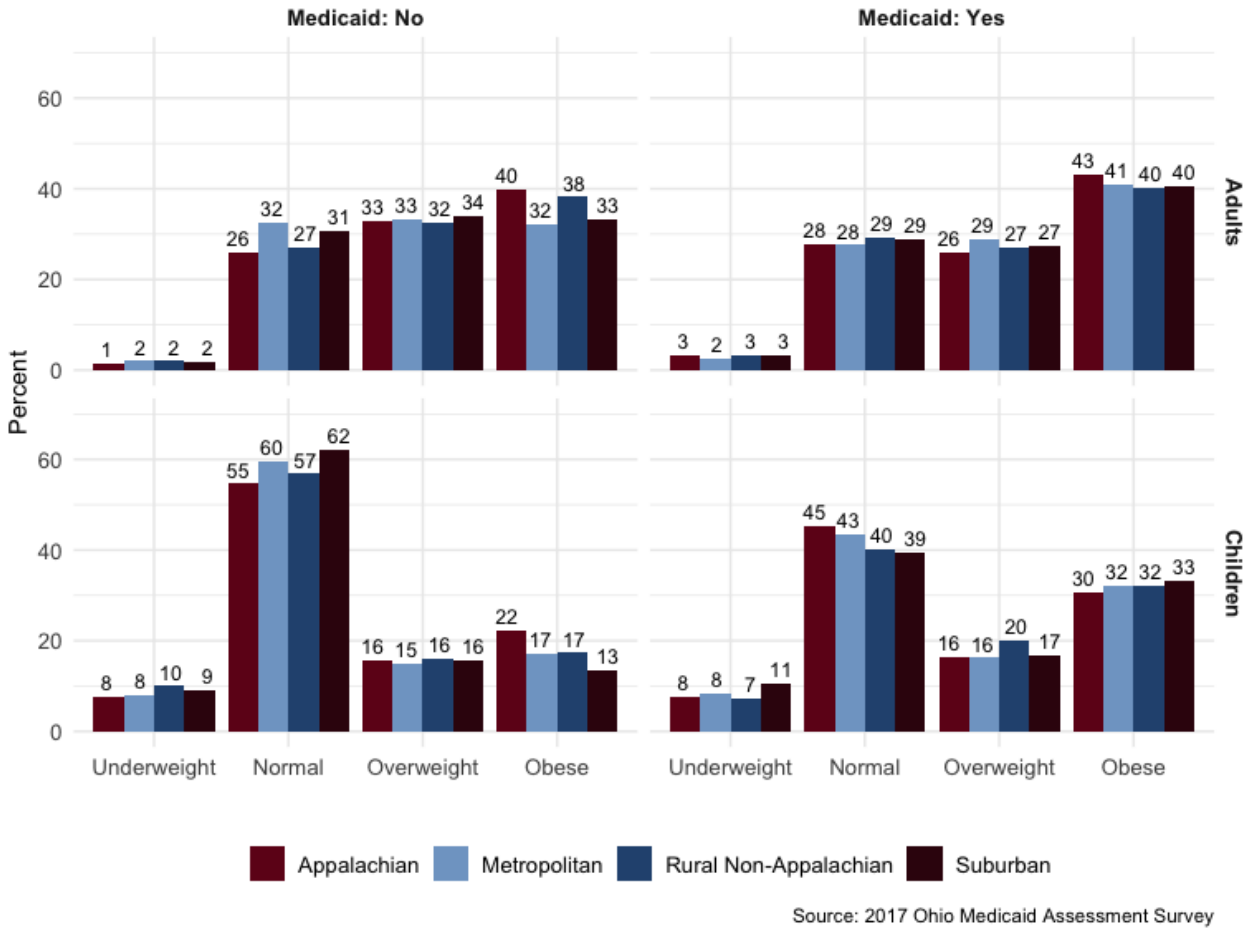
[77] See Appendix A, Table A67(a).

[78] See Appendix A, Table A67(b).

Figure 19: Percentage Distribution of Respondents' (or Children's) Body Mass Index Categories (by Population Group, Medicaid Status and OMAS County Type Classifications; Adults are 19-64 years old) (2017)



III. Modeling Health Status/Outcomes

Although the preceding explorations of the 2017 OMAS data are useful for shedding light on Ohioans' health care needs and challenges, particularly those of adults ages 19-64 and children (18 or younger), they were not designed to unpack the complex interplay of well-documented social determinants of health (Woolf and Braveman, 2011; Sabato et al., 2018, Gottlieb et al., 2015, Toebes and Stronks, 2016, Walker et al.. 2014, Walker et al., 2016, De Maio et al., 2017). Woolf and Braveman (2011) describe these determinants best as a combination of an individual's *biology* (sex, age, and genetics), *downstream factors* (utilization of medical care; the physical environment the individual lives/works in, health behaviors), and *upstream factors* (education, income, and the social environment in which the individual lives/works/plays). "These contextual conditions influence people's exposure to environmental risks and their personal health behaviors, vulnerability to illness, access to care, and ability to manage conditions at home – for example, the ability of patients with diabetes to adopt necessary

lifestyle changes to control their blood sugar. “Social determinants are often the root causes of illnesses and are key to understanding health disparities” (Woolf and Braveman, 2011:1852-53).

In the analyses that follow, this report models specific health outcomes as well as the overall health status of adults (defined here more expansively as ages 19 or older) and children (ages 18 or younger), respectively. The goal in these modeling exercises was to analyze if and how measurable social determinants of health shape individuals’ health. The emphasis here is on measurable determinants since the metrics available to us were all survey-based. The indicators this report focused on are the following:

(1) The overall health status of adults, and children, respectively;

(2) Whether the adult was ever told that he/she had diabetes (borderline diagnoses are excluded);

(3) Whether the adult was ever told that he/she had high blood pressure/hypertension;

(4) Whether the adult was ever told that he/she had/had coronary heart disease;

(5) Whether the adult was ever told that he/she had/had a heart attack; and

(6) The body mass index (BMI) of adults and children, respectively.

Some of these indicators, such as overall health status and BMI, are ordinal measures that span more than two categories—overall health status was self-reported as poor/fair/good/very good/excellent while BMI was classified, based on self-reported height and weight, as underweight/normal/overweight/obese. These ordinal indicators were modeled via survey-weighted ordinal logit models. In contrast, diabetes, hypertension, congestive heart failure, and coronary heart disease are binary—either the individual was told he/she had that condition or was not. These latter set of outcomes were modeled via survey-weighted logit models suited to the binary distribution of each of these indicators. Congestive heart failure was not modeled because the very small percentage of respondents with this diagnosis (4.21% of the respondents) created statistical challenges.

Keys to these models are covariates known or suspected to shape health outcomes. For example, we know that individuals in poverty are more likely not only to report poor or fair health than wealthier individuals (Braveman and Egerter, 2008) but also to experience premature death (Braveman et al., 2011). Education and income are two crucial factors because they shape opportunities for employment, the ability to afford health care expenses, access better housing in better physical environments, food security, health behaviors, and ultimately, health outcomes (Woolf and Braveman, 2011; Hill et al., 2013; Diez Roux et al., 2016; Clark and Utz, 2014; Gonzalez et al., 2015; Smalls et al., 2014, 2015; Hruby et al., 2016; Lawrence et al., 2017).

Several of these determinants were available from the 2017 OMAS data set and used in the models that follow, along with the usual demographic indicators of gender, age, race, marital status, educational attainment. Income was measured, however, relative to FPLs. Employment status reflects whether the respondent worked last week or not. Health insurance status was measured via a single variable that indicated whether the individual had health insurance coverage or not, and if covered, the type of coverage (Medicaid only, Medicare and Medicaid, Medicare only, et cetera). This report did not use the binary Medicaid versus non-Medicaid indicator used earlier in the exploratory analyses discussed thus far because the more expansive measure of health insurance coverage provides better leverage to evaluate precisely what, if any, differences occurred from being in the Medicare and Medicaid or Medicaid but no Medicare groups, versus from being uninsured or having employer-sponsored coverage, et cetera.

Health behaviors, such as are measured in the survey, were included for modeling purposes, specifically whether the individual was a current smoker, and whether the individual was a binge drinker. The categorical measure of body mass index classification, BMI, was included as a covariate in all models except where BMI was the dependent variable.

Given the centrality of place in this study, we included the respondent's location in terms of the county type (i.e., Appalachia/rural non-Appalachia/metropolitan/suburban). Doing so allowed this particular measure to absorb the omnibus impact of all unmeasured factors that may not only differ across the four county types but also be likely to influence health outcomes (for example, if air quality differs across county types).This does not imply that if a statistically significant impact of a particular county type is observed that this report can determine precisely what is it about this county type that is shaping the outcome. Rather, this report notes that county type differences influence outcomes even after controlling for all the other variables in the analysis.

Finally, while food security was assessed in the survey (via a question that asked respondents if, compared to 12 months ago, their ability to buy food for the family had changed and how), it appeared to exert no predictive influence once the income measure was included and, hence, it was excluded from all analyses. The inclusion of an indicator that captures whether the individual was (or not) ever without insurance coverage in the preceding 12 months was also considered, but too many missing values precluded its inclusion. There are no OMAS survey-based measures of housing quality or of any other attribute of the individual's physical and social environment, and so none were included in the models.

Given the models fit to the data were either survey-weighted ordinal logit models or survey-weighted logit models, interpreting the results can quickly become somewhat cumbersome. Therefore, this report employed a particular strategy to aid interpretation. First, this report relegated the full model results to the Appendix accompanying this study. Second, this report focused the discussion of "statistically significant" results around only two covariates: (1) county type, and (2) health insurance status/type. When this is done, the report speaks in terms

of differences in the probability of a particular health outcome across county types and/or insurance type.[79] It is important to bear in mind these probabilities were not observed estimates but instead predicted values from our statistical models and should be interpreted as the estimated percentage of a hypothetical subpopulation predicted to have the target outcome, assuming they have otherwise average characteristics. Note also that all models discussed below are for adults only because models estimated for children's overall health status revealed obesity and poverty to be the only significant predictors of better/worse health.

Overall Health Status

Despite controlling for demographics, health behavior, obesity, income, and access to a usual source of care, this report nevertheless found the county type where an individual resided and the health insurance coverage group to which he/she belonged to influence overall health. For example, Appalachian adults were more likely to say their health was poor or fair, respectively, than adults in other county types (see Table 19). Appalachian children, did not, however, fare the worst in terms of self-reported health status; metropolitan and rural non-Appalachian children had the lowest status.

Table 19: Predicted Probability of a Specific Health Status (by Population Group and OMAS County Type Classifications; Adults are 19-64 years old) (2017)

Group	County Type	Poor	Fair	Good	Very Good	Excellent
Adults	Appalachian	6.3	15.9	29.4	31.2	17.2
Adults	Metropolitan	5.8	15.1	28.9	31.8	18.4
Adults	Rural non-Appalachian	5.9	15.3	29.0	31.7	18.1
Adults	Suburban	5.7	15.0	28.8	31.9	18.6
Children	Appalachian	0.7	3.5	13.1	28.6	54.1
Children	Metropolitan	0.8	3.5	13.3	28.7	53.6
Children	Rural non-Appalachian	0.8	3.7	13.7	29.1	52.7
Children	Suburban	0.6	3.1	11.9	27.3	57.1

Source: Author's Analysis of 2017 Ohio Medicaid Assessment Survey

[79] Calculating these probabilities requires that this report hold all other covariates at specific values, and the values we choose are the reference categories of each of the other covariates (see Appendix A for details).

In terms of health insurance coverage, the Medicaid and Medicare group(s) were the most likely to report their health status as poor or fair, respectively, and this was as true for children as it is for adults (see Table 20). Of course, this finding does not imply that having Medicaid and Medicare or any other type of health insurance causes better or worse health; these models were not designed to establish causality and should not be viewed as such.

Table 20: Predicted Probability of a Specific Overall Health Status (by Population Group and Insurance Type; Adults are 19-64 years old) (2017)

Group	Insurance Status	Poor	Fair	Good	Very Good	Excellent
Adults	Exchange Coverage	3.5	11.1	26.7	35.5	23.2
Adults	Employer-sponsored Coverage	3.7	11.8	27.5	35.1	21.8
Adults	Medicaid and Medicare	10.9	23.8	33.5	23.5	8.3
Adults	Medicaid, no Medicare	6.1	16.7	31.6	31.0	14.7
Adults	Medicare, no Medicaid	7.9	19.7	32.9	27.9	11.6
Adults	Other	4.4	13.3	29.0	34.0	19.3
Adults	Other directly purchased	3.1	10.2	25.6	36.0	25.0
Adults	Uninsured	4.9	14.3	29.9	33.2	17.7
Adults	Unknown	5.8	16.2	31.3	31.5	15.3
Children	Exchange Coverage	0.6	3.0	11.9	28.3	56.3
Children	Employer-sponsored Coverage	0.5	2.4	10.1	25.9	61.1
Children	Medicaid and Medicare	1.7	7.5	23.6	34.6	32.7
Children	Medicaid, no Medicare	0.9	4.3	15.9	32.0	46.9
Children	Medicare, no Medicaid	0.7	3.5	13.6	30.2	51.9
Children	Other	0.5	2.6	10.6	26.7	59.6
Children	Other directly	0.6	2.7	10.9	27.1	58.7

	purchased					
Children	Uninsured	1.0	4.7	17.1	32.8	44.4
Children	Unknown	0.8	4.0	15.1	31.4	48.6

Source: Author's Analysis of 2017 Ohio Medicaid Assessment Survey

Obesity

Appalachian adults and children were more likely to be overweight or obese than residents of the other county types, and the differences were nontrivial (see Table 21). For example, an Appalachian adult had a 38.7% probability of being obese, and children in the region had a 23.5% chance of being obese. The average individual on Medicare and Medicaid, all being the same, had a 42.5% chance of being obese, while children in the same insurance group had a 28.7% chance of being obese (see Table 22).

Table 21: Predicted Probability of Specific BMI Status (by Population Group and OMAS County Type Classifications; Adults are 19-64 years old) (2017)

Group	County Type	Underweight	Normal/Healthy Weight	Overweight	Obese
Adults	Appalachian	1.7	26.6	33.0	38.7
Adults	Metropolitan	2.0	30.0	33.4	34.6
Adults	Rural non-Appalachian	1.8	28.0	33.3	37.0
Adults	Suburban	2.0	29.3	33.4	35.3
Children	Appalachian	7.2	52.7	16.6	23.5
Children	Metropolitan	8.4	55.1	15.7	20.9
Children	Rural non-Appalachian	7.7	53.8	16.2	22.3
Children	Suburban	8.7	55.8	15.4	20.2

Source: Author's Analysis of 2017 Ohio Medicaid Assessment Survey

Table 22: Predicted Probability of Specific BMI Status (by Population Group and Insurance Type; Adults are 19-64 years old) (2017)

Group	Insurance Status	Underweight	Normal/Healthy Weight	Overweight	Obese
Adults	Exchange Coverage	2.0	29.5	33.6	35.0
Adults	Employer-sponsored	2.0	29.9	33.6	34.5

Group	Insurance Status	Underweight	Normal/Healthy Weight	Overweight	Obese
	Coverage				
Adults	Medicaid and Medicare	1.4	23.7	32.5	42.5
Adults	Medicaid, no Medicare	1.8	27.5	33.3	37.4
Adults	Medicare, no Medicaid	1.6	26.0	33.1	39.3
Adults	Other	2.2	31.9	33.6	32.3
Adults	Other directly purchased	2.8	37.1	33.0	27.0
Adults	Uninsured	2.4	33.3	33.5	30.8
Adults	Unknown	2.4	34.0	33.5	30.1
Children	Exchange Coverage	7.8	54.8	16.1	21.3
Children	Employer-sponsored Coverage	9.0	57.2	15.1	18.8
Children	Medicaid and Medicare	5.3	47.6	18.4	28.7
Children	Medicaid, no Medicare	6.3	50.8	17.5	25.4
Children	Medicare, no Medicaid	6.9	52.7	16.9	23.5
Children	Other	8.5	56.4	15.5	19.6
Children	Other directly purchased	9.5	58.0	14.6	17.9
Children	Uninsured	7.9	55.2	16.0	20.9
Children	Unknown	7.3	53.7	16.6	22.4

Source: Author's Analysis of 2017 Ohio Medicaid Assessment Survey

Blood Pressure/Hypertension, Diabetes, Heart Attack, and Coronary Heart Failure

Appalachians were the second-most likely (after rural non-Appalachians) to have been diagnosed with heart disease but the most likely to have been diagnosed with high blood pressure/hypertension, diabetes, and heart attacks (see Table 23). County type differences were muted, however, for heart attacks, heart disease, and congestive heart failure.

Table 23: Predicted Probabilities of Adult (19-64 years old) Respondents' Specific Health Outcomes (by OMAS County Type Classifications) (2017)

Region	Blood Pressure/Hypertension	Diabetes	Heart Attack	Heart Disease
Appalachian	37.9	15.4	6.6	7.2
Metropolitan	36.0	14.1	5.1	6.2
Rural non-Appalachian	36.1	13.3	6.2	8.1
Suburban	36.3	13.9	5.7	6.4

Source: Author's Analysis of 2017 Ohio Medicaid Assessment Survey

When the focus shifted to insurance coverage, the Medicaid and Medicare group were the most likely to have received positive diagnoses, followed by the Medicare no Medicaid group and then by the Medicaid no Medicare group (see Table 24).

Table 24: Predicted Probabilities of Specific Health Outcomes for Adult (19-64 years old) Respondents (by Insurance Status) (2017)

Insurance Status	Blood Pressure/Hypertension	Diabetes	Heart Attack	Heart Disease
Exchange Coverage	31.6	11.3	3.5	6.4
Employer-sponsored Coverage	32.4	12.3	3.4	4.2
Medicaid and Medicare	43.3	16.5	8.4	9.9
Medicaid, no Medicare	39.4	14.8	6.8	7.2
Medicare, no Medicaid	42.2	16.2	6.4	8.2
Other	31.6	13.6	3.9	5.2

Other directly purchased	29.5	9.8	3.8	3.9
Uninsured	30.6	11.7	5.8	4.4
Unknown	36.8	13.8	7.4	5.0

Source: Author's Analysis of 2017 Ohio Medicaid Assessment Survey

Again, it is worth repeating the caution issued earlier: these models do not establish causality, so one should not read these results as indicating that Appalachia causes obesity or that Medicaid or Medicare or some other type of health insurance coverage causes better/worse health overall. Rather, these results merely indicate that at least some of the probability of having a particular health status or health condition is influenced by place, by the particular region an adult or child calls home, and that this influence comes through even after the individual's demographic and other attributes have been taken into account. Using low-income status in lieu of Medicaid status did not alter the results of these exploratory analyses of health care challenges, behaviors and outcomes.

In addition, it is important to recognize that as previously uninsured individuals (who tend to be drawn from low-income groups in general) receive health insurance coverage, they are more likely to receive diagnoses for one or more health conditions that may have resulted from lack of adequate health care while uninsured. In sum, a diagnosed health status or condition is not caused by having health insurance; there is no plausible explanation that could be offered for such a reading of the results. Instead, and given the high correlation between low-income status and Medicaid coverage, a more appropriate interpretation might be that low incomes reduce access to and utilization of health care services, adverse health behaviors, and this combination in turn leads to generally worse health outcomes overall.

Conclusions

This study set out to draw a health and socioeconomic profile of the Medicaid subpopulation in Ohio. This was done by analyzing the 2017 Ohio Medicaid Assessment Survey (OMAS) data statewide, by county type, and then by a combination of Medicaid status and county type. All analyses extended where pertinent to both adults and children. The resulting profile yields what is seen as valuable insights into health insurance coverage, health behaviors, outcomes, needs (both met and unmet), health challenges, and access to and utilization of medical care of Ohioans. Key findings are highlighted in the following section.

Place Matters

Where an individual resides appears to have an impact on his/her health, even after accounting for his/her demographics and other measurable attributes. Appalachia, for example, has long had lower educational attainment and household incomes, and hence unsurprisingly greater unemployment and poverty than the non-Appalachian parts of the state barring, perhaps, the

metropolitan counties. In this analysis, in particular, this report found only 10.8% and 5% of Appalachian 18-64 year-olds hold a bachelor's degree or a graduate/professional degree as the highest degree earned, a pattern markedly different from the other county types. Appalachian unemployment rates exceed those of the other county types, and labor force participation is the lowest in Appalachia. Average household and family incomes are the lowest in Appalachia, with on average a $10,000 gap between Appalachia and the other county types. Almost one in five Appalachians lives in poverty, while about 11% of the county type's population in occupied housing units are in mobile homes. One in four Ohioan adult reports that over the preceding 12 months, they had trouble paying medical bills or paying off incurred debt, with one in five likely to say that had trouble paying their rent/mortgage or buying food.

In terms of health outcomes, the secondary data this report explored showed that Appalachians are likely to have more physically and mentally unhealthy days and lose more years of potential life. Digging into the 2017 OMAS data yields more nuanced insights. For example, we find Appalachian adults (ages 19-64) to be the most likely (across the four county types) to report poor or fair health, and to have been told they had high blood pressure/hypertension, congestive heart failure, coronary heart disease, or had a heart attack. They are also more likely to have been told they have diabetes, and both adults and children in Appalachia are more likely to be obese than their peers in the other county types. No doubt health behaviors account for some of these health problems, given that one in four adult Ohioans is a current smoker and Appalachians are more likely to be current daily smokers.

Health Insurance Matters

Have health insurance coverage patterns changed over the preceding years? Yes, they have: the percentage of Ohioans ages 19-64 without health insurance dropped sharply from a high of 17.3% in 2012 to a low of 9.3% in 2017. The reduction in uninsured adults was even greater for adults ages 19-64 at or below 138% FPL, from a high of 32.8% in 2012 to 12.8% in 2017. The percentage of children without health insurance has dropped as well since 2012 but less precipitously, falling from 4.8% in 2012 to 3.3% in 2017.

While it may be too early to make a conclusive determination about the impact of Medicaid expanded health care coverage on Appalachian adults and children's health behaviors and outcomes, Medicaid recipients' answers to survey questions probing access to and utilization of health care illuminate the gains made thus far and the challenges ahead. First, in terms of access to care, Medicaid recipients are more likely to have seen their health care provider within the last 12 months. Appalachian children covered by Medicaid are the most likely to have seen a provider. Unfortunately, however, one in three Ohioans appears to have significant difficulty receiving the medical assistance they need on weekends, holidays, or in the evening hours, and residents of rural non-Appalachia and Appalachia are most likely to encounter this barrier.

Those on Medicaid in Appalachia and rural non-Appalachia are more likely to receive a same-day appointment during regular office hours than metropolitan and suburban residents on Medicaid. That said, the quality of care is not necessarily better for Medicaid recipients since

they are less likely to say (relative to the non-Medicaid groups) that their provider always spent enough time with them or always explained things to them in an easy-to-understand manner. Medicaid recipients are less likely to usually go to a doctor's office or health center for needed care or routine visits, although this is more of an issue for adults than it is for children. Medicaid recipients are also more likely to have visited an emergency room within the last 12 months.

Second, Appalachia, in terms of unmet health needs, dental care and vision care experience more unmet care needs than in mental health. Medicaid recipients, however, report considerably higher levels of unmet needs in mental, dental, vision, and other areas. A significant number of Medicaid recipients indicate that their plan does not give them access to these services. These services are covered by Medicaid and so these “no coverage” responses may be a result of recipients’ failure to understand their health care plans compounded, perhaps, by an inability to access the care they need. The survey responses to questions about care utilization also bear this out, given that Medicaid recipients are more likely to avoid getting the care they need, citing transportation, provider unavailability, and inability to find a provider as the reasons for avoiding care.

Third, while in general costs are cited as the primary reason for delaying/avoiding getting needed care, Medicaid recipients point to transportation, provider unavailability, and an inability to find a provider as bigger hurdles than costs. It is noteworthy that they cite (1) transportation, (2) an inability to find a provider, and (3) provider unavailability as barriers to accessing care. Medicaid does cover transportation for all Medicaid beneficiaries when medically necessary and the patient cannot be transported by any other means. Presumably, all county departments of Jobs and Family Services (CDJFS) have community non-medical emergency transportation plans in force. However, Medicaid beneficiaries are likely unaware of these transportation options, do not know how to avail of them, and/or Appalachian counties’ transit options are limited.

Access to medical care may also be unevenly distributed across Appalachian counties, a possibility not explored in this report. Some evidence indicates, however, that Appalachian counties in the nation are more likely to have health professional shortages (Hendryx, 2008), and that dental workforce availability is generally linked to utilization but is not the only predictor of utilization (Feng et al., 2017). If there are health professional shortages in Ohio’s Appalachian counties, a regional, transportation-based solution may be a viable option. A regional approach to managing and coordinating care may also mitigate some of Appalachians’ concerns about finding available health care providers, potentially resulting in more frequent, regular check-ups.

A bigger challenge that came through strongly in the focus groups was the complexity of the health care safety net and how difficult it was to get accurate and current information about coverage, providers, approvals and other expectations. Many participants had either Medicare or Veterans benefits along with Medicaid. Additionally, a number of participants were taking care of other family members who had a variety of coverage, due to their age or a disability. Many participants thought the move to administer Ohio Medicaid through managed care with five different MCOs makes for a complex system. For instance, participants frequently raised

concerns about copayments and deductibles that were characteristic of other coverage, but they expressed confusion about what was covered and by which benefit. Participants also felt that different MCOs covered different procedures, medications, and providers, and hence it would be better to have more information on covered procedures or care activities readily available.

The Medicaid subpopulation does reflect longer health insurance coverage spells, and children are more likely to have seen their health service provider in the last 12 months than children not covered by Medicaid. Medicaid recipients are also more likely to have received needed care either the same day or, at most, the next day. Where they access medical care, however, varies, with only 65.7% of Appalachians on Medicaid citing a doctor's office/health center, another 16.7% listing an urgent care clinic, and another 13.2% listing an emergency room as their usual source of care. This might be a matter of choice or linked either to an information/provider availability gap vis-a-vis health care services available to Medicaid recipients or transportation barriers.

Utilization of care exhibits some interesting differences across groups. For example, while the Medicaid subpopulation in each county type reports having seen a health care provider in the last 12 months, they also turn out to be less likely to have gone for a routine medical check-up in the last 12 months, to have had their vision checked, and for children to have had a well-baby check-up. Frequency of emergency room visits is higher for the Medicaid group. This pattern of responses indicates that preventive care utilization is low among the Medicaid populations, and this is troubling given that the Medicaid group is more likely to be obese, with generally unhealthy lifestyles, and face more health challenges. The stigma that many focus group participants reported they felt when dealing with the health care system, often seeing themselves treated differently (one focus group participant phrased it as being viewed by the health care provider as a "second-class citizens"), is a significant hurdle to health care-seeking behavior.

Fourth, and related to access to care and health challenges, the Medicaid subpopulation has greater health needs than the non-Medicaid group, and this is as true of adults as it is of children. In fact, adults on Medicaid are twice or thrice as likely to have a developmental disability, need special therapy, need counseling, or have a potentially disabling mental health/developmental condition than their non-Medicaid peers. These challenges are not necessarily higher among Appalachian Medicaid recipients, but other health conditions are. Appalachian children with Medicaid, for example, are the most likely county type group to be obese, while Medicaid adults in the county type are likely to have the highest rates of diabetes, and they are also most likely to be obese.

In sum, while the Appalachian region continues to struggle with significant economic and health challenges, its Medicaid subpopulation generally fares better than those who are not on Medicaid. Obesity, diabetes, hypertension, and smoking remain significant hurdles to improved health in the region. While not quite diseases of despair, income and education play a vital role in determining health behaviors and outcomes. Specifically, educational attainment is tied to employment opportunities which, in turn, allow for a greater earning potential that translates

into better housing, better nutrition, more discretionary health care spending when needed, and fewer adverse health behaviors (see, for example, Gan, 2017; Woolf and Braveman, 2011; Braveman and Gottlieb; Williams et al., 2010; Uphoff et al.,2013). An underprivileged childhood has long-term consequences for adverse health through the individual's lifetime (see, for example, Braveman and Barclay, 2009; Shuey and Wilson, 2014; McLaughlin et al.,~2016), and hence the poverty, lower educational attainment, and generally worse health (high obesity rates, for example) Appalachia's children encounter should be cause for significant concern.

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Appendix A

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Counties per County Type

Table A1: Distribution of Ohio Counties by OMAS County Type Classifications (2017)

Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adams	Allen	Ashland	Auglaize
Ashtabula	Butler	Champaign	Clark
Athens	Cuyahoga	Clinton	Delaware
Belmont	Franklin	Crawford	Fairfield
Brown	Hamilton	Darke	Fulton
Carroll	Lorain	Defiance	Geauga
Clermont	Lucas	Erie	Greene
Columbiana	Mahoning	Fayette	Lake
Coshocton	Montgomery	Hancock	Licking
Gallia	Richland	Hardin	Madison
Guernsey	Stark	Henry	Medina
Harrison	Summit	Huron	Miami
Highland	–	Knox	Pickaway

Hocking	–	Logan	Portage
Holmes	–	Marion	Union
Jackson	–	Mercer	Wood
Jefferson	–	Morrow	–
Lawrence	–	Ottawa	–
Meigs	–	Paulding	–
Monroe	–	Preble	–
Morgan	–	Putnam	–
Muskingum	–	Sandusky	–
Noble	–	Seneca	–
Perry	–	Shelby	–
Pike	–	Van Wert	–
Ross	–	Warren	–
Scioto	–	Wayne	–
Trumbull	–	Williams	–
Tuscarawas	–	Wyandot	–
Vinton	–	–	–
Washington	–	–	–

Source: 2017 Ohio Medicaid Assessment Survey

Table A2: Population Distribution by OMAS County Type Classifications and Year (2000-2017)

Year	Metropolitan	Appalachian	Rural Non-Appalachian	Suburban
2000	6,356,014	1,783,665	1,483,496	1,740,368
2001	6,352,513	1,785,506	1,490,750	1,758,635
2002	6,338,601	1,791,142	1,500,069	1,778,077
2003	6,328,792	1,796,585	1,510,073	1,799,338
2004	6,309,816	1,799,549	1,519,697	1,823,189
2005	6,291,635	1,800,822	1,527,219	1,843,644
2006	6,278,952	1,804,385	1,534,391	1,863,485
2007	6,274,796	1,805,126	1,540,447	1,880,099
2008	6,272,798	1,804,597	1,543,832	1,894,164

2009	6,278,283	1,803,028	1,542,886	1,904,699
2010	6,280,228	1,803,644	1,541,500	1,913,910
2011	6,279,575	1,800,357	1,540,669	1,922,731
2012	6,289,140	1,791,982	1,538,863	1,926,984
2013	6,307,084	1,787,759	1,537,497	1,935,505
2014	6,326,626	1,783,193	1,537,079	1,946,843
2015	6,338,991	1,777,551	1,536,667	1,952,818
2016	6,350,903	1,772,971	1,536,939	1,961,741
2017	6,372,627	1,769,709	1,539,348	1,976,925

Source: U.S. Census Bureau, Population Division, Intercensal Population Estimates

Table A3: Percentage Distribution of Population by OMAS County Type Classifications and Year (2000-2017)

Year	Metropolitan (% of State)	Appalachian (% of State)	Rural Non-Appalachian (% of State)	Suburban (% of State)
2000	55.9	15.7	13.1	15.3
2001	55.8	15.7	13.1	15.4
2002	55.6	15.7	13.1	15.6
2003	55.3	15.7	13.2	15.7
2004	55.1	15.7	13.3	15.9
2005	54.9	15.7	13.3	16.1
2006	54.7	15.7	13.4	16.2
2007	54.6	15.7	13.4	16.3
2008	54.5	15.7	13.4	16.4
2009	54.5	15.6	13.4	16.5
2010	54.4	15.6	13.4	16.6
2011	54.4	15.6	13.3	16.7
2012	54.5	15.5	13.3	16.7
2013	54.5	15.5	13.3	16.7
2014	54.6	15.4	13.3	16.8
2015	54.6	15.3	13.2	16.8
2016	54.6	15.3	13.2	16.9
2017	54.7	15.2	13.2	17.0

Source: Author's calculations based on U.S. Census Bureau, Population Division, Intercensal Population Estimates

Distribution of Age, Race/Ethnicity, and Gender

Figure A1: Distribution of Age-groups by OMAS County Type Classifications (percentages) (2017)

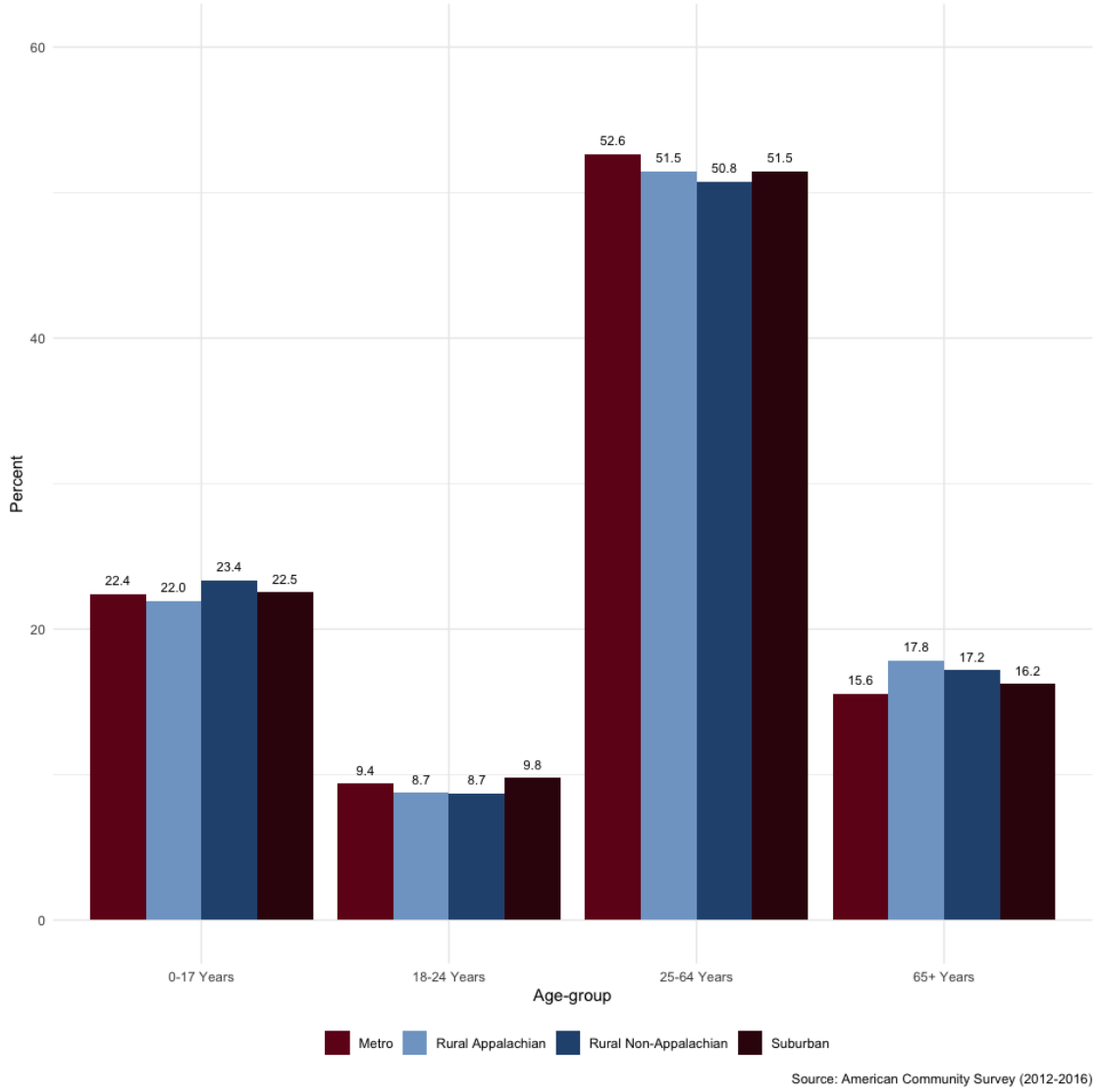


Table A4: Population Distribution by Sex and OMAS County Type Classifications (2017)

County Type	Sex	Population	County type Total	Percent of County type
Appalachian	Female	891,528	1,772,957	50.3
Appalachian	Male	881,429	1,772,957	49.7
Metropolitan	Female	3,264,711	6,339,367	51.5
Metropolitan	Male	3,074,656	6,339,367	48.5
Rural Non-Appalachian	Female	773,666	1,539,677	50.2
Rural Non-Appalachian	Male	766,011	1,539,677	49.8
Suburban	Female	992,774	1,962,372	50.6
Suburban	Male	969,598	1,962,372	49.4

Source: National Center for Health Statistics. Vintage 2017 postcensal estimates of the resident population of the United States (April 1, 2010, July 1, 2010-July 1, 2017), by year, county, single-year of age (0, 1, 2, .., 85 years and over), bridged race, Hispanic origin, and sex

Figure A2: Distribution of Race and Ethnicity by Sex, Age-group, and OMAS County Type Classifications (2017)

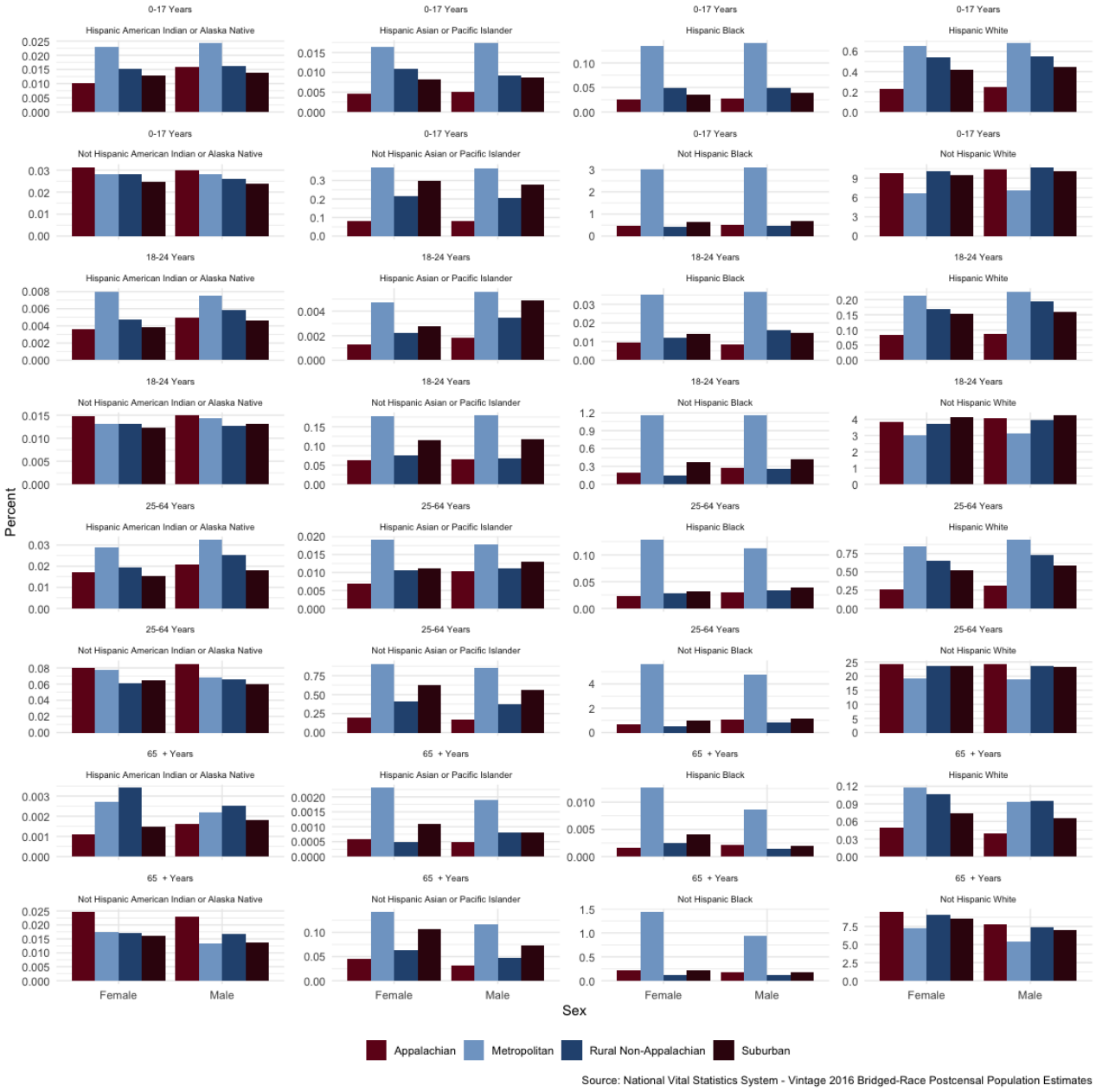


Figure A3(a): Percentage Distribution of Adult (19-64 years old) Respondents (by Medicaid Status, Age-group, and OMAS County Type Classifications) (2017)

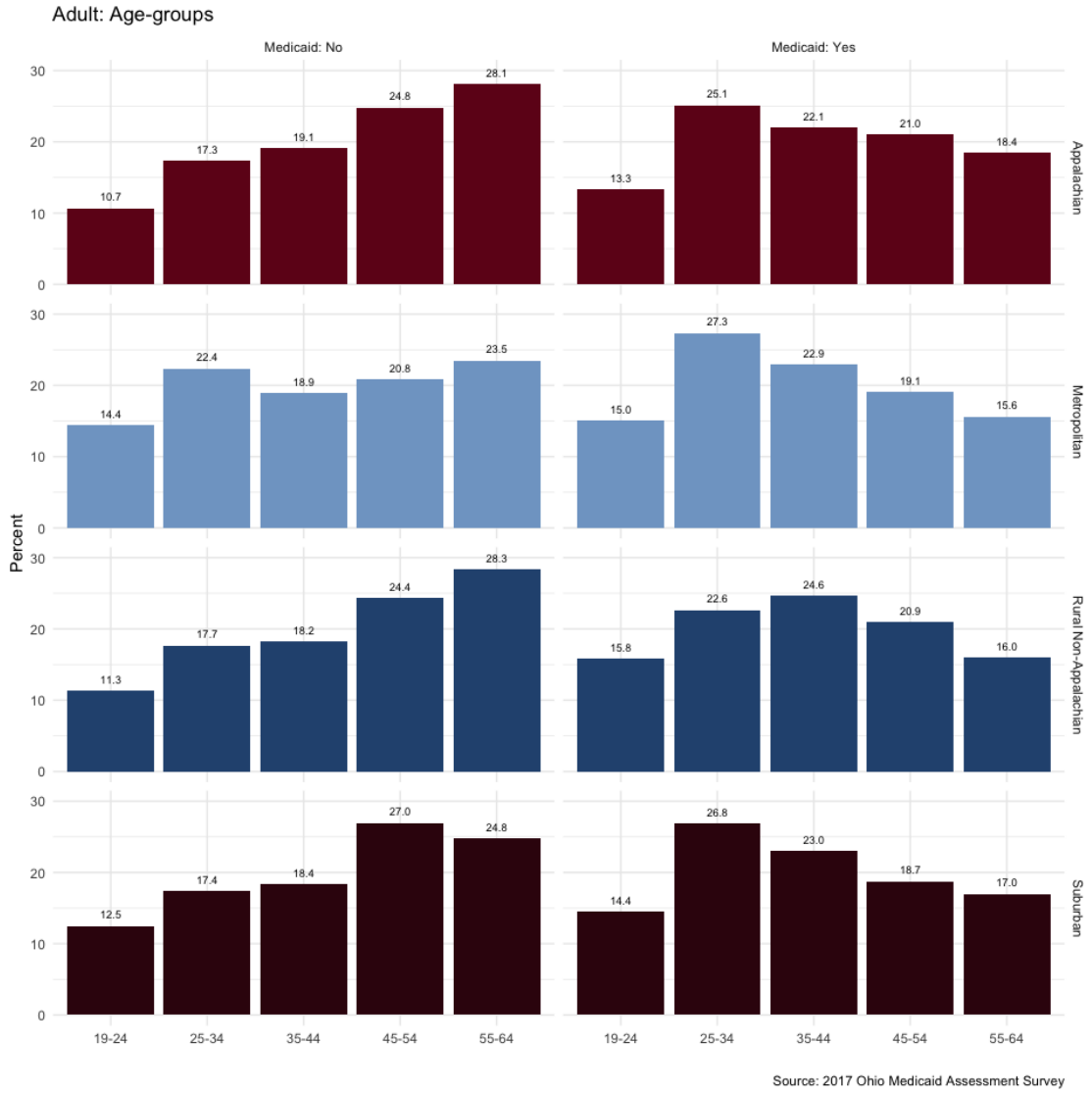


Figure A3(b): Percentage Distribution of Children (by Medicaid Status, Age-group, and OMAS County Type Classifications) (2017)

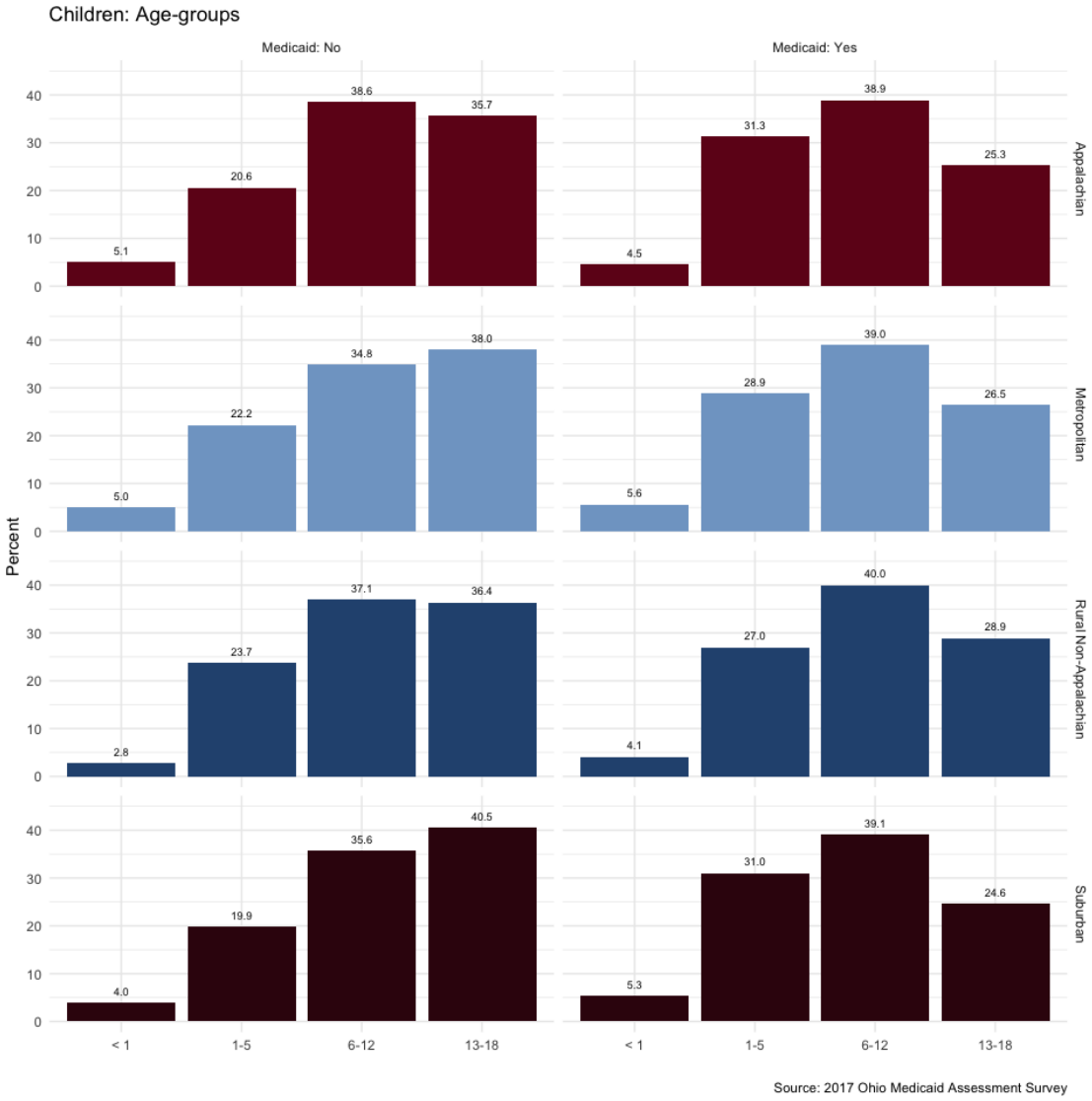


Figure A3(c): Percentage Distribution of Adult (19-64 years old) Respondents (by Medicaid Status, Gender, and OMAS County Type Classifications) (2017)

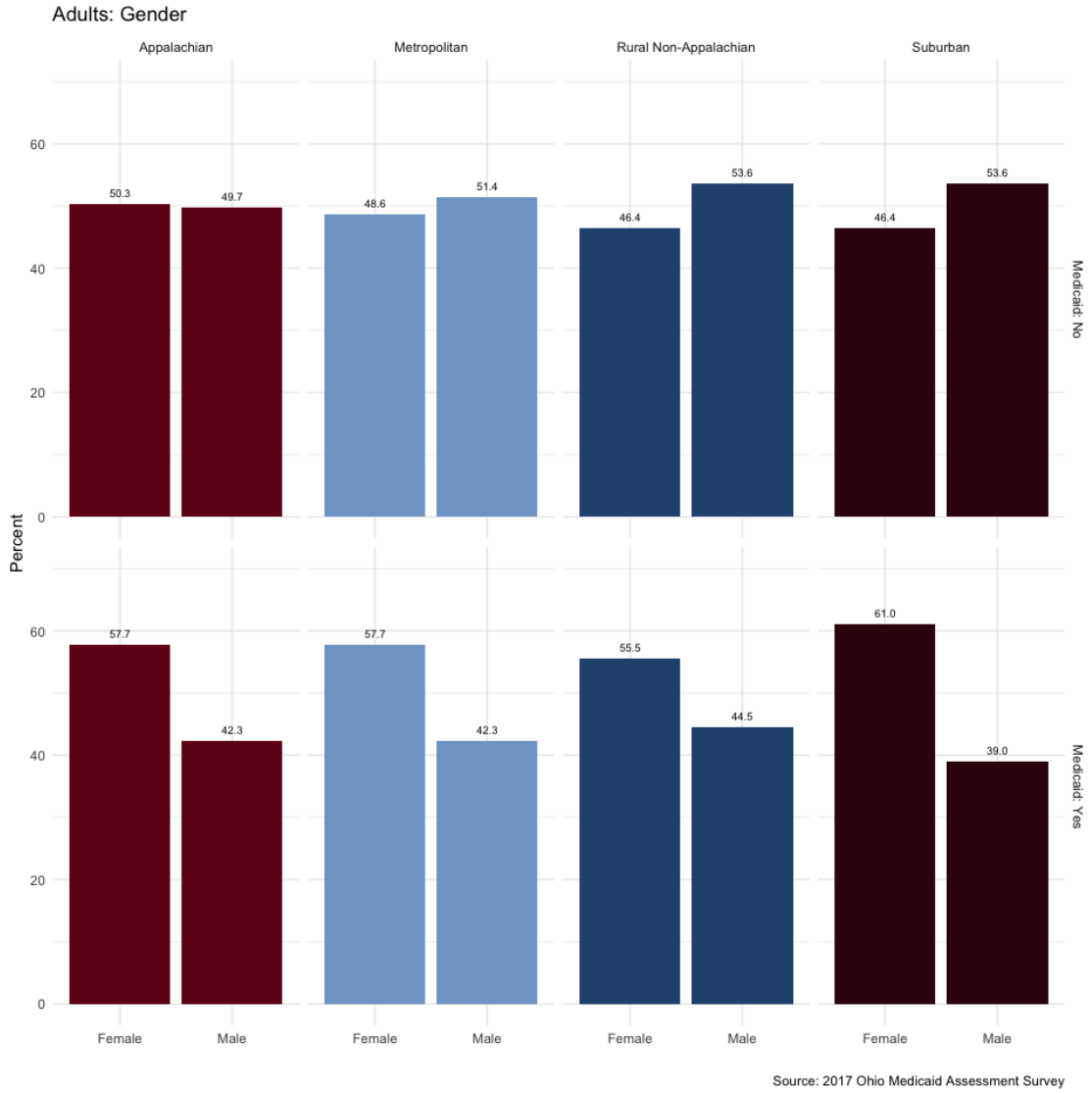


Figure A3(d): Percentage Distribution of Children (by Medicaid Status, Gender, and OMAS County Type Classifications) (2017)

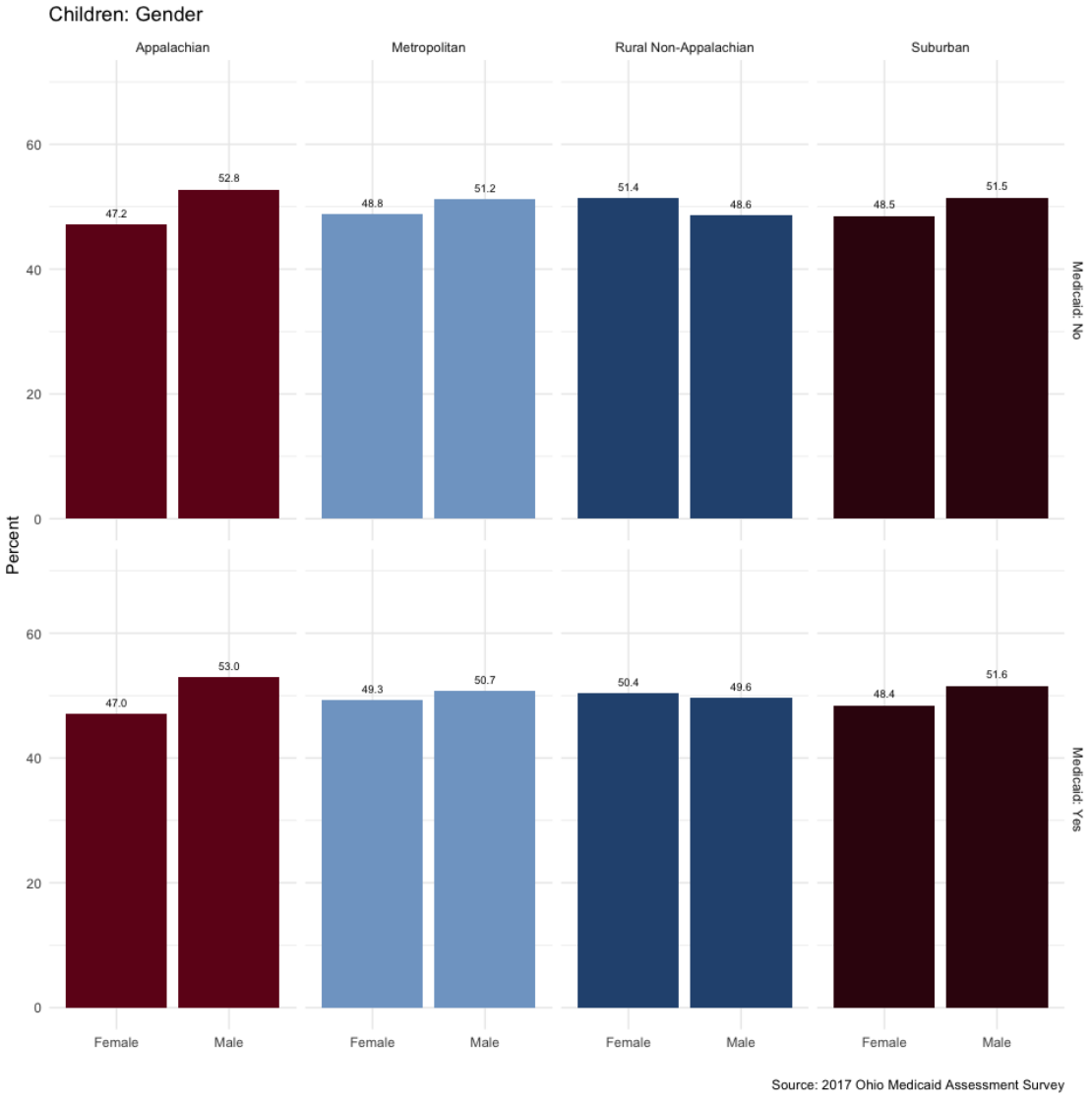


Figure A3(e): Percentage Distribution of Adult (19-64 years old) Respondents' (by Medicaid Status, Race/Ethnicity, and OMAS County Type Classifications) (2017)

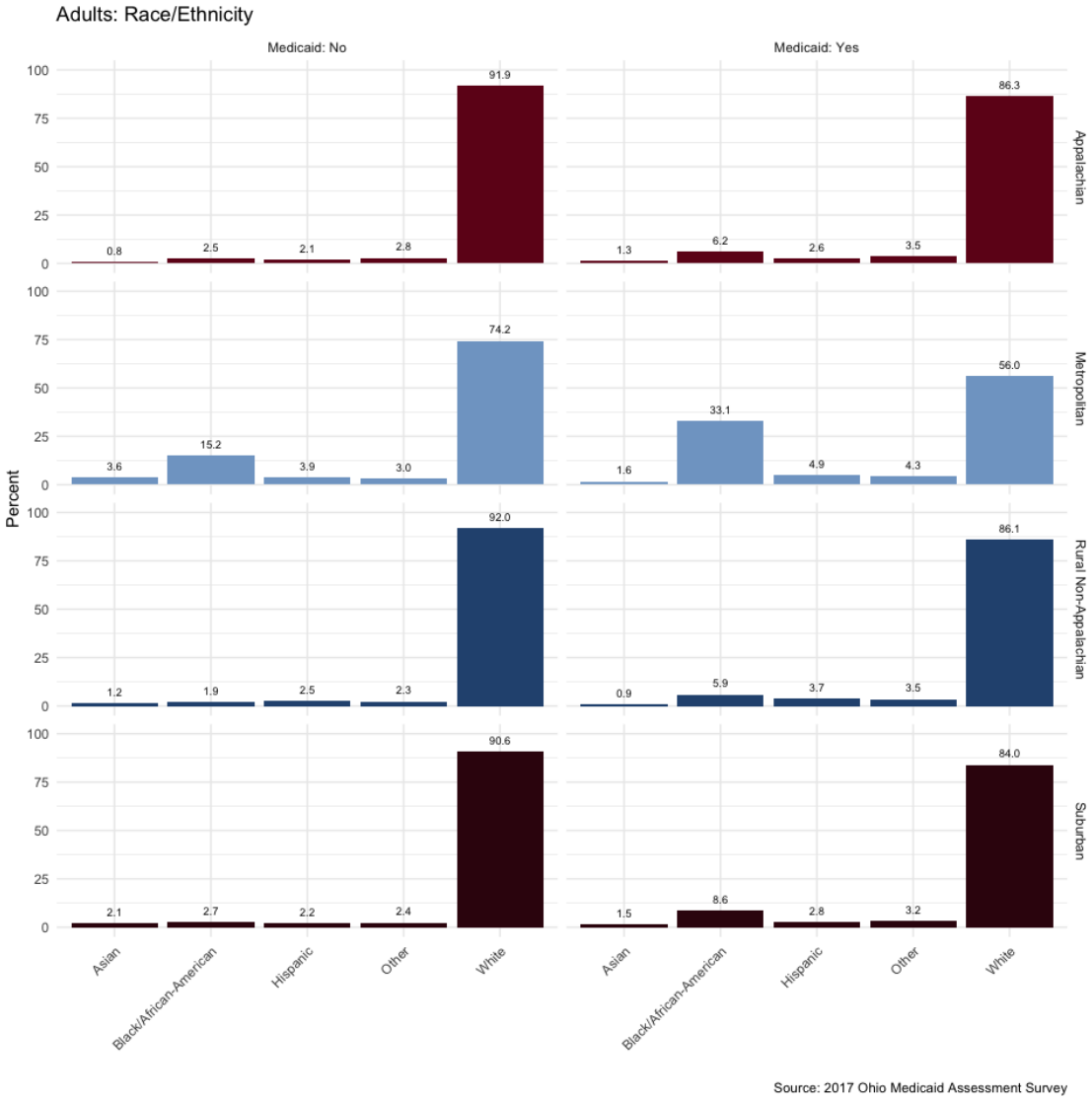
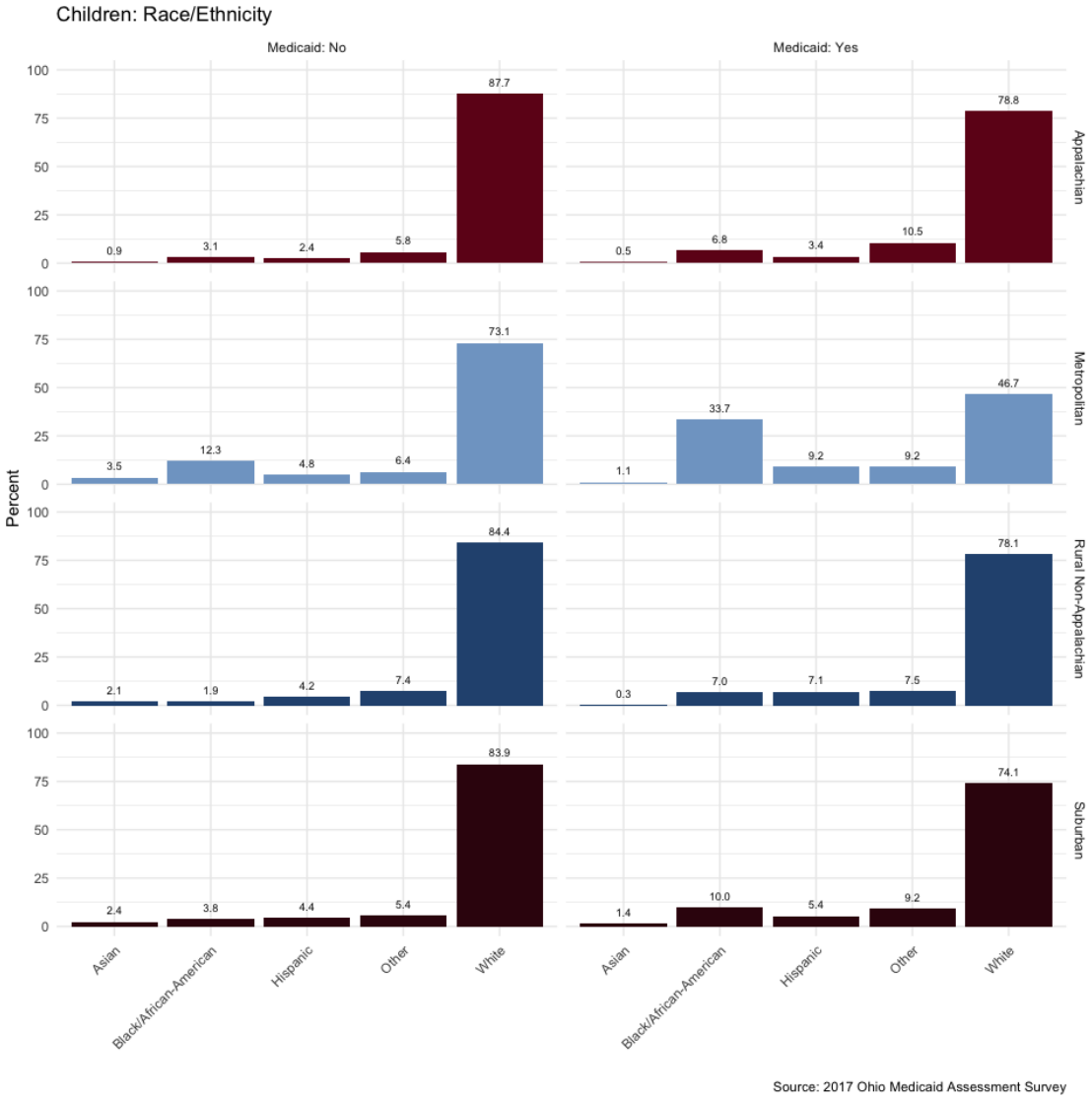
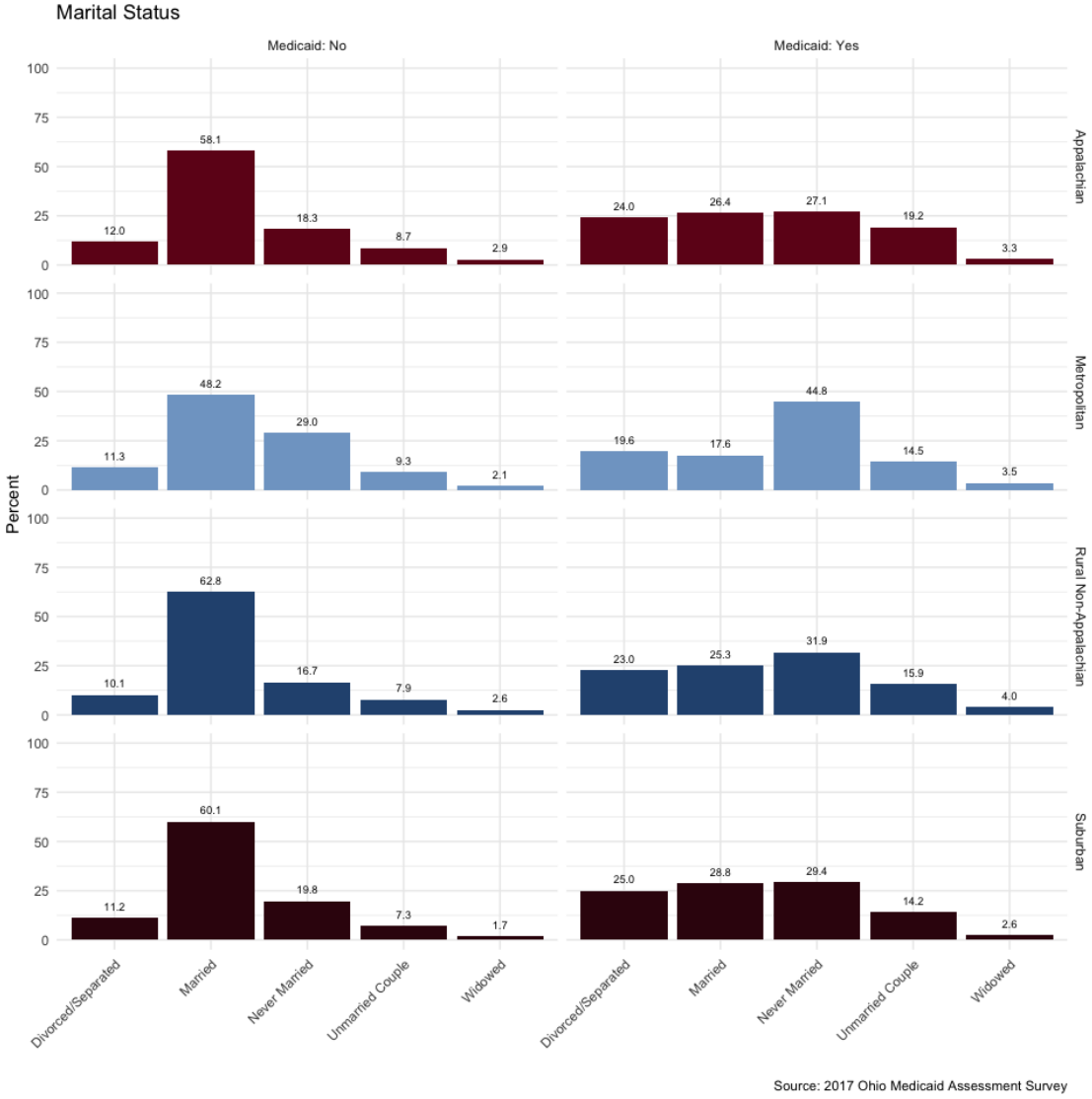


Figure A3(f): Percentage Distribution of Children (by Medicaid Status, Race/Ethnicity, and OMAS County Type Classifications) (2017)



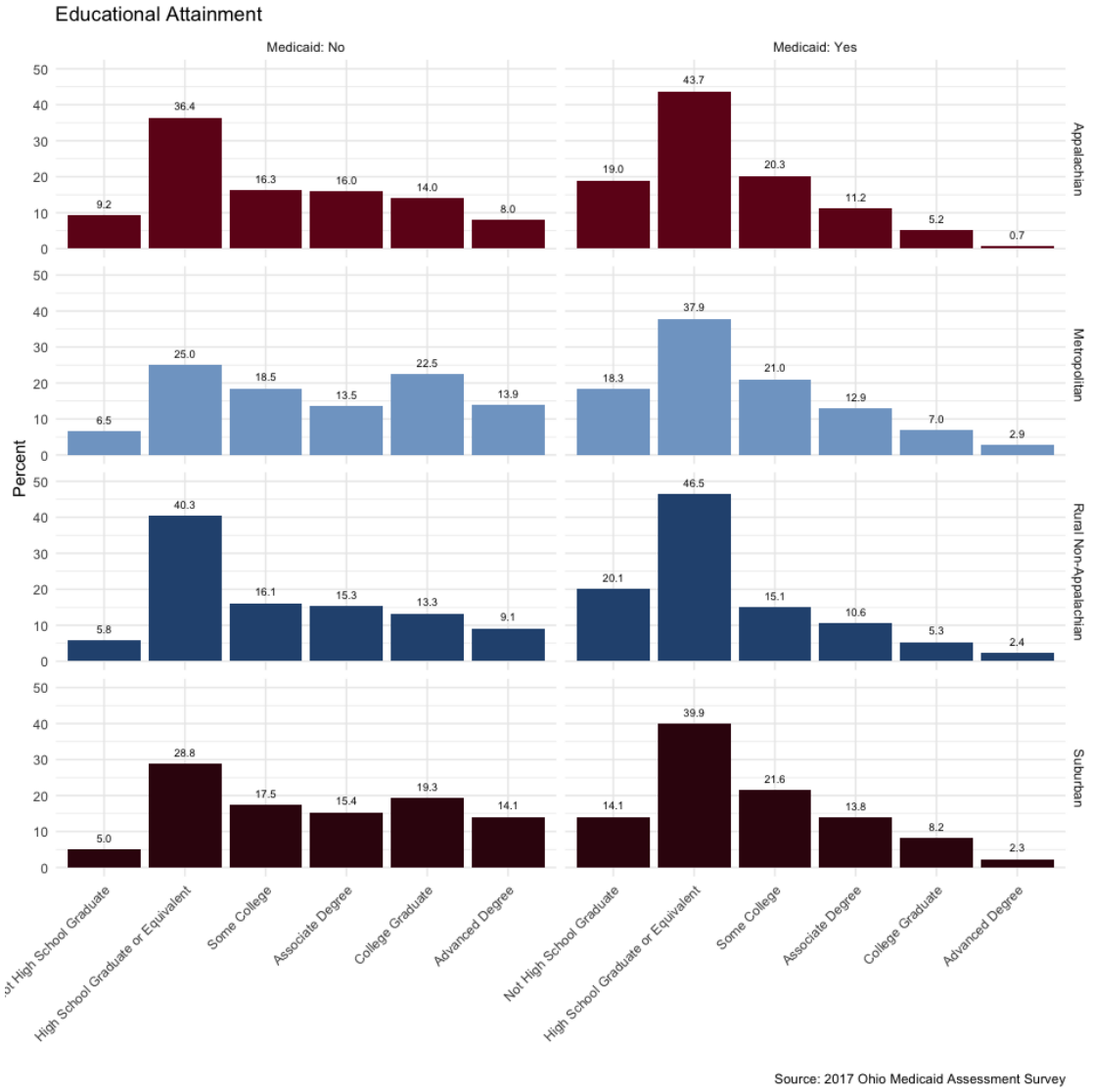
Source: 2017 Ohio Medicaid Assessment Survey

Figure A3(g): Percentage Distribution of Adult (19-64 years old) Respondents (by Medicaid Status, Marital Status, and OMAS County Type Classifications) (2017)



Source: 2017 Ohio Medicaid Assessment Survey

Figure A3(h): Percentage Distribution of Adult (19-64 years old) Respondents (by Medicaid Status, Educational Attainment, and OMAS County Type Classifications) (2017)



Source: 2017 Ohio Medicaid Assessment Survey

Figure A3(i): Percentage Distribution of Adult (19-64 years old) Respondents (by Medicaid Status, Work Status, and OMAS County Type Classifications) (2017)

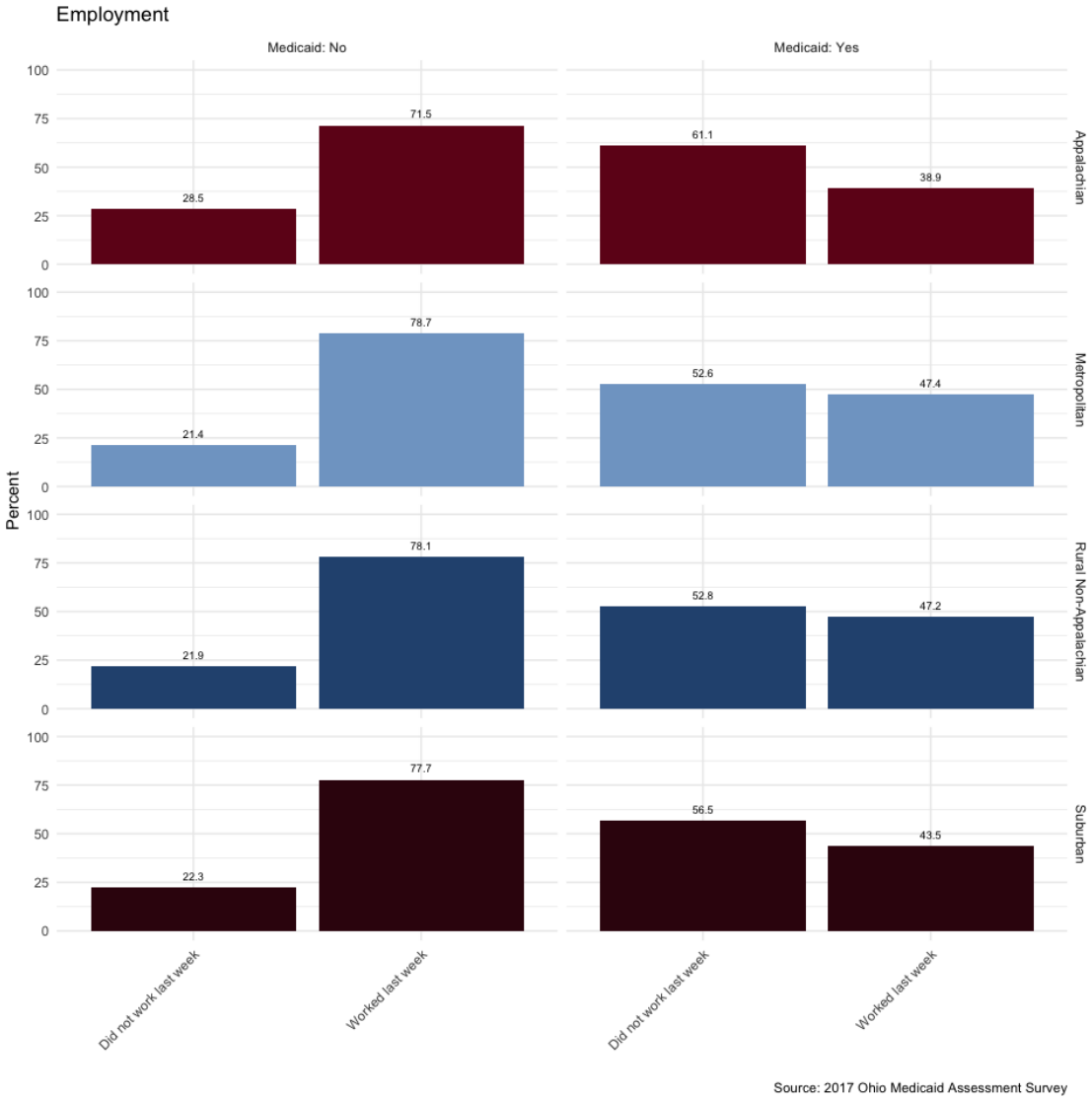


Figure A3(j): Percentage Distribution of Adult (19-64 years old) Respondents (by Medicaid Status, Federal Poverty Level, and OMAS County Type Classifications) (2017)

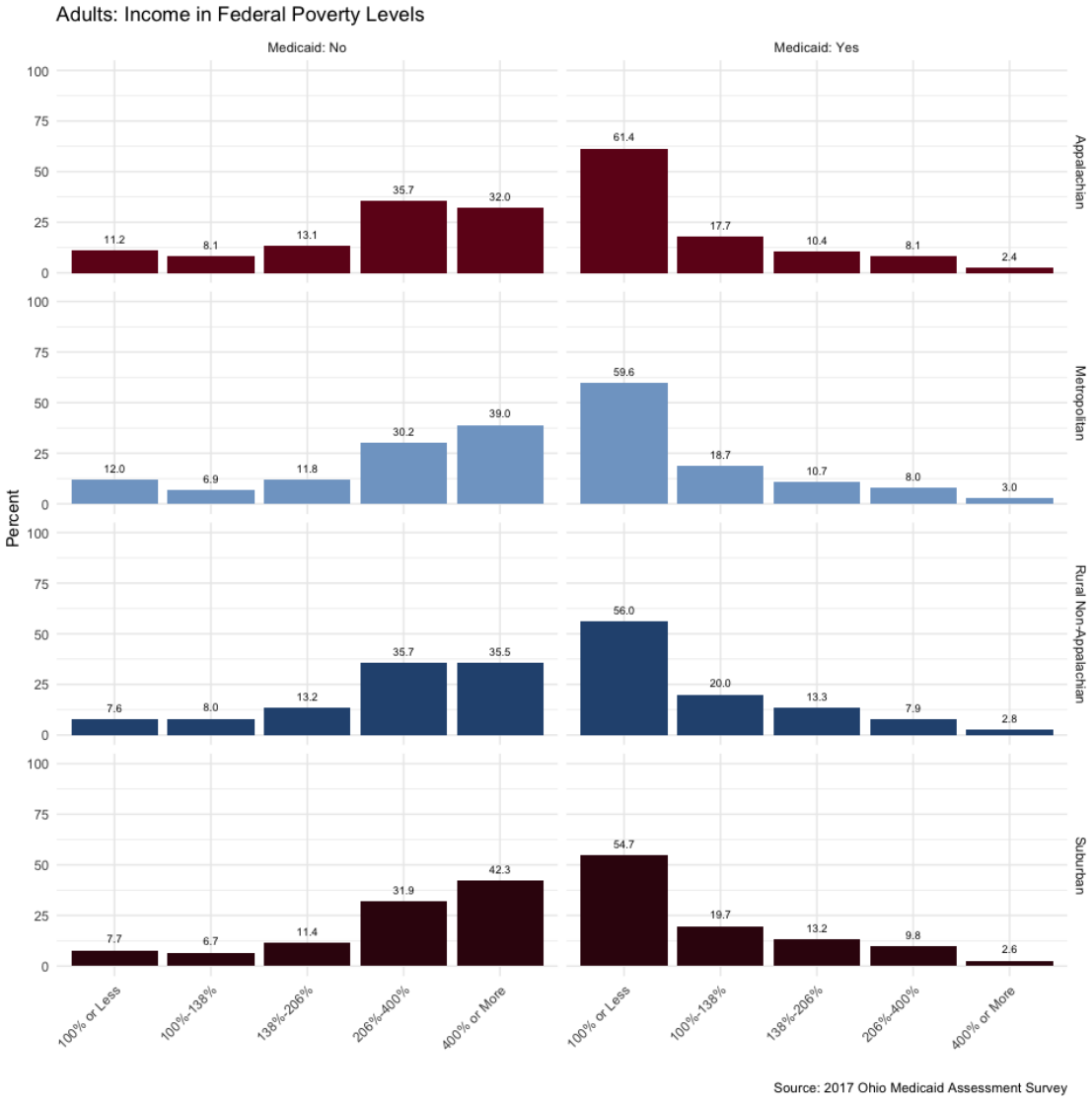
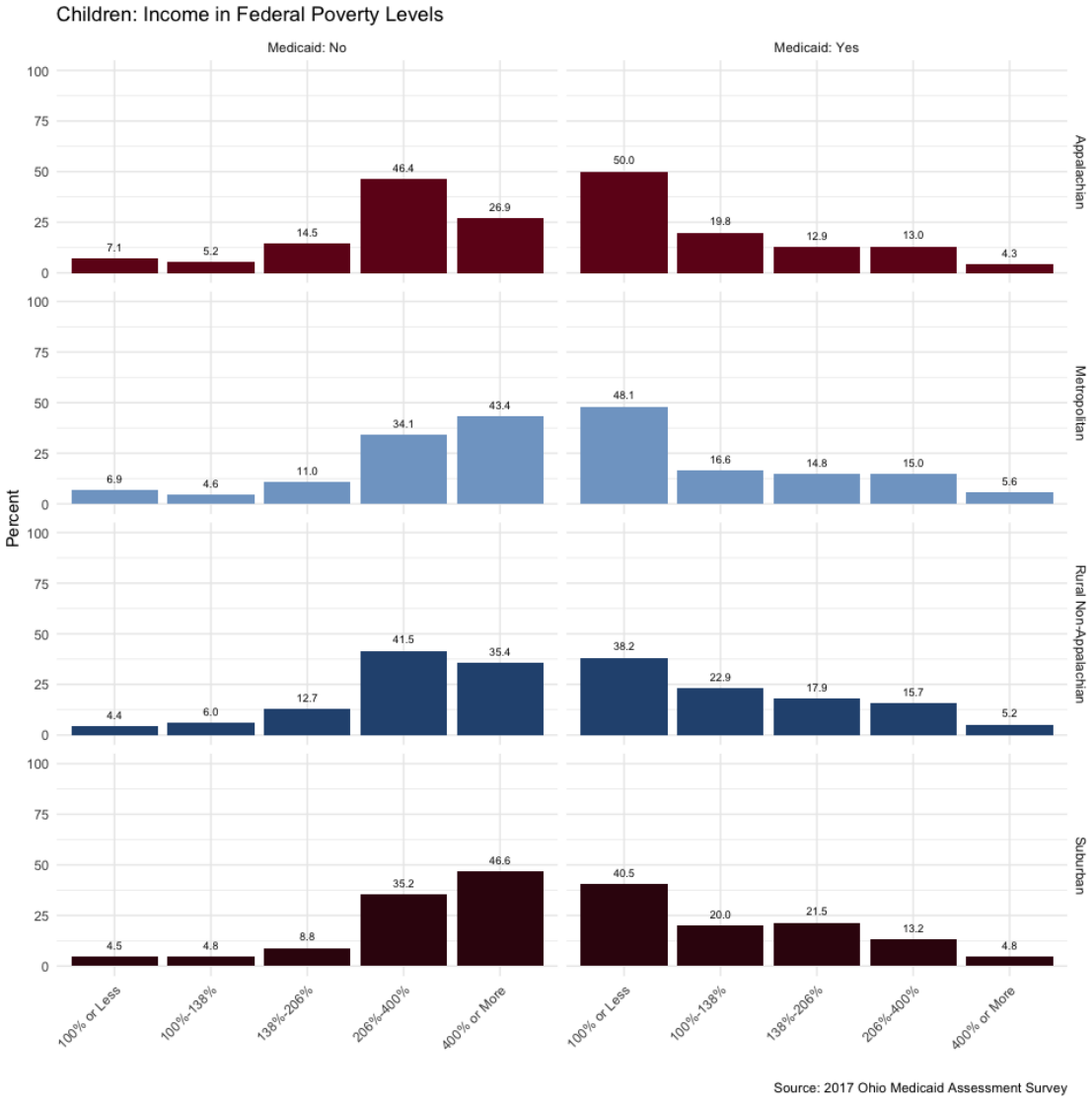


Figure A3(k): Percentage Distribution of Children (by Medicaid Status, Federal Poverty Level, and OMAS County Type Classifications) (2017)



Health Insurance

Table A5: Percentage Distribution of Respondents' Health Insurance Coverage Type (Adult (19-64 years old) Respondents versus Children) (2017)

Coverage Type	Adult (%)	Std. Error	Child (%)	Std. Error
Employer-sponsored Coverage	51.24	0.40	43.86	0.63
Medicaid, no Medicare	19.21	0.31	42.92	0.65
Uninsured	9.28	0. 24	3.34	0.21
Medicare, no Medicaid	4.61	0.17	0.71	0.11
Other directly purchased	4.10	0. 16	2.50	0.20
Unknown	3.85	0.15	2.53	0.18
Medicaid and Medicare	2.84	0. 11	1.73	0.16
Other	2.63	0.13	1.55	0. 15
Exchange Coverage	2.25	0.12	0.86	0.11

Source: 2017 Ohio Medicaid Assessment Survey

Table A6(a): Percentage Distribution of Adult (19-64 years old) Respondents' Health Insurance Coverage Type (by OMAS County Type Classifications) (2017)

Coverage Type	Metro	Rural Appalachia	Rural Non-Appalachia	Suburban
Exchange Coverage	2.66	1.95	2.70	2.52
Employer-sponsored Coverage	46.80	49.63	55.35	58.18
Medicaid and Medicare	3.12	3.02	2.45	2.20
Medicaid, no Medicare	21.66	21.03	15.71	13.01
Medicare, no Medicaid	5.70	4.35	4.82	4.24
Other	2.17	2.56	2.96	3.05
Other directly purchased	4.01	4.06	4.19	4.31
Std. Error:	0.34	0.15	0.33	0.33

Exchange Coverage				
Std. Error: Employer-sponsored Coverage	1.00	0.54	1.01	0.98
Std. Error: Medicaid and Medicare	0.28	0.16	0.28	0.22
Std. Error: Medicaid, no Medicare	0.80	0.45	0.72	0.66
Std. Error: Medicare, no Medicaid	0.46	0.23	0.45	0.43
Std. Error: Other	0.28	0.17	0.36	0.35
Std. Error: Other directly purchased	0.37	0.21	0.38	0.40
Uninsured	9.83	9.49	9.24	7.99
Unknown	4.04	3.92	2.58	4.48

Source: 2017 Ohio Medicaid Assessment Survey

Table A6(b): Percentage Distribution of Children's Health Insurance Coverage Type (by OMAS County Type Classifications) (2017)

Coverage Type	Metropolitan	Rural Appalachia	Rural Non-Appalachia	Suburban
Exchange Coverage	0.99	0.82	0.84	0.91
Employer-sponsored Coverage	34.96	43.54	46.28	51.64
Medicaid and Medicare	1.60	1.86	1.57	1.57
Medicaid, no Medicare	50.95	43.52	41.27	34.39
Medicare, no Medicaid	0.55	0.84	0.57	0.52

Other	1.31	1.28	2.08	2.22
Other directly purchased	3.02	2.34	2.21	2.79
Uninsured	3.95	3.33	3.08	2.98
Unknown	2.67	2.46	2.08	2.99
Std. Error: Exchange Coverage	0.38	0.15	0.23	0.24
Std. Error: Employer-sponsored Coverage	1.47	0.89	1.69	1.54
Std. Error: Medicaid and Medicare	0.31	0.24	0.38	0.42
Std. Error: Medicaid, no Medicare	1.59	0.90	1.73	1.52
Std. Error: Medicare, no Medicaid	0.18	0.19	0.19	0.17
Std. Error: Other	0.36	0.17	0.47	0.43
Std. Error: Other directly purchased	0.56	0.28	0.36	0.43

Source: 2017 Ohio Medicaid Assessment Survey

Table A7: Percent of Adult (19-64 years old) Respondents indicating their Current Insurance Plan Covers Dental/Vision/Prescriptions (2017)

Coverage	No	Yes	Std. Error
Dental	21.04	78.96	0.33
Prescriptions	6.31	93.69	0.33
Vision	22.78	77.22	0.19

Source: 2017 Ohio Medicaid Assessment Survey

Figure A4: Percentage Distribution of Adult (19-64 years old) Respondents' Dental, Prescription, and Vision Coverage (by OMAS County Type Classifications) (2017)

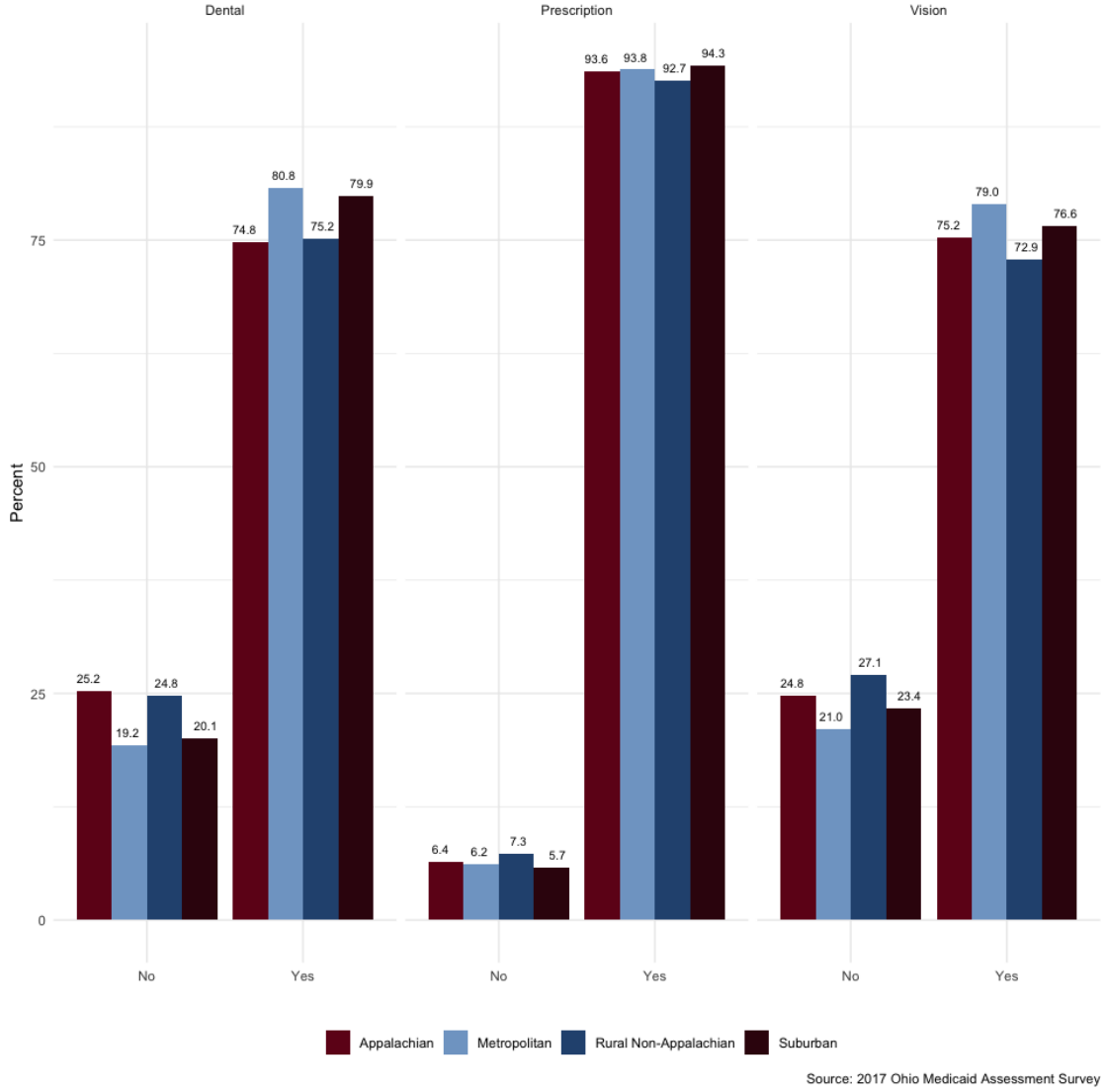


Table A8: Percentage Distribution of the Duration of Current Coverage for Adult (19-64 years old) Respondents and for Children (2017)

Group	Response	Percent	Std. Error
Adults	< 3 months	4.56	0.19
Adults	3 months - 1 year	15.41	0.33
Adults	> 1 year	80.03	0.37
Children	< 3 months	4.35	0.26
Children	3 months - 1 year	13.82	0.45
Children	> 1 year	81.83	0.50

Source: 2017 Ohio Medicaid Assessment Survey

Figure A5(a): Percentage Distribution of the Duration of Current Coverage for Adult (19-64 years old) Respondents and for Children (by OMAS County Type Classifications and Population Group) (2017)

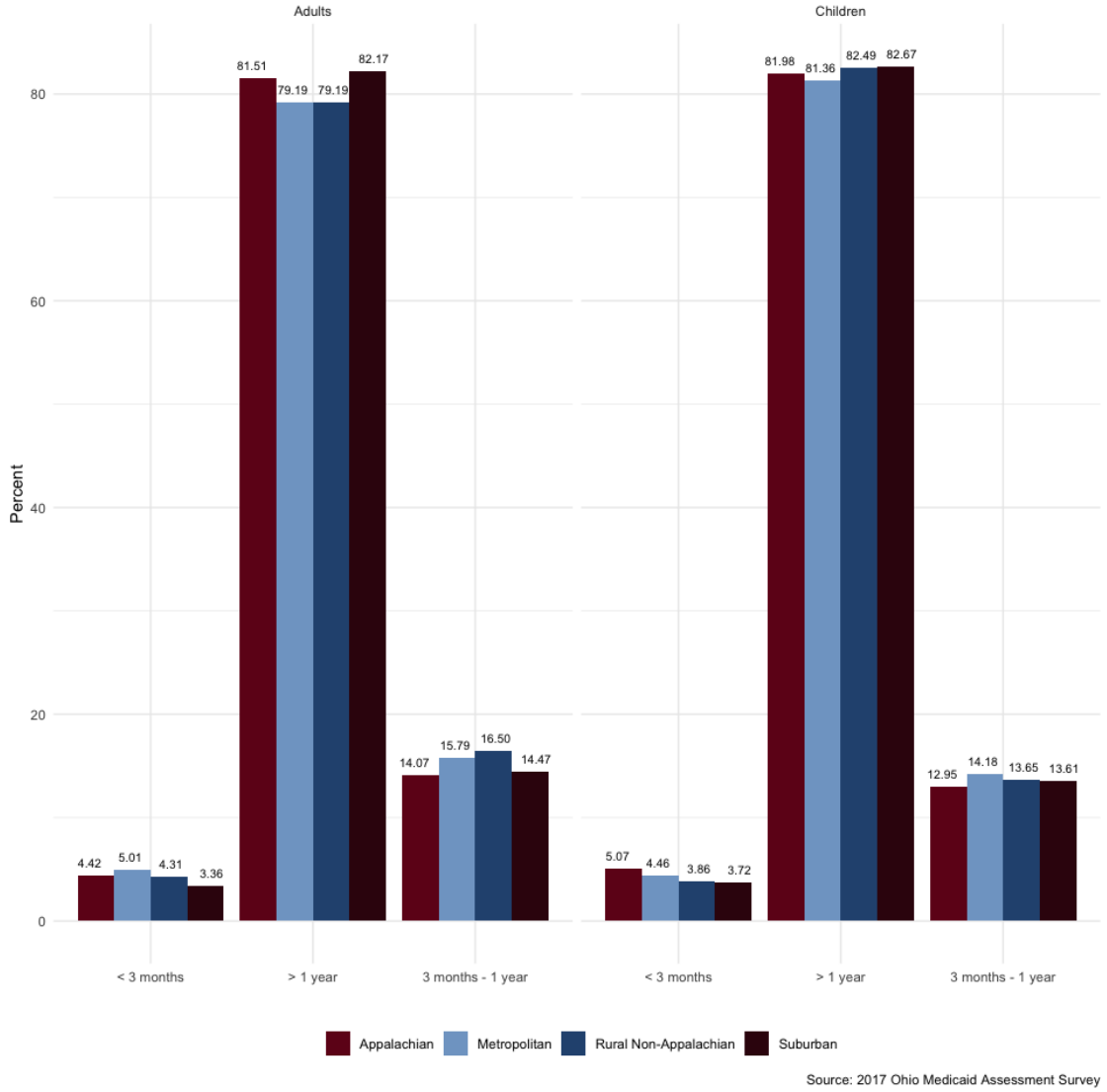


Figure A5(b): Percentage Distribution of the Duration of Current Coverage for Adult (19-64 years old) Respondents and for Children (by OMAS County Type Classifications, Medicaid Status and Population Group) (2017)

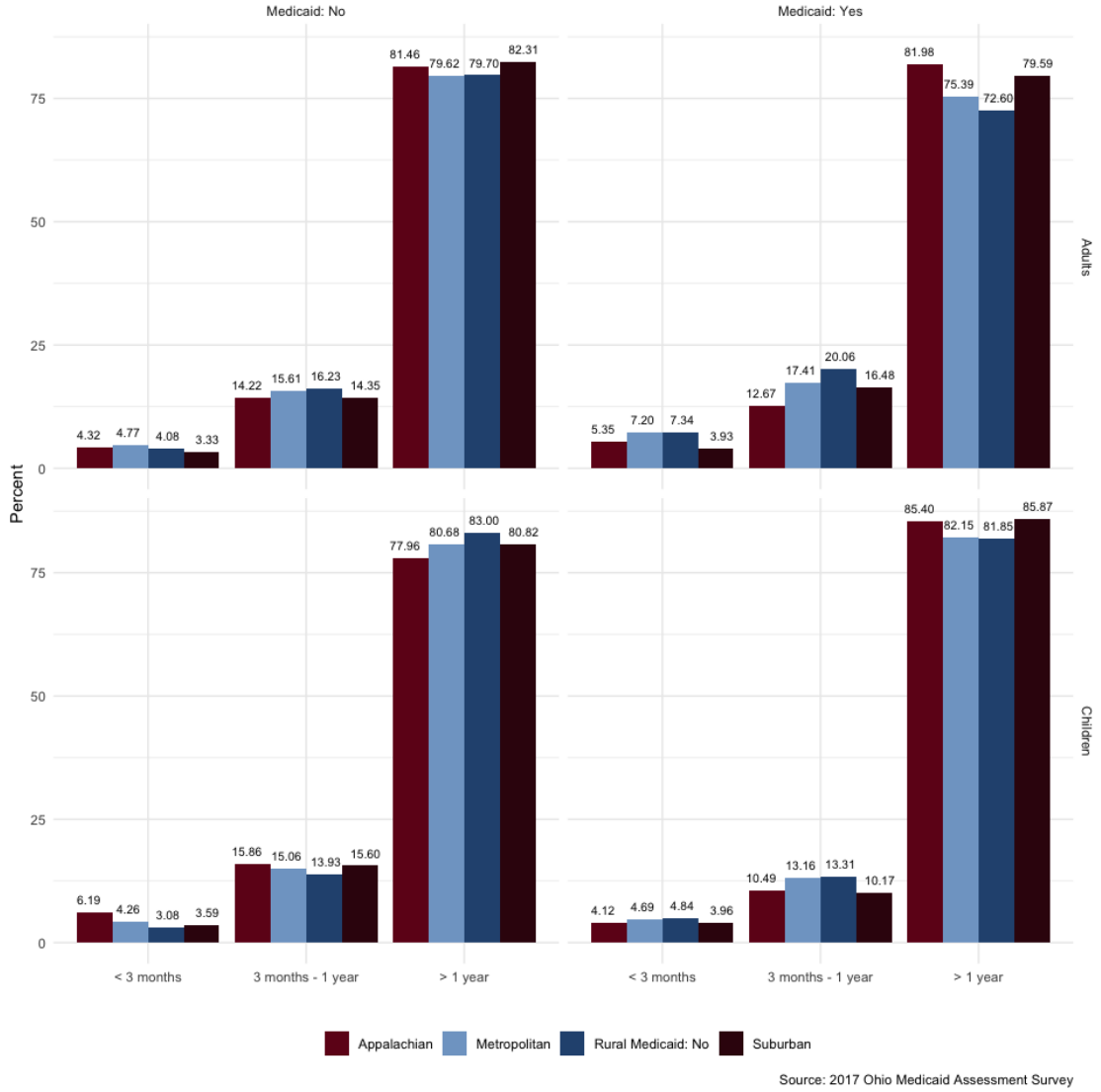


Table A9: Percentage Distribution of Adult (19-64 years old) Respondents and Children who have ever been out of Coverage in the Last 12 Months (2017)

Group	Response	Percent	Std. Error
Adults	No	75.46	0.83
Adults	Yes	24.54	0.83
Children	No	90.48	1.19
Children	Yes	9.52	1.19

Source: 2017 Ohio Medicaid Assessment Survey

Table A10(a): Percentage Distribution of the Duration that Adult (19-64 years old) Respondents or Children have been Out of Coverage in the Last 12 Months (2017)

Group	0-2 Months	3-6 Months	7-12 Months	Never since birth
Adults	40.35	33.27	26.38	NA
Std. Error	1.88	1.84	1.66	NA
Children	69.02	10.92	7.77	12.29
Std. Error	2.05	1.54	1.18	1.35

Source: 2017 Ohio Medicaid Assessment Survey

Table A10(b): Percentage Distribution of the Duration that Adult (19-64 years old) Respondents or Children have been Out of Coverage in the Last 12 Months (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Medicaid: No	0-2 months	43.80	45.43	50.25	48.89
Adults	Medicaid: Yes	0-2 months	34.03	29.32	40.30	25.26
Adults	Medicaid: No	3-6 months	38.50	33.65	33.39	26.66
Adults	Medicaid: Yes	3-6 months	24.87	34.52	31.43	38.77
Adults	Medicaid: No	7-12 months	17.69	20.92	16.36	24.45
Adults	Medicaid: Yes	7-12 months	41.10	36.16	28.27	35.97
Children	Medicaid: No	0-2 months	66.37	69.01	63.41	73.72
Children	Medicaid: Yes	0-2 months	73.93	68.98	63.82	72.43
Children	Medicaid: No	3-6 months	22.68	12.02	13.14	4.95
Children	Medicaid: Yes	3-6 months	7.75	9.74	13.87	2.50
Children	Medicaid: No	7-12 months	1.65	4.62	7.42	4.54

Children	Medicaid: Yes	7-12 months	6.02	11.51	7.54	14.34
Children	Medicaid: No	Never since birth	9.29	14.35	16.04	16.80
Children	Medicaid: Yes	Never since birth	12.30	9.77	14.77	10.73

Source: 2017 Ohio Medicaid Assessment Survey

Table A11: Percentage Distribution of Adult (19-64 years old) Respondents indicating their Employer/Union Offers a Health Insurance Plan (2017)

Response	Percent	Std. Error
No	23.98	0.42
Yes	76.02	0.42

Source: 2017 Ohio Medicaid Assessment Survey

Table A12 Percentage Distribution of Adult (19-64 years old) Respondents indicating their Employer/Union Offers a Health Insurance Plan (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	27.06	72.94	1.14
Metropolitan	23.49	76.51	0.57
Rural Non-Appalachian	24.55	75.45	1.08
Suburban	22.50	77.50	1.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A13: Percentage Distribution of Adult (19-64 years old) Respondents indicating who the Employer/Union Plan Covers (2017)

Response	Percent	Std. Error
Does not offer insurance	0.12	0.03
Employee & Spouse Only	3.94	0.25
Employee Only	6.79	0.30
Employee & Family	89.14	0.38

Source: 2017 Ohio Medicaid Assessment Survey

Table A14(a): Percentage Distribution of Adult (19-64 years old) Respondents indicating who the Employer/Union Plan Covers (by OMAS County Type Classifications) (2017)

Response	Does not offer insurance	Std. Error	Employee & Spouse Only	Std. Error	Employee Only	Std. Error	Employee & Family	Std. Error
Appalachian	0.08	0.06	3.08	0.51	6.82	0.82	90.01	0.95
Metropolitan	0.11	0.04	4.32	0.35	7.34	0.42	88.22	0.53
Rural Non-Appalachian	0.14	0.08	4.16	0.70	5.98	0.73	89.72	0.98
Suburban	0.16	0.10	3.19	0.51	5.51	0.69	91.13	0.85

Source: 2017 Ohio Medicaid Assessment Survey

Table A14(b): Percentage Distribution of Adult (19-64 years old) Respondents Indicating Who the Employer/Union Plan Covers (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Does not offer insurance	0.06	0.10	0.08	0.05
No	Employee and Spouse only	3.27	4.10	4.04	3.30
No	Employee only	5.75	5.95	4.95	5.26
No	Employees and Family	90.91	89.85	90.93	91.40
No	Std. Error: Does not offer insurance	0.06	0.04	0.08	0.05
No	Std. Error: Employee and Spouse only	0.55	0.37	0.73	0.54
No	Std. Error: Employee only	0.81	0.40	0.69	0.70

No	Std. Error: Employees and Family	0.97	0.53	0.98	0.86
Yes	Does not offer insurance	0.26	0.26	0.87	2.46
Yes	Employee and Spouse only	1.17	6.19	5.62	1.08
Yes	Employee only	17.92	19.52	18.08	10.50
Yes	Employees and Family	80.65	74.03	75.43	85.97
Yes	Std. Error: Does not offer insurance	0.26	0.16	0.63	1.92
Yes	Std. Error: Employee and Spouse only	0.75	1.25	2.21	1.07
Yes	Std. Error: Employee only	3.83	2.00	4.30	3.55
Yes	Std. Error: Employees and Family	3.89	2.22	4.63	4.07

Source: 2017 Ohio Medicaid Assessment Survey

Table A15: Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan (2017)

Response	Percent	Std. Error
No	11.83	0.38
Yes	88.17	0.38

Source: 2017 Ohio Medicaid Assessment Survey

Table A16 (a): Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	12.36	87.64	1.05

Metropolitan	12.03	87.97	0.53
Rural Non-Appalachian	11.03	88.97	0.94
Suburban	11.34	88.66	0.92

Source: 2017 Ohio Medicaid Assessment Survey

Table A16(b): Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	9.35	90.65	0.97
Yes	Appalachian	40.45	59.55	5.03
No	Metropolitan	9.12	90.88	0.48
Yes	Metropolitan	36.17	63.83	2.39
No	Rural Non-Appalachian	9.01	90.99	0.90
Yes	Rural Non-Appalachian	31.90	68.10	4.67
No	Suburban	9.32	90.68	0.90
Yes	Suburban	45.84	54.16	5.74

Source: 2017 Ohio Medicaid Assessment Survey

Table A17: Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan but are Not Participating Because of Cost

Response	Percent	Std. Error
No	53.33	1.24
Yes	46.67	1.24

Source: 2017 Ohio Medicaid Assessment Survey

Table A18: Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan but are Not Participating Because of Cost (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	47.27	52.73	3.34
Metropolitan	53.53	46.47	1.66
Rural Non-Appalachian	53.92	46.08	3.40
Suburban	57.16	42.84	2.97

Source: 2017 Ohio Medicaid Assessment Survey

Table A19: Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan but are Not Participating Because of Other Insurance (2017)

Response	Percent	Std. Error
No	21.52	1.02
Yes	78.48	1.02

Source: 2017 Ohio Medicaid Assessment Survey

Table A20(a): Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan but are Not Participating Because of Other Insurance (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	22.57	77.43	2.68
Metropolitan	21.97	78.03	1.38
Rural Non-Appalachian	23.20	76.80	2.98
Suburban	17.91	82.09	2.20

Source: 2017 Ohio Medicaid Assessment Survey

Table A20(b): Percent of Adult (19-64 years old) Respondents Indicating they are Currently Eligible for the Employer/Union Plan but are Not Participating Because of Other Insurance (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	23.58	76.42	3
Yes	Appalachian	18.63	81.37	6
No	Metropolitan	25.27	74.73	1.66
Yes	Metropolitan	10.57	89.43	1.98
No	Rural Non-Appalachian	25.28	74.72	3.56
Yes	Rural Non-Appalachian	15.97	84.03	4.52
No	Suburban	18.87	81.13	2.41
Yes	Suburban	10.84	89.16	4.51

Source: 2017 Ohio Medicaid Assessment Survey

Table A21: Percent of Adult (19-64 years old) Respondents Indicating they Work at least 30 hours/week (2017)

Response	Percent	Std. Error
< 30 hours	18.53	0.38
>= 30 hours	81.47	0.38

Source: 2017 Ohio Medicaid Assessment Survey

Table A22(a): Percent of Adult (19-64 years old) Respondents Indicating they Work at least 30 hours/week (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
< 30 hours	18.87	19.09	16.65	17.86
>= 30 hours	81.13	80.91	83.35	82.14
Std. Error	1.03	0.52	0.95	0.90

Source: 2017 Ohio Medicaid Assessment Survey

Table A22(b): Percent of Adult (19-64 years old) Respondents Indicating they Work at least 30 hours/week (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	Work < 30 hours	Work 30+ hours	Std. Error
No	Appalachian	15.60	84.40	1.07
Yes	Appalachian	37.27	62.73	2.97
No	Metropolitan	15.61	84.39	0.53
Yes	Metropolitan	37.52	62.48	1.62
No	Rural Non-Appalachian	13.93	86.07	0.93
Yes	Rural Non-Appalachian	37.31	62.69	3.62
No	Suburban	15.64	84.36	0.90
Yes	Suburban	40.06	59.94	3.73

Source: 2017 Ohio Medicaid Assessment Survey

Table A23: Percent of Adult (19-64 years old) Respondents Indicating Whether they are Enrolled in Own, Dual, or Other employer/union plan (2017)

Response	Percent	Std. Error
Dual Employer	1.14	0.12
Other Employer	29.55	0.51
Own Employer	69.32	0.51

Source: 2017 Ohio Medicaid Assessment Survey

Table A24 Percent of Adult (19-64 years old) Respondents Indicating Whether they are Enrolled in Own, Dual, or Other employer/union plan (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Own Employer	66.00	70.81	69.29	67.39
Std. Error	1.42	0.70	1.27	1.21
Other Employer	32.53	28.12	29.47	31.63
Std. Error	1.40	0.69	1.26	1.20
Dual Employer	1.48	1.07	1.24	0.98
Std. Error	0.38	0.17	0.32	0.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A25: Percent of Adult (19-64 years old) Respondents Indicating they are Enrolled in Current Own Employer/Union Plan (2017)

Response	Percent	Std. Error
Enrolled	34.63	0.38
Not Enrolled	65.37	0.38

Source: 2017 Ohio Medicaid Assessment Survey

Table A26(a): Percent of Adult (19-64 years old) Respondents Indicating they are Enrolled in Current Own Employer/Union Plan (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Not Enrolled	70.25	65.30	62.25	63.29
Std. Error	0.92	0.52	1.00	0.95
Enrolled	29.75	34.70	37.75	36.71
Std. Error	0.92	0.52	1.00	0.95

Source: 2017 Ohio Medicaid Assessment Survey

Table A26(b): Percent of Adult (19-64 years old) Respondents Indicating they are Enrolled in Current Own Employer/Union Plan (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	Enrolled	Not Enrolled	Std. Error
No	Appalachian	38.61	61.39	1.14
Yes	Appalachian	2.70	97.30	0.64
No	Metropolitan	44.06	55.94	0.62
Yes	Metropolitan	4.78	95.22	0.50

No	Rural Non-Appalachian	44.74	55.26	1.15
Yes	Rural Non-Appalachian	6.02	93.98	1.27
No	Suburban	42.94	57.06	1.07
Yes	Suburban	1.96	98.04	0.66

Source: 2017 Ohio Medicaid Assessment Survey

Access to/Utilization of Health Care

Table A27: Percent of Adult (19-64 years old) Respondents Indicating they have One Place they go to when Sick or Needing Health Advice (2017)

Response	Adult	Child	Std. Error
No	9.49	1.73	0.16
Yes	90.51	98.27	0.16

Source: 2017 Ohio Medicaid Assessment Survey

Table A28(a): Percent of Adult (19-64 years old) Respondents Indicating they have One Place they go to when Sick or Needing Health Advice (by OMAS County Type Classifications) (2017)

County Type	Group	No	Yes	Std. Err
Appalachian	Adults	8.92	91.08	0.56
Metropolitan	Adults	9.82	90.18	0.33
Rural Non-Appalachian	Adults	8.85	91.15	0.55
Suburban	Adults	9.41	90.59	0.62
Appalachian	Children	1.75	98.25	0.46
Metropolitan	Children	1.78	98.22	0.23
Rural Non-Appalachian	Children	2.09	97.91	0.41
Suburban	Children	1.24	98.76	0.29

Source: 2017 Ohio Medicaid Assessment Survey

Table A28(b) Percent of Adult (19-64 years old) Respondents Indicating they have One Place they go to when Sick or Needing Health Advice (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	County Type	No	Yes	Std. Err
Adults	No	Appalachian	9.51	90.49	0.67
Adults	Yes	Appalachian	7.10	92.90	1.00
Adults	No	Metropolitan	10.51	89.49	0.39

Adults	Yes	Metropolitan	7.62	92.38	0.60
Adults	No	Rural Non-Appalachian	8.59	91.41	0.60
Adults	Yes	Rural Non-Appalachian	10.05	89.95	1.38
Adults	No	Suburban	9.44	90.56	0.68
Adults	Yes	Suburban	9.22	90.78	1.52
Children	No	Appalachian	1.54	98.46	0.42
Children	Yes	Appalachian	1.95	98.05	0.78
Children	No	Metropolitan	1.64	98.36	0.26
Children	Yes	Metropolitan	1.94	98.06	0.39
Children	No	Rural Non-Appalachian	1.38	98.62	0.35
Children	Yes	Rural Non-Appalachian	3.02	96.98	0.83
Children	No	Suburban	1.80	98.20	0.43
Children	Yes	Suburban	0.23	99.77	0.17

Source: 2017 Ohio Medicaid Assessment Survey

Table A29: Percent of Adult (19-64 years old) Respondents and Children with One or More Persons they think of as Personal Doctor/Nurse (2017)

Response	Adult	Child	Std. Error
No	23.62	13.98	0.46
Yes	76.38	86.02	0.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A30(a): Percent of Adult (19-64 years old) Respondents and Children with One or More Persons they think of as Personal Doctor/Nurse (by OMAS County Type Classifications) (2017)

County Type	Group	No	Yes	Std. Err
Appalachian	Adults	22.59	77.41	0.89
Metropolitan	Adults	25.14	74.86	0.51
Rural Non-Appalachian	Adults	21.99	78.01	0.91
Suburban	Adults	20.60	79.40	0.83
Appalachian	Children	14.51	85.49	1.21
Metropolitan	Children	14.69	85.31	0.65
Rural Non-	Children	15.20	84.80	1.30

Appalachian				
Suburban	Children	10.03	89.97	0.95

Source: 2017 Ohio Medicaid Assessment Survey

Table A30(b): Percent of Adult (19-64 years old) Respondents and Children with One or More Persons they think of as Personal Doctor/Nurse (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	County Type	No	Yes	Std. Err
Adults	No	Appalachian	21.85	78.15	1.03
Adults	Yes	Appalachian	24.78	75.22	1.76
Adults	No	Metropolitan	23.12	76.88	0.57
Adults	Yes	Metropolitan	31.35	68.65	1.12
Adults	No	Rural Non-Appalachian	20.88	79.12	0.98
Adults	Yes	Rural Non-Appalachian	27.09	72.91	2.34
Adults	No	Suburban	19.73	80.27	0.89
Adults	Yes	Suburban	25.49	74.51	2.26
Children	No	Appalachian	12.57	87.43	1.48
Children	Yes	Appalachian	16.27	83.73	1.86
Children	No	Metropolitan	10.88	89.12	0.71
Children	Yes	Metropolitan	19.41	80.59	1.13
Children	No	Rural Non-Appalachian	13.50	86.50	1.53
Children	Yes	Rural Non-Appalachian	17.52	82.48	2.27
Children	No	Suburban	9.11	90.89	1.03
Children	Yes	Suburban	11.68	88.32	1.89

Source: 2017 Ohio Medicaid Assessment Survey

Table A31: Percent of Adult (19-64 years old) Respondents and Children who saw this Health Care Provider in the Last 12 Months (2017)

Response	Adult	Child	Std. Error
No	13	5.46	0.33
Yes	87	94.54	0.33

Source: 2017 Ohio Medicaid Assessment Survey

Table A32(a): Percent of Adult (19-64 years old) Respondents and Children who saw this Health Care Provider in the Last 12 Months (by OMAS County Type Classifications) (2017)

County Type	Group	No	Yes	Std. Err
Appalachian	Adults	12.06	87.94	0.77
Metropolitan	Adults	13.19	86.81	0.46
Rural Non-Appalachian	Adults	13.83	86.17	0.84
Suburban	Adults	12.60	87.40	0.78
Appalachian	Children	5.69	94.31	0.81
Metropolitan	Children	4.65	95.35	0.40
Rural Non-Appalachian	Children	8.51	91.49	1.17
Suburban	Children	5.32	94.68	0.77

Source: 2017 Ohio Medicaid Assessment Survey

Table A32(b): Percent of Adult (19-64 years old) Respondents and Children who saw this Health Care Provider in the Last 12 Months (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	County Type	No	Yes	Std. Err
Adults	No	Appalachian	12.83	87.17	0.90
Adults	Yes	Appalachian	9.67	90.33	1.47
Adults	No	Metropolitan	13.72	86.28	0.53
Adults	Yes	Metropolitan	11.33	88.67	0.93
Adults	No	Rural Non-Appalachian	14.82	85.18	0.96
Adults	Yes	Rural Non-Appalachian	8.87	91.13	1.43
Adults	No	Suburban	13.09	86.91	0.86
Adults	Yes	Suburban	9.64	90.36	1.88
Children	No	Appalachian	8.90	91.10	1.46
Children	Yes	Appalachian	2.66	97.34	0.72
Children	No	Metropolitan	5.48	94.52	0.56
Children	Yes	Metropolitan	3.51	96.49	0.54
Children	No	Rural Non-Appalachian	10.09	89.91	1.54
Children	Yes	Rural Non-Appalachian	6.23	93.77	1.71

Children	No	Suburban	5.90	94.10	1.02
Children	Yes	Suburban	4.25	95.75	1.08

Source: 2017 Ohio Medicaid Assessment Survey

Table A33: Percent of Adult (19-64 years old) Respondents Indicating in the Last 12 Months they Needed Medical Assistance During Evenings/Weekends/Holidays (2017)

Response	Percent	Std. Error
No	74.43	0.46
Yes	25.57	0.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A34(a): Percent of Adult (19-64 years old) Respondents Indicating in the Last 12 Months they Needed Medical Assistance During Evenings/Weekends/Holidays (by OMAS County Type Classifications) (2017)

Response	No	Yes	Std. Error
Appalachian	72.79	27.21	1.16
Metropolitan	74.22	25.78	0.64
Rural Non-Appalachian	77.13	22.87	1.13
Suburban	74.57	25.43	1.14

Source: 2017 Ohio Medicaid Assessment Survey

Table A34(b): Percent of Adult (19-64 years old) Respondents Indicating in the Last 12 Months they Needed Medical Assistance During Evenings/Weekends/Holidays (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	75.77	24.23	1.29
Yes	Appalachian	63.80	36.20	2.42
No	Metropolitan	77.51	22.49	0.70
Yes	Metropolitan	63.12	36.88	1.44
No	Rural Non-Appalachian	79.61	20.39	1.23
Yes	Rural Non-Appalachian	65.35	34.65	2.76
No	Suburban	76.78	23.22	1.22
Yes	Suburban	61.75	38.25	3.12

Source: 2017 Ohio Medicaid Assessment Survey

Table A35(a): Percent of Adult (19-64 years old) Respondents Indicating that in the Last 12 Months they Received Needed Medical Assistance During Evenings/Weekends (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Never	34.36	30.79	40.92	31.99
Adults	Std. Error:	2.27	1.32	2.76	2.44
Adults	Sometimes	20.27	17.32	16.31	18.50
Adults	Std. Error:	2.09	1.07	2.01	2.01
Adults	Usually	17.82	20.32	14.61	18.77
Adults	Std. Error:	1.89	1.16	1.84	1.94
Adults	Always	27.55	31.57	28.16	30.74
Adults	Std. Error:	2.29	1.34	2.57	2.46
Children	Never	31.93	32.80	36.47	36.78
Children	Std. Error:	1.70	0.99	1.80	1.67
Children	Sometimes	16.09	14.98	15.05	12.68
Children	Std. Error:	1.51	0.78	1.41	1.19
Children	Usually	17.65	15.77	14.53	16.09
Children	Std. Error:	1.40	0.78	1.34	1.25
Children	Always	34.32	36.44	33.95	34.46
Children	Std. Error:	1.75	1.02	1.81	1.68

Source: 2017 Ohio Medicaid Assessment Survey

Table A35(b): Percent of Adult (19-64 years old) Respondents Indicating that in the Last 12 Months they Received Needed Medical Assistance During Evenings/Weekends (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	No	Never	37.95	30.08	44.50	32.95
Adults	Yes	Never	27.15	32.24	31.02	28.66
Adults	No	Std. Error:	2.89	1.57	3.35	2.86
Adults	Yes	Std. Error:	3.54	2.40	4.53	4.43
Adults	No	Sometimes	17.76	17.00	16.48	17.53
Adults	Yes	Sometimes	25.32	17.97	15.86	21.87
Adults	No	Std. Error:	2.38	1.33	2.49	2.24
Adults	Yes	Std. Error:	3.99	1.82	3.16	4.46

Adults	No	Usually	18.29	19.35	12.09	18.59
Adults	Yes	Usually	16.88	22.31	21.59	19.40
Adults	No	Std. Error:	2.41	1.41	2.01	2.22
Adults	Yes	Std. Error:	2.98	2.04	4.00	4.03
Adults	No	Always	26.00	33.57	26.94	30.93
Adults	Yes	Always	30.65	27.49	31.53	30.07
Adults	No	Std. Error:	2.75	1.70	3.07	2.80
Adults	Yes	Std. Error:	4.06	2.07	4.67	5.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A35(c): Percent of Respondents Indicating that in the Last 12 Months their Children Received Needed Medical Assistance During Evenings/Weekends (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	31.52	35.33	34.33	37.69
Yes	Never	32.30	29.41	39.41	35.14
No	Std. Error:	2.38	1.30	2.18	2.01
Yes	Std. Error:	2.40	1.52	3.13	3.00
No	Sometimes	13.57	13.33	12.36	11.73
Yes	Sometimes	18.34	17.21	18.75	14.37
No	Std. Error:	1.82	0.93	1.45	1.29
Yes	Std. Error:	2.36	1.31	2.67	2.35
No	Usually	19.47	15.25	16.36	15.58
Yes	Usually	16.03	16.48	12.01	17.00
No	Std. Error:	2.01	0.98	1.92	1.41
Yes	Std. Error:	1.96	1.26	1.77	2.41
No	Always	35.44	36.09	36.95	35.00
Yes	Always	33.33	36.91	29.83	33.49
No	Std. Error:	2.37	1.31	2.27	2.04
Yes	Std. Error:	2.58	1.63	2.88	2.91

Source: 2017 Ohio Medicaid Assessment Survey

Table A36(a): Percent of Adult (19-64 years old) Respondents Indicating they Contacted their Health Care Provider's Office to get an Appointment for an Illness, Injury, or Condition that Needed Care Right Away (2017)

Response	Percent	Std. Error
No	51.36	0.52
Yes	48.64	0.52

Source: 2017 Ohio Medicaid Assessment Survey

Table A36(b): Percent of Adult (19-64 years old) Respondents Indicating they Contacted their Health Care Provider's Office to get an Appointment for an Illness, Injury, or Condition that Needed Care Right Away (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	51.14	48.86	1.31
Metropolitan	50.98	49.02	0.72
Rural Non-Appalachian	51.53	48.47	1.36
Suburban	52.76	47.24	1.28

Source: 2017 Ohio Medicaid Assessment Survey

Table A36(c): ***Percent of Adult (19-64 years old) Respondents Indicating they Contacted their Health Care Provider's Office to get an Appointment for an Illness, Injury, or Condition that Needed Care Right Away (by Medicaid Status and OMAS County Type Classifications) (2017)***

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	54.94	45.06	1.54
Yes	Appalachian	39.80	60.20	2.39
No	Metropolitan	53.96	46.04	0.83
Yes	Metropolitan	40.95	59.05	1.48
No	Rural Non-Appalachian	54.54	45.46	1.53
Yes	Rural Non-Appalachian	37.35	62.65	2.87
No	Suburban	54.90	45.10	1.40
Yes	Suburban	40.38	59.62	3.11

Source: 2017 Ohio Medicaid Assessment Survey

Table A37(a): Percentage Distribution of the Number of Days, in the Past 12 Months, Adult (19-64 years old) Respondents had to Wait for an Appointment for an Illness, Injury, or Condition that Needed Care Right Away (2017)

Response	Percent	Std. Error
Same day	35.15	0.72
1 day	25.58	0.65
2-3 days	22.38	0.62
4-7 days	8.06	0.40
> 7 days	8.68	0.42
Couldn't so went to ER	0.14	0.06

Source: 2017 Ohio Medicaid Assessment Survey

Table A37(b): Percentage Distribution of the Number of Days, in the Past 12 Months, Adult (19-64 years old) Respondents had to Wait for an Appointment for an Illness, Injury, or Condition that Needed Care Right Away (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Same day	36.44	34.06	35.77	37.13
Std. Error	1.80	0.99	1.80	1.79
1 day	22.75	26.32	26.97	24.78
Std. Error	1.48	0.92	1.77	1.57
2-3 days	23.59	21.94	22.42	22.62
Std. Error	1.62	0.84	1.59	1.58
4-7 days	7.33	8.71	5.82	8.44
Std. Error	0.90	0.59	0.82	1.05
> 7 days	9.62	8.85	8.85	7.00
Std. Error	1.08	0.58	1.22	0.88
Couldn't so went to ER	0.26	0.13	0.17	0.03
Std. Error	0.26	0.06	0.12	0.03

Source: 2017 Ohio Medicaid Assessment Survey

Table A37(c): Percentage Distribution of the Number of Days, in the Past 12 Months, Adult (19-64 years old) Respondents had to Wait for an Appointment for an Illness, Injury, or Condition that Needed Care Right Away (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Same day	39.66	36.55	37.59	39.24
Yes	Same day	29.21	27.50	29.53	27.90
No	Std. Error	2.24	1.18	2.14	2.02
Yes	Std. Error	2.95	1.72	3.18	3.68
No	1 day	22.90	28.51	28.38	25.39
Yes	1 day	22.41	20.56	22.17	22.08
No	Std. Error	1.80	1.12	2.12	1.77
Yes	Std. Error	2.62	1.54	2.89	3.41
No	2-3 days	23.42	20.67	21.00	21.05
Yes	2-3 days	23.99	25.28	27.26	29.52
No	Std. Error	2.04	0.97	1.78	1.74
Yes	Std. Error	2.52	1.64	3.44	3.72
No	4-7 days	5.99	7.25	5.10	8.41
Yes	4-7 days	10.34	12.57	8.26	8.60
No	Std. Error	0.82	0.64	0.87	1.18
Yes	Std. Error	2.23	1.28	2.04	2.25
No	> 7 days	7.65	6.91	7.70	5.87
Yes	> 7 days	14.05	13.94	12.79	11.90
No	Std. Error	1.19	0.62	1.40	0.89
Yes	Std. Error	2.21	1.32	2.51	2.66
No	Couldn't so went to ER	0.38	0.12	0.22	0.03
Yes	Couldn't so went to ER	0.00	0.14	0.00	0.00
No	Std. Error	0.38	0.08	0.16	0.03
Yes	Std. Error	0.00	0.12	0.00	0.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A38(a): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Spent Enough Time with Adults (19-64 years old) and Children (2017)

Group	Response	Percent	Std. Error
Adults	Never	1.77	0.15
Adults	Sometimes	10.13	0.32
Adults	Usually	20.85	0.42
Adults	Always	67.25	0.49
Children	Never	0.80	0.12
Children	Sometimes	7.03	0.38
Children	Usually	14.52	0.54
Children	Always	77.65	0.63

Source: 2017 Ohio Medicaid Assessment Survey

Table A38(b): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Spent Enough Time with Adults (19-64 years old) and Children (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Never	2.72	1.65	1.56	1.39
Adults	Std. Error	0.52	0.19	0.36	0.33
Adults	Sometimes	8.74	11.04	9.07	9.31
Adults	Std. Error	0.70	0.47	0.72	0.75
Adults	Usually	18.40	21.81	19.84	20.90
Adults	Std. Error	1.02	0.60	1.08	1.01
Adults	Always	70.14	65.49	69.53	68.40
Adults	Std. Error	1.20	0.69	1.23	1.17
Children	Never	0.84	0.90	0.46	0.71
Children	Std. Error	0.26	0.19	0.20	0.27
Children	Sometimes	6.29	7.87	6.53	5.41
Children	Std. Error	0.88	0.58	0.80	0.75
Children	Usually	16.73	13.77	15.92	13.77
Children	Std. Error	1.51	0.72	1.46	1.22
Children	Always	76.15	77.46	77.09	80.11
Children	Std. Error	1.66	0.88	1.58	1.38

Source: 2017 Ohio Medicaid Assessment Survey

Table A38(c): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Spent Enough Time with Adults (19-64 years old) (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	3.05	1.62	1.48	1.27
Yes	Never	1.73	1.77	1.93	2.06
No	Std. Error	0.65	0.22	0.40	0.35
Yes	Std. Error	0.72	0.40	0.80	0.98
No	Sometimes	7.15	10.35	8.82	8.80
Yes	Sometimes	13.48	13.38	10.27	12.28
No	Std. Error	0.71	0.53	0.80	0.81
Yes	Std. Error	1.77	1.01	1.63	1.95
No	Usually	18.19	22.63	20.23	21.31
Yes	Usually	19.03	19.06	17.97	18.52
No	Std. Error	1.19	0.69	1.20	1.11
Yes	Std. Error	1.96	1.21	2.51	2.39
No	Always	71.61	65.40	69.47	68.61
Yes	Always	65.75	65.79	69.83	67.14
No	Std. Error	1.40	0.79	1.38	1.28
Yes	Std. Error	2.38	1.43	2.78	2.91

Source: 2017 Ohio Medicaid Assessment Survey

Table A38(d): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Spent Enough Time with Children (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	0.73	0.50	0.55	0.41
Yes	Never	0.93	1.44	0.35	1.25
No	Std. Error	0.30	0.18	0.23	0.18
Yes	Std. Error	0.40	0.39	0.35	0.69
No	Sometimes	7.46	6.30	5.78	3.90
Yes	Sometimes	5.26	9.99	7.56	8.12
No	Std. Error	1.49	0.69	0.89	0.71

Yes	Std. Error	0.98	0.98	1.47	1.66
No	Usually	13.98	12.86	15.15	14.16
Yes	Usually	19.16	14.98	16.97	13.08
No	Std. Error	1.72	0.91	1.83	1.43
Yes	Std. Error	2.38	1.15	2.41	2.23
No	Always	77.83	80.34	78.52	81.54
Yes	Always	74.65	73.59	75.13	77.54
No	Std. Error	2.13	1.09	1.97	1.56
Yes	Std. Error	2.50	1.44	2.67	2.66

Source: 2017 Ohio Medicaid Assessment Survey

Table A39(a): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Explained things in an Easy to Understand Manner to Adult (19-64 years old) Respondents or to Children (2017)

Group	Response	Percent	Std. Error
Adults	Never	1.38	0.12
Adults	Sometimes	4.29	0.22
Adults	Usually	16.06	0.39
Adults	Always	78.27	0.43
Children	Never	0.80	0.13
Children	Sometimes	2.15	0.20
Children	Usually	12.27	0.49
Children	Always	84.78	0.53

Source: 2017 Ohio Medicaid Assessment Survey

Table A39(b): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Explained things in an Easy to Understand Manner to Adult (19-64 years old) Respondents or to Children (by OMAS County Type Classifications and Population Group) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Never	1.75	1.24	1.89	1.06
Adults	Std. Error	0.34	0.16	0.39	0.28
Adults	Sometimes	3.58	5.03	3.88	2.83
Adults	Std. Error	0.48	0.33	0.48	0.45

Adults	Usually	15.11	16.26	16.05	16.35
Adults	Std. Error	0.92	0.54	0.98	0.91
Adults	Always	79.56	77.47	78.19	79.77
Adults	Std. Error	1.04	0.62	1.09	1.01
Children	Never	0.62	0.75	1.24	0.76
Children	Std. Error	0.19	0.16	0.60	0.26
Children	Sometimes	1.92	2.59	1.70	1.33
Children	Std. Error	0.37	0.33	0.42	0.36
Children	Usually	12.21	11.31	16.15	12.33
Children	Std. Error	1.28	0.66	1.37	1.17
Children	Always	85.26	85.35	80.91	85.58
Children	Std. Error	1.33	0.74	1.49	1.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A39(c): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Explained things in an Easy to Understand Manner to Adult (19-64 years old) Respondents (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	1.75	1.06	1.95	1.05
Yes	Never	1.74	1.84	1.59	1.08
No	Std. Error	0.42	0.17	0.45	0.32
Yes	Std. Error	0.48	0.41	0.57	0.51
No	Sometimes	2.96	4.38	3.36	2.75
Yes	Sometimes	5.44	7.22	6.32	3.32
No	Std. Error	0.50	0.35	0.52	0.50
Yes	Std. Error	1.22	0.78	1.21	0.96
No	Usually	15.23	16.45	16.18	15.55
Yes	Usually	14.75	15.62	15.43	20.94
No	Std. Error	1.11	0.63	1.09	0.96
Yes	Std. Error	1.60	1.11	2.22	2.65
No	Always	80.06	78.11	78.51	80.65
Yes	Always	78.07	75.32	76.66	74.66
No	Std. Error	1.23	0.70	1.22	1.08
Yes	Std. Error	1.96	1.31	2.45	2.76

Source: 2017 Ohio Medicaid Assessment Survey

Table A39(d): Percentage Distribution of How Often, in the Past 12 Months, Health Care Provider Explained things in an Easy to Understand Manner to Children (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	0.73	0.50	0.91	0.77
Yes	Never	0.52	1.08	1.69	0.75
No	Std. Error	0.30	0.17	0.39	0.26
Yes	Std. Error	0.25	0.30	1.32	0.54
No	Sometimes	1.05	2.09	1.14	1.16
Yes	Sometimes	2.68	3.26	2.48	1.63
No	Std. Error	0.34	0.40	0.46	0.44
Yes	Std. Error	0.64	0.55	0.77	0.61
No	Usually	10.67	10.60	14.47	11.19
Yes	Usually	13.57	12.28	18.50	14.39
No	Std. Error	1.30	0.82	1.49	1.22
Yes	Std. Error	2.13	1.09	2.53	2.42
No	Always	87.55	86.81	83.47	86.88
Yes	Always	83.23	83.39	77.33	83.23
No	Std. Error	1.37	0.91	1.59	1.30
Yes	Std. Error	2.20	1.22	2.78	2.50

Source: 2017 Ohio Medicaid Assessment Survey

Table A40(a): Percentage Distribution of Place where Adult (19-64 years old) Respondents Indicate they Usually go for Care (by OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	A doctor's office or health center	78.34	78.80	80.35	82.22
Yes	A doctor's office or health	65.70	64.20	69.70	70.52

	center				
No	Std. Error	1.01	0.55	0.97	0.89
Yes	Std. Error	1.93	1.13	2.34	2.38
No	Hospital ER	4.80	6.27	5.33	3.84
Yes	Hospital ER	13.24	18.18	16.24	10.57
No	Std. Error	0.48	0.34	0.57	0.47
Yes	Std. Error	1.34	0.90	2.03	1.51
No	Some other place	6.16	5.74	5.50	5.44
Yes	Some other place	4.35	5.71	5.19	4.98
No	Std. Error	0.62	0.31	0.55	0.55
Yes	Std. Error	0.77	0.55	1.00	1.15
No	Urgent Care	10.70	9.20	8.82	8.50
Yes	Urgent Care	16.70	11.92	8.88	13.93
No	Std. Error	0.75	0.38	0.68	0.61
Yes	Std. Error	1.58	0.79	1.38	1.88

Source: 2017 Ohio Medicaid Assessment Survey

Table A40(b): Percentage Distribution of Place where Respondents Indicate their Child Usually goes for Care (by OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	A doctor's office or health center	90.48	93.86	93.69	93.26
Yes	A doctor's office or health center	88.64	85.29	90.02	89.10

No	Std. Error	1.13	0.52	0.93	0.89
Yes	Std. Error	1.49	1.00	1.38	1.79
No	Hospital ER	1.11	1.76	1.04	0.82
Yes	Hospital ER	3.94	6.52	4.02	1.75
No	Std. Error	0.31	0.30	0.36	0.31
Yes	Std. Error	0.87	0.73	0.91	0.70
No	Some other place	2.88	1.34	2.04	2.35
Yes	Some other place	1.45	2.85	1.95	1.78
No	Std. Error	0.64	0.26	0.62	0.52
Yes	Std. Error	0.44	0.45	0.58	0.68
No	Urgent Care	5.53	3.04	3.22	3.57
Yes	Urgent Care	5.98	5.34	4.01	7.36
No	Std. Error	0.90	0.36	0.61	0.67
Yes	Std. Error	1.16	0.62	0.89	1.55

Source: 2017 Ohio Medicaid Assessment Survey

Table A41(a): Percent of Respondents Indicating that in the Past 12 Months there was a Time they Needed Professional Help Coordinating Care/Referrals among Different Health Care Providers and Services that their Child Uses (2017)

Response	Percent	Std. Error
No	72.28	1.16
Yes	27.72	1.16

Source: 2017 Ohio Medicaid Assessment Survey

Table A41(b): Percent of Respondents Indicating that in the Past 12 Months there was a Time they Needed Professional Help Coordinating Care/Referrals among Different Health Care Providers and Services that their Child Uses (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	71.70	28.30	2.95

Metropolitan	70.73	29.27	1.64
Rural Non-Appalachian	74.17	25.83	2.94
Suburban	76.31	23.69	2.56

Source: 2017 Ohio Medicaid Assessment Survey

Table A41(c): Percent of Respondents Indicating that in the Past 12 Months there was a Time they Needed Professional Help Coordinating Care/Referrals among Different Health Care Providers and Services that their Child Uses (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	71.48	28.52	4.23
Yes	Appalachian	71.81	28.19	3.87
No	Metropolitan	70.78	29.22	2.36
Yes	Metropolitan	70.68	29.32	2.27
No	Rural Non-Appalachian	75.88	24.12	4.21
Yes	Rural Non-Appalachian	72.78	27.22	4.19
No	Suburban	79.35	20.65	3.30
Yes	Suburban	73.33	26.67	3.91

Source: 2017 Ohio Medicaid Assessment Survey

Table A42(a): Percent of Respondents Indicating that in the Past 12 Months they Received Needed Help with Arranging/Coordinating Care/Referrals among Different Health Care Providers and Services that their Child Uses (2017)

Response	Percent	Std. Error
Never	1.73	0.55
Rarely	4.66	1.14
Sometimes	12.44	1.58
Usually	27.24	2.18
Always	53.94	2.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A42(b): Percent of Respondents Indicating that in the Past 12 Months they Received Needed Help with Arranging/Coordinating Care/Referrals among Different Health Care Providers and Services that their Child Uses (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	0.36	2.45	2.98	0.00
Yes	Never	0.77	1.73	1.43	2.46
No	Std. Error: Never	0.37	1.24	2.95	0.00
Yes	Std. Error: Never	0.78	1.19	1.43	1.81
No	Rarely	11.34	6.67	3.91	3.21
Yes	Rarely	2.54	3.67	2.10	3.87
No	Std. Error: Rarely	6.18	3.16	2.50	3.16
Yes	Std. Error: Rarely	1.39	1.75	2.09	2.80
No	Sometimes	9.15	8.86	9.89	11.76
Yes	Sometimes	11.34	19.19	13.46	3.94
No	Std. Error: Sometimes	3.68	2.47	5.26	5.09
Yes	Std. Error: Sometimes	4.75	3.75	5.32	2.36
No	Usually	30.02	30.72	21.45	29.68
Yes	Usually	21.60	25.23	21.11	35.14
No	Std. Error: Usually	7.76	4.51	7.87	7.34
Yes	Std. Error: Usually	6.81	3.94	6.97	8.04
No	Always	49.12	51.30	61.78	55.34
Yes	Always	63.75	50.18	61.90	54.59
No	Std. Error: Always	8.65	4.97	9.49	8.75
Yes	Std. Error: Always	7.68	4.55	8.14	8.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A43(a): Percent of Respondents Indicating an Inability to get Dental Care for their child (2017)

Response	Percent	Std. Error
No	95.34	0.29
Yes	4.66	0.29

Source: 2017 Ohio Medicaid Assessment Survey

Table A43(b): Percent of Respondents Indicating an Inability to get Dental Care for their Child (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	94.17	5.83	0.87
Metropolitan	95.24	4.76	0.40
Rural Non-Appalachian	95.02	4.98	0.74
Suburban	97.08	2.92	0.52

Source: 2017 Ohio Medicaid Assessment Survey

Table A43(c): Percent of Respondents Indicating an Inability to get Dental Care for their Child (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	97.39	2.61	0.60
Yes	Appalachian	91.22	8.78	1.56
No	Metropolitan	97.37	2.63	0.37
Yes	Metropolitan	92.63	7.37	0.76
No	Rural Non-Appalachian	97.37	2.63	0.56
Yes	Rural Non-Appalachian	91.88	8.12	1.52
No	Suburban	98.35	1.65	0.42
Yes	Suburban	94.79	5.21	1.24

Source: 2017 Ohio Medicaid Assessment Survey

Table A43(d): Percent of Adult (19-64 years old) Respondents Indicating they Encountered a Problem with Getting Needed Care (2017)

Response	Percent	Std. Error
No	76.35	0.34
Yes	23.65	0.34

Source: 2017 Ohio Medicaid Assessment Survey

Table A43(e): Percent of Adult (19-64 years old) Respondents Indicating they Encountered a Problem with Getting Needed Care (by OMAS County Type Classifications) (2017)

County Type	No	Yes	Std. Error
Appalachian	75.31	24.69	0.86
Metropolitan	75.69	24.31	0.48
Rural Non-Appalachian	78.23	21.77	0.85
Suburban	78.20	21.80	0.85

Source: 2017 Ohio Medicaid Assessment Survey

Table A43(f): Percent of Adult (19-64 years old) Respondents Indicating they Encountered a Problem with Getting Needed Care (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	County Type	No	Yes	Std. Error
No	Appalachian	78.01	21.99	0.98
Yes	Appalachian	67.15	32.85	1.80
No	Metropolitan	78.72	21.28	0.53
Yes	Metropolitan	66.09	33.91	1.07
No	Rural Non-Appalachian	81.37	18.63	0.89
Yes	Rural Non-Appalachian	64.09	35.91	2.23
No	Suburban	80.09	19.91	0.92
Yes	Suburban	67.69	32.31	2.24

Source: 2017 Ohio Medicaid Assessment Survey

Table A44(a): Percentage Distribution of Duration Since Adult (19-64 years old) Respondents or Child Last Saw a Doctor/Health Care Professional -- not Including Overnight Hospital Stays, Visits to Hospital Emergency Rooms, Home Visits, or Telephone Calls (2017)

Group	Response	Percent	Std. Error
Adults	Within the last 12 months	81.30	0.31
Adults	More than 12 months ago	18.48	0.31
Adults	Never	0.22	0.04
Children	Within the last 12 months	91.65	0.35

Children	More than 12 months ago	8.17	0.35
Children	Never	0.19	0.05

Source: 2017 Ohio Medicaid Assessment Survey

Table A44(b): Percentage Distribution of Duration Since Adult (19-64 years old) Respondents or Child Last Saw a Doctor/Health Care Professional -- not Including Overnight Hospital Stays, Visits to Hospital Emergency Rooms, Home Visits, or Telephone Calls (by OMAS County Type Classifications and Group) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Within the last 12 months	80.56	81.84	80.66	80.64
Adults	Std. Error	0.79	0.43	0.79	0.81
Adults	More than 12 months ago	19.28	17.90	19.19	19.18
Adults	Std. Error	0.79	0.42	0.79	0.81
Adults	Never	0.17	0.26	0.15	0.18
Adults	Std. Error	0.06	0.06	0.07	0.07
Children	Within the last 12 months	91.59	91.92	89.57	92.62
Children	Std. Error	0.89	0.47	1.02	0.86
Children	More than 12 months ago	8.32	7.89	10.26	7.13
Children	Std. Error	0.88	0.47	1.02	0.85
Children	Never	0.09	0.20	0.17	0.25
Children	Std. Error	0.05	0.07	0.09	0.16

Source: 2017 Ohio Medicaid Assessment Survey

Table A44(c): Percentage Distribution of Duration Since Adult (19-64 years old) Respondents Last Saw a Doctor/Health Care Professional -- not Including Overnight Hospital Stays, Visits to Hospital Emergency Rooms, Home Visits, or Telephone Calls (By OMAS County Type Classifications and Medicaid Status) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	0.18	0.23	0.14	0.19

Yes	Never	0.12	0.37	0.20	0.14
No	Std. Error	0.07	0.06	0.07	0.08
Yes	Std. Error	0.07	0.17	0.20	0.14
No	More than 12 months ago	20.67	19.11	20.64	19.73
Yes	More than 12 months ago	15.06	14.06	12.60	16.16
No	Std. Error	0.94	0.49	0.90	0.89
Yes	Std. Error	1.39	0.81	1.52	1.91
No	Within the last 12 months	79.15	80.66	79.22	80.08
Yes	Within the last 12 months	84.82	85.58	87.19	83.70
No	Std. Error	0.94	0.50	0.90	0.89
Yes	Std. Error	1.39	0.82	1.53	1.91

Source: 2017 Ohio Medicaid Assessment Survey

Table A44(d): Percentage Distribution of Duration Since Child Last Saw a Doctor/Health Care Professional -- not Including Overnight Hospital Stays, Visits to Hospital Emergency Rooms, Home Visits, or Telephone Calls (by OMAS County Type Classifications and Medicaid Status) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	0.19	0.23	0.21	0.21
Yes	Never	0.00	0.15	0.11	0.34
No	Std. Error	0.11	0.09	0.13	0.21
Yes	Std. Error	0.00	0.11	0.11	0.24
No	More than 12 months ago	9.97	8.55	12.27	7.02
Yes	More than 12 months ago	6.83	7.07	7.63	7.32
No	Std. Error	1.35	0.61	1.42	1.01

Yes	Std. Error	1.17	0.71	1.32	1.48
No	Within the last 12 months	89.84	91.21	87.52	92.77
Yes	Within the last 12 months	93.17	92.77	92.26	92.35
No	Std. Error	1.36	0.62	1.43	1.03
Yes	Std. Error	1.17	0.72	1.33	1.49

Source: 2017 Ohio Medicaid Assessment Survey

Table A45(a): Percentage Distribution of Duration Since Adult (19-64 years old) Respondent Last Visited a Doctor for a Routine Check-up (2017)

Response	Percent	Std. Error
Within the last 12 months	77.50	0.37
More than 12 months ago	22.19	0.37
Never	0.31	0.05

Source: 2017 Ohio Medicaid Assessment Survey

Table A45(b): Percentage Distribution of Duration Since Adult (19-64 years old) Respondent Last Visited a Doctor for a Routine Check-up (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Within the last 12 months	78.73	77.72	75.86	76.84
Std. Error	0.92	0.52	0.97	0.92
More than 12 months ago	21.02	22.03	23.70	22.70
Std. Error	0.92	0.51	0.97	0.92
Never	0.25	0.25	0.44	0.46
Std. Error	0.08	0.07	0.14	0.14

Source: 2017 Ohio Medicaid Assessment Survey

Table A46(a): Percent of Respondents Indicating if, since the Child's Birth, the Child Received a Well-Baby Check-up (2017)

Response	Percent	Std. Error
No	8.87	0.38
Yes	91.13	0.38

Source: 2017 Ohio Medicaid Assessment Survey

Table A46(b): Percent of Respondents Indicating if, since the Child's Birth, the Child Received a Well-Baby Check-up (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	11.59	7.34	12.69	8.13
Yes	88.41	92.66	87.31	91.87
Std. Error	1.09	0.49	1.21	0.85

Source: 2017 Ohio Medicaid Assessment Survey

Table A46(c): Percent of Respondents Indicating if, since the Child's Birth, the Child Received a Well-Baby Check-up (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	10.87	6.65	12.15	7.37
Yes	No	12.22	8.16	13.37	9.50
No	Std. Error	1.46	0.61	1.46	0.92
Yes	Std. Error	1.64	0.79	2.01	1.72
No	Yes	89.13	93.35	87.85	92.63
Yes	Yes	87.78	91.84	86.63	90.50
No	Std. Error	1.46	0.61	1.46	0.92
Yes	Std. Error	1.64	0.79	2.01	1.72

Source: 2017 Ohio Medicaid Assessment Survey

Table A47(a): Percentage Distribution of when the Adult (19-64 years old) Respondent or Child Last had a Dental Check-up (2017)

Group	Response	Percent	Std. Error
Adults	Never	0.63	0.06
Adults	More than 12 months ago	36.84	0.39
Adults	Within the last 12 months	62.53	0.39
Children	Child does not have teeth	0.24	0.06
Children	Never	8.46	0.38
Children	More than 12 months ago	13.12	0.46
Children	Within the last 12 months	78.18	0.56

Source: 2017 Ohio Medicaid Assessment Survey

Table A47(b): Percentage Distribution of when the Adult (19-64 years old) Respondent or Child Last had a Dental Check-up (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Never	0.54	0.74	0.44	0.48
Adults	Std. Error	0.14	0.10	0.12	0.13
Adults	More than 12 months ago	42.43	35.65	39.30	33.33
Adults	Std. Error	1.00	0.53	1.02	0.95
Adults	Within the last 12 months	57.02	63.61	60.26	66.20
Adults	Std. Error	1.00	0.53	1.02	0.95
Children	Child does not have teeth	0.00	0.29	0.41	0.19
Children	Std. Error	0.00	0.10	0.16	0.14
Children	Never	9.41	8.22	7.80	8.92
Children	Std. Error	1.00	0.53	0.81	1.01
Children	More than 12 months ago	16.85	12.46	14.88	10.17
Children	Std. Error	1.26	0.61	1.31	1.01
Children	Within the last 12 months	73.75	79.04	76.91	80.71
Children	Std. Error	1.49	0.77	1.47	1.35

Source: 2017 Ohio Medicaid Assessment Survey

Table A47(c): Percentage Distribution of when the Adult (19-64 years old) Respondent Last had a Dental Check-up (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	0.43	0.74	0.34	0.47
Yes	Never	0.88	0.73	0.87	0.50
No	Std. Error	0.14	0.11	0.12	0.15
Yes	Std. Error	0.35	0.18	0.39	0.23
No	More than 12 months ago	39.20	32.71	36.65	30.16
Yes	More than 12 months ago	52.21	44.99	51.31	50.87
No	Std. Error	1.14	0.59	1.13	1.02
Yes	Std. Error	1.93	1.13	2.30	2.46
No	Within the last 12 months	60.36	66.55	63.01	69.37
Yes	Within the last 12 months	46.91	54.28	47.82	48.63
No	Std. Error	1.14	0.60	1.13	1.02
Yes	Std. Error	1.92	1.13	2.30	2.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A47(d): Percentage Distribution of when the Respondent's Child Last had a Dental Check-up (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Child does not have teeth	0.00	0.19	0.64	0.30
Yes	Child does not have teeth	0.00	0.41	0.09	0.00
No	Std. Error	0.00	0.10	0.27	0.22
Yes	Std. Error	0.00	0.18	0.09	0.00
No	Never	6.85	6.66	7.69	7.21
Yes	Never	11.74	10.13	7.94	12.04

No	Std. Error	1.02	0.61	0.99	1.06
Yes	Std. Error	1.66	0.92	1.38	2.05
No	More than 12 months ago	13.69	9.09	11.87	7.48
Yes	More than 12 months ago	19.73	16.61	18.93	15.06
No	Std. Error	1.60	0.66	1.43	1.08
Yes	Std. Error	1.92	1.08	2.30	2.03
No	Within the last 12 months	79.46	84.05	79.80	85.01
Yes	Within the last 12 months	68.53	72.86	73.04	72.90
No	Std. Error	1.81	0.87	1.68	1.46
Yes	Std. Error	2.30	1.31	2.52	2.64

Source: 2017 Ohio Medicaid Assessment Survey

Table A48(a): Percentage Distribution of when the Adult (19-64 years old) Respondent or Child Last had a Vision Check (2017)

Group	Response	Percent	Std. Error
Adults	Respondent is blind	0.01	0.00
Adults	Never	1.10	0.00
Adults	More than 2 years ago	28.38	0.00
Adults	1-2 years ago	23.43	0.00
Adults	Within the last 12 months	47.07	0.00
Children	Child is blind	0.02	0.00
Children	Never	4.49	0.00
Children	More than 2 years ago	11.57	0.00
Children	1-2 years ago	17.48	0.01
Children	Within the last 12 months	66.45	0.01

Source: 2017 Ohio Medicaid Assessment Survey

Table A48(b): Percentage Distribution of when the Adult (19-64 years old) Respondent or Child Last had a Vision Check (by Group and OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Respondent is blind	0.01	0.02	0.00	0.00
Adults	Std. Error	0.01	0.01	0.00	0.00
Adults	Never	1.04	1.23	0.96	0.81
Adults	Std. Error	0.20	0.13	0.20	0.17
Adults	More than 2 years ago	29.78	28.43	27.94	27.15
Adults	Std. Error	0.93	0.50	0.91	0.90
Adults	1-2 years ago	24.52	22.95	23.78	23.77
Adults	Std. Error	0.88	0.47	0.91	0.85
Adults	Within the last 12 months	44.65	47.37	47.32	48.27
Adults	Std. Error	1.01	0.55	1.04	1.00
Children	Child is blind	0.04	0.00	0.08	0.00
Children	Std. Error	0.04	0.00	0.06	0.00
Children	Never	4.59	4.23	5.51	4.32
Children	Std. Error	0.87	0.43	0.98	0.80
Children	More than 2 years ago	10.40	11.55	11.04	13.24
Children	Std. Error	1.00	0.68	1.18	1.20
Children	1-2 years ago	17.37	17.04	19.14	17.55
Children	Std. Error	1.54	0.83	1.53	1.37
Children	Std. Error	1.81	1.01	1.84	1.74
Children	Within the last 12 months	67.61	67.18	64.23	64.89

Source: 2017 Ohio Medicaid Assessment Survey

Table A48(c): Percentage Distribution of when the Adult (19-64 years old) Respondent Last had a Vision Check (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Respondent is blind	0.02	0.01	0.00	0.00
Yes	Respondent is blind	0.00	0.05	0.00	0.00
No	Std. Error	0.02	0.01	0.00	0.00
Yes	Std. Error	0.00	0.04	0.00	0.00
No	Never	1.05	1.18	0.83	0.84
Yes	Never	0.98	1.39	1.57	0.63
No	Std. Error	0.24	0.14	0.20	0.19
Yes	Std. Error	0.37	0.30	0.64	0.34
No	More than 2 years ago	29.14	27.59	28.71	25.69
Yes	More than 2 years ago	31.73	31.09	24.44	35.30
No	Std. Error	1.07	0.57	1.04	0.97
Yes	Std. Error	1.81	1.05	1.81	2.42
No	1-2 years ago	24.24	23.04	22.75	23.80
Yes	1-2 years ago	25.37	22.67	28.45	23.60
No	Std. Error	1.03	0.54	0.99	0.93
Yes	Std. Error	1.73	0.94	2.21	2.07
No	Within the last 12 months	45.55	48.18	47.71	49.68
Yes	Within the last 12 months	41.92	44.79	45.55	40.47
No	Std. Error	1.19	0.64	1.17	1.09
Yes	Std. Error	1.89	1.13	2.28	2.35

Source: 2017 Ohio Medicaid Assessment Survey

Table A48(d): Percentage Distribution of when the Adult (19-64 years old) Respondent Last had a Vision Check (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never	4.27	4.38	5.57	5.37
Yes	Never	4.90	4.04	5.43	2.13
No	Std. Error	1.13	0.53	1.16	1.09
Yes	Std. Error	1.32	0.71	1.66	0.92
No	More than 2 years ago	11.65	12.03	12.09	13.03
Yes	More than 2 years ago	9.13	10.91	9.56	13.66
No	Std. Error	1.42	0.92	1.56	1.41
Yes	Std. Error	1.45	1.02	1.79	2.24
No	Child is blind	0.07	0.00	0.03	0.00
Yes	Child is blind	0.00	0.00	0.14	0.00
No	Std. Error	0.07	0.00	0.03	0.00
Yes	Std. Error	0.00	0.00	0.14	0.00
No	1-2 years ago	17.64	17.58	18.83	17.28
Yes	1-2 years ago	17.09	16.32	19.58	18.12
No	Std. Error	2.02	1.07	1.98	1.62
Yes	Std. Error	2.28	1.29	2.69	2.56
No	Within the last 12 months	66.37	66.01	63.47	64.32
Yes	Within the last 12 months	68.88	68.73	65.29	66.09
No	Std. Error	2.42	1.32	2.40	2.06
Yes	Std. Error	2.67	1.58	3.12	3.16

Source: 2017 Ohio Medicaid Assessment Survey

Table A49(a): Percentage Distribution of How Many Times, in the Last 12 Months, the Adult (19-64 years old) Respondent or Child has been a Patient in a Hospital Emergency Room (2017)

Group	Response	Percent	Std. Error
Adults	None	70.57	0.37
Adults	1 or more	29.43	0.37
Children	None	86.13	0.50
Children	1 or more	13.87	0.50

Source: 2017 Ohio Medicaid Assessment Survey

Table A49(b): Percentage Distribution of How Many Times, in the Last 12 Months, the Adult (19-64 years old) Respondent or Child has been a Patient in a Hospital Emergency (by OMAS County Type Classifications and Group) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	None	70.49	69.46	72.35	73.16
Adults	1 or more	29.51	30.54	27.65	26.84
Adults	Std. Error	0.91	0.51	0.95	0.89
Children	None	85.08	85.70	86.60	88.17
Children	1 or more	14.92	14.30	13.40	11.83
Children	Std. Error	1.36	0.69	1.26	1.14

Source: 2017 Ohio Medicaid Assessment Survey

Table A49(c): Percentage Distribution of How Many Times, in the Last 12 Months, the Adult (19-64 years old) Respondent has been a Patient in a Hospital Emergency Room (by OMAS County Type Classifications and Medicaid Status) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	None	76.65	76.53	77.31	77.58
Yes	None	51.70	46.92	49.68	48.40
No	1 or more	23.35	23.47	22.69	22.42
Yes	1 or more	48.30	53.08	50.32	51.60
No	Std. Error	1.00	0.54	1.00	0.92
Yes	Std. Error	1.94	1.13	2.31	2.47

Source: 2017 Ohio Medicaid Assessment Survey

Table A49(d): Percentage Distribution of How Many Times, in the Last 12 Months, the Respondent's Child has been a Patient in a Hospital Emergency Room (by OMAS County Type Classifications and Medicaid Status) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	None	94.23	93.64	92.08	94.86
Yes	None	76.16	75.83	79.19	76.36
No	1 or more	5.77	6.36	7.92	5.14
Yes	1 or more	23.84	24.17	20.81	23.64
No	Std. Error	0.88	0.57	1.36	0.83
Yes	Std. Error	2.37	1.30	2.28	2.61

Source: 2017 Ohio Medicaid Assessment Survey

Unmet Health Care Needs

Table A50(a): Percent of Adult (19-64 years old) Respondents Indicating there was (or was not) a Time When they Needed Dental/Vision/Mental/Other Care but could not get it (2017)

Item	Response	Percent	Std. Error
Unmet Dental	No	87.19	0.27
Unmet Dental	Yes	12.81	0.27
Unmet Vision	No	89.75	0.25
Unmet Vision	Yes	10.25	0.25
Unmet Mental	No	92.91	0.21
Unmet Mental	Yes	7.09	0.21
Unmet Other	No	90.68	0.23
Unmet Other	Yes	9.32	0.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A50(b): Percent of Adult (19-64 years old) Respondents Indicating there was (or was not) a Time When they Needed Dental/Vision/Mental/Other Care but could not get it (by OMAS County Type Classifications) (2017)

Item	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Unmet Dental	Yes	12.79	13.26	11.83	12.05
Unmet Dental	Std. Error	0.65	0.38	0.65	0.68
Unmet	No	87.21	86.74	88.17	87.95

Dental					
Unmet Vision	Yes	11.64	10.17	10.13	9.25
Unmet Vision	Std. Error	0.66	0.33	0.65	0.60
Unmet Vision	No	88.36	89.83	89.87	90.75
Unmet Mental	Yes	6.76	7.50	5.93	6.92
Unmet Mental	Std. Error	0.52	0.29	0.48	0.53
Unmet Mental	No	93.24	92.50	94.07	93.08
Unmet Other	Yes	9.43	9.48	8.24	9.58
Unmet Other	Std. Error	0.57	0.32	0.55	0.61
Unmet Other	No	90.57	90.52	91.76	90.42

Source: 2017 Ohio Medicaid Assessment Survey

Table A50(c): Percent of Adult (19-64 years old) Respondents Indicating there was (or was not) a Time When they Needed Dental/Vision/Mental/Other Care but could not get it (by Medicaid Status and OMAS County Type Classifications) (2017)

Item	Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Unmet Dental	No	No	88.10	88.47	90.07	88.87
Unmet Dental	Yes	No	84.52	81.24	79.60	82.80
Unmet Dental	No	Std. Error	0.75	0.41	0.68	0.74
Unmet Dental	Yes	Std. Error	1.33	0.88	1.79	1.72
Unmet Dental	No	Yes	11.90	11.53	9.93	11.13
Unmet Dental	Yes	Yes	15.48	18.76	20.40	17.20
Unmet Vision	No	No	89.60	91.33	91.71	91.49
Unmet Vision	Yes	No	84.59	85.08	81.55	86.61
Unmet Vision	No	Std. Error	0.74	0.36	0.66	0.65

Unmet Vision	Yes	Std. Error	1.43	0.78	1.89	1.59
Unmet Vision	No	Yes	10.40	8.67	8.29	8.51
Unmet Vision	Yes	Yes	15.41	14.92	18.45	13.39
Unmet Mental	No	No	94.54	93.81	95.82	94.23
Unmet Mental	Yes	No	89.30	88.36	86.19	86.67
Unmet Mental	No	Std. Error	0.58	0.31	0.44	0.56
Unmet Mental	Yes	Std. Error	1.16	0.69	1.69	1.59
Unmet Mental	No	Yes	5.46	6.19	4.18	5.77
Unmet Mental	Yes	Yes	10.70	11.64	13.81	13.33
Unmet Other	No	No	91.29	91.45	92.15	91.36
Unmet Other	Yes	No	88.37	87.60	89.97	85.21
Unmet Other	No	Std. Error	0.65	0.36	0.61	0.66
Unmet Other	Yes	Std. Error	1.23	0.73	1.26	1.64
Unmet Other	No	Yes	8.71	8.55	7.85	8.64
Unmet Other	Yes	Yes	11.63	12.40	10.03	14.79

Source: 2017 Ohio Medicaid Assessment Survey

Table A51(a): Percent of Adult (19-64 years old) Respondents Indicating they Delayed/Avoided Getting Needed Care and Why (2017)

Item	Response	Percent	Std. Error
Delayed/avoided care?	No	71.93	0.37
Delayed/avoided care?	Yes	28.07	0.37

Avoided because of cost?	No	44.26	0.76
Avoided because of cost?	Yes	55.74	0.76
Avoided because of no transport?	No	87.93	0.49
Avoided because of no transport?	Yes	12.07	0.49
Avoided because of unavailable provider?	No	78.05	0.63
Avoided because of unavailable provider?	Yes	21.95	0.63
Avoided because could not find provider?	No	85.20	0.54
Avoided because could not find provider?	Yes	14.80	0.54

Source: 2017 Ohio Medicaid Assessment Survey

Table A51(b): Percent of Adult (19-64 years old) Respondents Indicating they Delayed/Avoided Getting Needed Care and Why (by OMAS County Type Classifications) (2017)

Item	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Delayed/avoided care?	No	72.23	71.63	72.84	71.94
Delayed/avoided care?	Yes	27.77	28.37	27.16	28.06
Delayed/avoided care?	Std. Error	0.90	0.50	0.92	0.91
Avoided because of cost?	No	46.49	45.33	40.91	40.86
Avoided because of cost?	Yes	53.51	54.67	59.09	59.14

Avoided because of cost?	Std. Error	1.89	1.05	1.92	1.9
Avoided because of no transport?	No	87.32	86.93	89.48	90.92
Avoided because of no transport?	Yes	12.68	13.07	10.52	9.08
Avoided because of no transport?	Std. Error	1.18	0.70	1.15	1.03
Avoided because of unavailable provider?	No	80.12	76.54	78.94	80.77
Avoided because of unavailable provider?	Yes	19.88	23.46	21.06	19.23
Avoided because of unavailable provider?	Std. Error	1.44	0.90	1.62	1.50
Avoided because could not find provider?	No	86.67	84.06	86.00	87.22

Avoided because could not find provider?	Yes	13.33	15.94	14.00	12.78
Avoided because could not find provider?	Std. Error	1.10	0.78	1.29	1.25

Source: 2017 Ohio Medicaid Assessment Survey

Table A51(c): Percent of Adult (19-64 years old) Respondents Indicating they Delayed/Avoided Getting Needed Care and Why (by Medicaid Status and OMAS County Type Classifications) (2017)

Item	Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Delayed/avoided care?	No	No	73.84	72.29	73.84	73.39
Delayed/avoided care?	Yes	No	67.31	69.52	68.35	63.89
Delayed/avoided care?	No	Yes	26.16	27.71	26.16	26.61
Delayed/avoided care?	Yes	Yes	32.69	30.48	31.65	36.11
Delayed/avoided care?	No	Std. Error:	1.02	0.58	1.02	0.99
Delayed/avoided care?	Yes	Std. Error:	1.85	1.04	2.14	2.37
Avoided because of cost?	No	No	36.62	37.15	33.59	34.98
Avoided because of cost?	Yes	No	70.57	68.98	68.26	64.85
Avoided because of cost?	No	Yes	63.38	62.85	66.41	65.02
Avoided because of cost?	Yes	Yes	29.43	31.02	31.74	35.15

Avoided because of cost?	No	Std. Error:	2.23	1.20	2.10	2.09
Avoided because of cost?	Yes	Std. Error:	3.25	1.84	3.56	3.87
Avoided because of no transport?	No	No	92.23	92.27	93.76	95.54
Avoided because of no transport?	Yes	No	75.37	71.44	73.47	72.04
Avoided because of no transport?	No	Yes	7.77	7.73	6.24	4.46
Avoided because of no transport?	Yes	Yes	24.63	28.56	26.53	27.96
Avoided because of no transport?	No	Std. Error:	1.18	0.67	0.98	0.81
Avoided because of no transport?	Yes	Std. Error:	2.79	1.80	3.62	3.65
Avoided because of unavailable provider?	No	No	82.61	78.61	82.49	82.38
Avoided because of unavailable provider?	Yes	No	74.07	70.55	65.58	74.23
Avoided because of unavailable provider?	No	Yes	17.39	21.39	17.51	17.62
Avoided because of unavailable provider?	Yes	Yes	25.93	29.45	34.42	25.77
Avoided because of	No	Std. Error:	1.69	1.00	1.71	1.64

unavailable provider?						
Avoided because of unavailable provider?	Yes	Std. Error:	2.80	1.92	3.94	3.62
Avoided because could not find provider?	No	No	89.25	87.52	88.31	89.09
Avoided because could not find provider?	Yes	No	80.38	74.10	77.34	79.60
Avoided because could not find provider?	No	Yes	10.75	12.48	11.69	10.91
Avoided because could not find provider?	Yes	Yes	19.62	25.90	22.66	20.40
Avoided because could not find provider?	No	Std. Error:	1.23	0.82	1.33	1.34
Avoided because could not find provider?	Yes	Std. Error:	2.30	1.81	3.42	3.19

Source: 2017 Ohio Medicaid Assessment Survey

Table A52(a): Percentage Distribution of Wait Durations Reported by Respondents for their Child's Appointment when was Care Needed Right Away (2017)

Response	Percent	Std. Error
Not needed right away	3.62	0.28
Same day	54.36	0.75
1 day	20.83	0.60
2-3 days	14.58	0.51
4-7 days	3.94	0.31

> 7 days	2.67	0.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A52(b): Percentage Distribution of Wait Durations Reported by Respondents for their Child's Appointment when Care was Needed Right Away (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Not needed right away	3.50	3.61	4.48	3.09
Std. Error	0.69	0.38	0.99	0.55
Same day	52.09	54.15	54.07	57.32
Std. Error	1.89	1.05	1.89	1.72
1 day	23.66	19.53	21.82	21.55
Std. Error	1.70	0.81	1.54	1.42
2-3 days	15.14	14.89	15.02	12.73
Std. Error	1.30	0.72	1.34	1.11
4-7 days	3.45	4.54	2.68	3.49
Std. Error	0.67	0.48	0.59	0.68
> 7 days	2.15	3.28	1.93	1.82
Std. Error	0.44	0.37	0.42	0.45

Source: 2017 Ohio Medicaid Assessment Survey

Table A52(c): Percentage Distribution of Wait Durations Reported by Respondents for their Child's Appointment when Care was Needed Right Away (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Not needed right away	4.22	4.60	5.70	3.38
Yes	Not needed right away	2.87	2.28	2.78	2.57
No	Same day	55.37	57.96	58.16	58.66
Yes	Same day	49.19	49.03	48.41	54.91
No	1 day	23.50	18.96	19.56	20.89
Yes	1 day	23.81	20.30	24.95	22.74
No	2-3 days	13.37	13.16	12.49	12.39

Yes	2-3 days	16.70	17.20	18.52	13.34
No	4-7 days	1.32	2.96	2.19	3.16
Yes	4-7 days	5.34	6.66	3.36	4.08
No	> 7 days	2.23	2.35	1.89	1.52
Yes	> 7 days	2.09	4.52	1.99	2.36
No	Std. Error: Not needed right away	1.10	0.58	1.46	0.65
Yes	Std. Error: Not needed right away	0.85	0.46	1.27	1.01
No	Std. Error: Same day	2.58	1.33	2.34	1.99
Yes	Std. Error: Same day	2.76	1.68	3.18	3.14
No	Std. Error: 1 day	2.31	1.01	1.75	1.61
Yes	Std. Error: 1 day	2.43	1.33	2.76	2.65
No	Std. Error: 2-3 days	1.63	0.86	1.36	1.30
Yes	Std. Error: 2-3 days	2.01	1.24	2.56	2.02
No	Std. Error: 4-7 days	0.46	0.51	0.51	0.66
Yes	Std. Error: 4-7 days	1.18	0.88	1.22	1.47
No	Std. Error: > 7 days	0.67	0.43	0.51	0.44
Yes	Std. Error: > 7 days	0.56	0.66	0.71	0.99

Source: 2017 Ohio Medicaid Assessment Survey

Financial Hurdles

Table A53(a): Percent of Adult (19-64 years old) Respondents Indicating there were Times, in the Last 12 Months, when they had Problems Paying or Were Unable to Pay for Medical Bills for Anyone in the Family/Household (2017)

Response	Percent	Std. Error

No	72.75	0.36
Yes	27.25	0.36

Source: 2017 Ohio Medicaid Assessment Survey

Table A53(b): Percent of Adult (19-64 years old) Respondents Indicating there were Times, in the Last 12 Months, when they had Problems Paying or Were Unable to Pay for Medical Bills for Anyone in the Family/Household (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	70.90	73.06	73.40	72.98
Yes	29.10	26.94	26.60	27.02
Std. Error	0.93	0.49	0.93	0.90

Source: 2017 Ohio Medicaid Assessment Survey

Table A53(c): Percent of Adult (19-64 years old) Respondents Indicating there were Times, in the Last 12 Months, when they had Problems Paying or Were Unable to Pay for Medical Bills for Anyone in the Family/Household (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	70.63	73.21	74.31	72.99
Yes	No	71.73	72.58	69.27	72.93
No	Yes	29.37	26.79	25.69	27.01
Yes	Yes	28.27	27.42	30.73	27.07
No	Std. Error	1.08	0.57	1.02	1.00
Yes	Std. Error	1.80	1.02	2.19	2.08

Source: 2017 Ohio Medicaid Assessment Survey

Table A54(a): Percent of Adult (19-64 years old) Respondents Indicating that In the Past 12 Months it has become Easier/Harder to buy Food, pay Rent/Mortgage, pay off Debt, if they have had no such Problems, or if the Problem Severity has stayed the same (2017)

Item	Response	Percent	Std. Error
Buy Food	Not a problem	0.41	0.06
Buy Food	Harder	21.05	0.33
Buy Food	The Same	67.56	0.38
Buy Food	Easier	10.98	0.25
Pay Rent/Mortgage	Not a problem	4.87	0.19
Pay Rent/Mortgage	Harder	18.74	0.31

Pay Rent/Mortgage	The Same	65.99	0.38
Pay Rent/Mortgage	Easier	10.39	0.24
Pay off Debt	Not a problem	3.40	0.15
Pay off Debt	Harder	28.97	0.37
Pay off Debt	The Same	56.32	0.40
Pay off Debt	Easier	11.31	0.26

Source: 2017 Ohio Medicaid Assessment Survey

Table A54(b): Percent of Adult (19-64 years old) Respondents Indicating that In the Past 12 Months it has become Easier/Harder to buy Food, pay Rent/Mortgage, pay off Debt, if they have had no such Problems, or if the Problem Severity has stayed the same (by OMAS County Type Classifications) (2017)

Item	Category	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Debt	Not a problem	3.24	3.56	3.59	2.83
Debt	Easier	10.41	11.55	11.73	11.02
Debt	The same	57.37	55.23	57.51	58.14
Debt	Harder	28.98	29.66	27.17	28.01
Std. Error	Not a problem	0.32	0.22	0.40	0.31
Std. Error	Easier	0.61	0.35	0.66	0.64
Std. Error	The same	1.00	0.55	1.03	0.99
Std. Error	Harder	0.92	0.51	0.93	0.91
Food	Not a problem	0.18	0.49	0.57	0.27
Food	Easier	9.83	11.27	11.87	10.34
Food	The same	67.07	66.69	67.63	71.12
Food	Harder	22.92	21.55	19.94	18.27
Std. Error	Not a problem	0.06	0.09	0.15	0.11
Std. Error	Easier	0.58	0.35	0.68	0.61
Std. Error	The same	0.94	0.53	0.99	0.91
Std. Error	Harder	0.85	0.46	0.84	0.78
Rent	Not a problem	7.30	3.96	5.98	4.75
Rent	Easier	9.38	10.71	10.67	10.08

Rent	The same	65.25	65.74	66.65	67.08
Rent	Harder	18.06	19.59	16.70	18.09
Std. Error	Not a problem	0.54	0.23	0.55	0.45
Std. Error	Easier	0.57	0.34	0.62	0.62
Std. Error	The same	0.97	0.53	0.97	0.95
Std. Error	Harder	0.79	0.44	0.76	0.77

Source: 2017 Ohio Medicaid Assessment Survey

Table A54(c): Percent of Adult (19-64 years old) Respondents Indicating that In the Past 12 Months it has become Easier/Harder to pay off Debt, if they have had no such Problems, or if the Problem Severity has stayed the same (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Category	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Not a problem	2.90	3.16	3.33	2.77
Yes	Not a problem	4.30	4.84	4.80	3.19
No	Easier	11.54	12.48	12.35	11.87
Yes	Easier	6.97	8.57	8.92	6.25
No	The same	59.28	58.05	60.59	60.05
Yes	The same	51.59	46.24	43.58	47.49
No	Harder	26.28	26.31	23.72	25.31
Yes	Harder	37.15	40.35	42.70	43.07
No	Std. Error: Not a problem	0.37	0.23	0.44	0.34
Yes	Std. Error: Not a problem	0.63	0.52	0.91	0.83
No	Std. Error: Easier	0.74	0.42	0.75	0.72
Yes	Std. Error: Easier	1.05	0.64	1.25	1.32
No	Std. Error: The same	1.16	0.63	1.14	1.09
Yes	Std. Error:	1.93	1.14	2.26	2.48

	The same				
No	Std. Error: Harder	1.06	0.57	0.99	0.98
Yes	Std. Error: Harder	1.85	1.11	2.32	2.42

Source: 2017 Ohio Medicaid Assessment Survey

Table A54(d): Percent of Adult (19-64 years old) Respondents Indicating that In the Past 12 Months it has become Easier/Harder to buy Food, if they have had no such Problems, or if the Problem Severity has stayed the same (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Category	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Not a problem	0.12	0.53	0.43	0.32
Yes	Not a problem	0.35	0.36	1.20	0.00
No	Easier	10.04	11.61	11.86	10.28
Yes	Easier	9.19	10.20	11.92	10.68
No	The same	70.65	71.17	70.93	74.78
Yes	The same	56.22	52.46	52.69	50.80
No	Harder	19.19	16.69	16.79	14.62
Yes	Harder	34.24	36.99	34.19	38.52
No	Std. Error: Not a problem	0.05	0.11	0.13	0.13
Yes	Std. Error: Not a problem	0.17	0.13	0.62	0.00
No	Std. Error: Easier	0.68	0.41	0.76	0.66
Yes	Std. Error: Easier	1.09	0.70	1.56	1.62
No	Std. Error: The same	1.07	0.58	1.08	0.96
Yes	Std. Error: The same	1.93	1.13	2.31	2.48
No	Std. Error:	0.95	0.48	0.89	0.80

	Harder				
Yes	Std. Error: Harder	1.84	1.10	2.14	2.36

Source: 2017 Ohio Medicaid Assessment Survey

Table A54(e): Percent of Adult (19-64 years old) Respondents Indicating that In the Past 12 Months it has become Easier/Harder to pay the Rent/Mortgage, if they have had no such Problems, or if the Problem Severity has stayed the same (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Category	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Not a problem	7.20	4.04	6.21	4.91
Yes	Not a problem	7.61	3.69	4.91	3.88
No	Easier	9.47	10.69	10.70	9.94
Yes	Easier	9.12	10.75	10.54	10.82
No	The same	67.79	69.22	69.48	70.11
Yes	The same	57.57	54.66	53.91	50.21
No	Harder	15.54	16.05	13.61	15.03
Yes	Harder	25.71	30.91	30.64	35.10
No	Std. Error: Not a problem	0.61	0.27	0.63	0.49
Yes	Std. Error: Not a problem	1.18	0.47	1.02	1.15
No	Std. Error: Easier	0.67	0.39	0.70	0.66
Yes	Std. Error: Easier	1.09	0.73	1.28	1.68
No	Std. Error: The same	1.12	0.59	1.08	1.02
Yes	Std. Error: The same	1.93	1.14	2.29	2.48
No	Std. Error: Harder	0.89	0.47	0.78	0.79
Yes	Std. Error:	1.65	1.04	2.12	2.32

	Harder				

Source: 2017 Ohio Medicaid Assessment Survey

Health Behaviors

Table A55(a): Percent of Adult (19-64 years old) Respondents Indicating they have Smoked at least 100 Cigarettes in their Lifetime (2017)

Response	Percent	Std. Error
No	52.78	0.4
Yes	47.22	0.4

Source: 2017 Ohio Medicaid Assessment Survey

Table A55(b): Percent of Adult (19-64 years old) Respondents Indicating they have Smoked at least 100 Cigarettes in their Lifetime (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	46.52	55.15	50.40	52.59
Yes	53.48	44.85	49.60	47.41
Std. Error	1.01	0.55	1.04	1.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A55(c): Percent of Adult (19-64 years old) Respondents Indicating they have Smoked at least 100 Cigarettes in their Lifetime (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	51.60	60.11	54.96	55.60
Yes	No	31.14	39.38	29.60	35.89
No	Std. Error	1.18	0.62	1.15	1.09
Yes	Std. Error	1.80	1.09	2.01	2.34
No	Yes	48.40	39.89	45.04	44.40
Yes	Yes	68.86	60.62	70.40	64.11

Source: 2017 Ohio Medicaid Assessment Survey

Table A56(a): Percentage Distribution of Adult (19-64 years old) Respondents' Current Smoking Status (2017)

Response	Percent	Std. Error
Never Smoked	52.80	0.40

Former Smoker	20.15	0.32
Currently Smokes	27.05	0.36

Source: 2017 Ohio Medicaid Assessment Survey

Table 56(b): Percentage Distribution of Adult (19-64 years old) Respondents' Current Smoking Status (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Never Smoked	46.53	55.19	50.42	52.59
Std. Error	1.01	0.55	1.04	1.00
Former Smoker	22.01	18.67	22.37	21.73
Std. Error	0.83	0.43	0.87	0.82
Currently Smokes	31.46	26.14	27.21	25.68
Std. Error	0.94	0.49	0.92	0.89

Source: 2017 Ohio Medicaid Assessment Survey

Table 56(c): Percentage Distribution of Adult (19-64 years old) Respondents' Current Smoking Status (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Never Smoked	51.61	60.15	54.98	55.61
Yes	Never Smoked	31.14	39.41	29.62	35.89
No	Former Smoker	22.55	19.35	22.92	22.90
Yes	Former Smoker	20.39	16.53	19.85	15.23
No	Currently Smokes	25.85	20.50	22.10	21.49
Yes	Currently Smokes	48.47	44.06	50.53	48.88
No	Std. Error: Never Smoked	1.18	0.62	1.15	1.09
Yes	Std. Error: Never Smoked	1.80	1.10	2.01	2.34

No	Std. Error: Former Smoker	0.97	0.49	0.98	0.92
Yes	Std. Error: Former Smoker	1.58	0.84	1.87	1.64
No	Std. Error: Currently Smokes	1.05	0.52	0.96	0.92
Yes	Std. Error: Currently Smokes	1.92	1.12	2.33	2.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A57(a): Percentage Distribution of Adult (19-64 years old) Respondents' Frequency of Smoking (2017)

Response	Percent	Std. Error
Not at all	42.83	0.58
Some Days	13.33	0.39
Every Day	43.84	0.58

Source: 2017 Ohio Medicaid Assessment Survey

Table A57(b): Percentage Distribution of Adult (19-64 years old) Respondents' Frequency of Smoking (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Not at all	41.48	41.74	45.25	45.94
Std. Error	1.35	0.81	1.47	1.46
Some Days	11.79	14.95	11.20	11.45
Std. Error	0.88	0.58	0.96	0.88
Every Day	46.73	43.30	43.55	42.61
Std. Error	1.37	0.82	1.45	1.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A57(c): Percentage Distribution of Adult (19-64 years old) Respondents' Frequency of Smoking (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Not at all	46.96	48.61	51.00	51.70

Yes	Not at all	29.76	27.35	28.49	23.81
No	Some Days	12.73	13.91	10.79	10.31
Yes	Some Days	9.77	17.15	12.39	15.81
No	Every Day	40.31	37.48	38.21	37.99
Yes	Every Day	60.47	55.51	59.12	60.38
No	Std. Error: Not at all	1.69	1.00	1.73	1.66
Yes	Std. Error: Not at all	2.14	1.29	2.55	2.47
No	Std. Error: Some Days	1.17	0.67	1.13	0.94
Yes	Std. Error: Some Days	1.13	1.10	1.82	2.19
No	Std. Error: Every Day	1.68	0.98	1.65	1.64
Yes	Std. Error: Every Day	2.23	1.45	2.79	2.95

Source: 2017 Ohio Medicaid Assessment Survey

Table A58(a): Percentage Distribution of Adult (19-64 years old) Respondents' Frequency of Binge Drinking in the Past 30 Days (2017)

Response	Percent	Std. Error
No	76.31	0.34
Yes	23.69	0.34

Source: 2017 Ohio Medicaid Assessment Survey

Table A58(b): Percentage Distribution of Adult (19-64 years old) Respondents' Frequency of Binge Drinking in the Past 30 Days (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	78.22	75.03	78.40	77.23
Yes	21.78	24.97	21.60	22.77
Std. Error	0.85	0.48	0.84	0.86

Source: 2017 Ohio Medicaid Assessment Survey

Table A58(c): Percentage Distribution of Adult (19-64 years old) Respondents' Frequency of Binge Drinking in the Past 30 Days (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-	Suburban

				Appalachian	
No	No	77.09	73.48	77.40	75.78
Yes	No	81.67	80.02	82.94	85.29
No	Yes	22.91	26.52	22.60	24.22
Yes	Yes	18.33	19.98	17.06	14.71
No	Std. Error: No	1.02	0.56	0.96	0.96
Yes	Std. Error: No	1.50	0.91	1.70	1.79

Source: 2017 Ohio Medicaid Assessment Survey

Table A59(a): Percent of Respondents Indicating their Child Consumed Zero, One, Two, or Three or More Glasses/Boxes of 100% Fruit Juice on the Previous Day (2017)

Response	Percent	Std. Error
Zero	32.53	1.46
One	26.33	1.36
Two	21.26	1.23
Three or more	19.88	1.18

Source: 2017 Ohio Medicaid Assessment Survey

Table A59(b): Percent of Respondents Indicating their Child Consumed Zero, One, Two, or Three or More Glasses/Boxes of 100% Fruit Juice on the Previous Day (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Zero	30.63	32.31	38.59	30.01
Std. Error: Zero	3.45	2.01	3.93	3.57
One	21.44	27.23	21.09	33.17
Std. Error: One	3.06	1.88	2.87	3.93
Two	24.60	19.20	22.81	23.64
Std. Error: Two	3.09	1.66	3.17	3.17
Three or more	23.32	21.25	17.51	13.18
Std. Error: Three or more	2.79	1.72	2.92	2.34

Source: 2017 Ohio Medicaid Assessment Survey

Table A59(c): Percent of Respondents Indicating their Child Consumed Zero, One, Two, or Three or More Glasses/Boxes of 100% Fruit Juice on the Previous Day (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-	Suburban

				Appalachian	
No	Zero	39.79	40.71	48.19	36.43
Yes	Zero	25.26	24.47	27.33	22.80
No	One	19.92	31.28	21.81	35.64
Yes	One	22.34	23.46	20.24	30.41
No	Two	22.05	16.06	15.10	18.70
Yes	Two	26.09	22.13	31.86	29.19
No	Three or more	18.25	11.95	14.90	9.23
Yes	Three or more	26.30	29.93	20.57	17.61
No	Std. Error: Zero	5.18	2.82	5.29	5.07
Yes	Std. Error: Zero	4.53	2.88	5.65	4.82
No	Std. Error: One	4.30	2.71	3.84	5.35
Yes	Std. Error: One	4.15	2.59	4.48	5.79
No	Std. Error: Two	4.48	1.99	3.37	3.52
Yes	Std. Error: Two	4.14	2.60	5.58	5.32
No	Std. Error: Three or more	3.64	1.93	3.03	2.41
Yes	Std. Error: Three or more	3.88	2.76	5.04	4.12

Source: 2017 Ohio Medicaid Assessment Survey

Table A60(a): Percent of Respondents Indicating their Child Consumed Zero, One, Two, or Three or More Glasses/Cans of Soda/Pop on the Previous Day (2017)

Response	Percent	Std. Error
Zero	80.83	1.25
One	11.68	0.98
Two	5.01	0.76
Three or more	2.48	0.52

Source: 2017 Ohio Medicaid Assessment Survey

Table A60(b): Percent of Respondents Indicating their Child Consumed Zero, One, Two, or Three or More Glasses/Cans of Soda/Pop on the Previous Day (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Zero	74.61	81.92	79.92	84.67
Std. Error	3.41	1.65	3.41	2.96
One	17.19	9.54	12.36	12.62
Std. Error	2.85	1.22	2.35	2.81
Two	6.79	4.84	6.01	2.70
Std. Error	2.26	0.92	2.71	1.14
Three or more	1.41	3.69	1.71	0.00
Std. Error	0.99	0.87	0.90	0.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A60(c): Percent of Respondents Indicating their Child Consumed Zero, One, Two, or Three or More Glasses/Cans of Soda/Pop on the Previous Day (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Zero	84.57	90.27	87.89	84.95
Yes	Zero	68.64	74.03	70.27	84.37
No	One	13.36	6.75	7.96	12.37
Yes	One	19.48	12.18	17.70	12.91
No	Two	1.49	0.99	4.15	2.68
Yes	Two	9.97	8.48	8.26	2.72
No	Three or more	0.59	1.99	0.00	0.00
Yes	Three or more	1.90	5.31	3.77	0.00
No	Std. Error: Zero	4.18	1.50	3.97	4.35
Yes	Std. Error: Zero	4.73	2.76	5.59	3.99
No	Std. Error:	4.11	1.26	2.20	4.17

	One				
Yes	Std. Error: One	3.82	2.03	4.42	3.71
No	Std. Error: Two	0.88	0.52	3.58	1.57
Yes	Std. Error: Two	3.49	1.70	4.08	1.65
No	Std. Error: Three or more	0.59	0.67	0.00	0.00
Yes	Std. Error: Three or more	1.54	1.56	1.99	0.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A61(a): Percent of Respondents Indicating their Child has a Particular Health Need (2017)

Item	No	Yes	Std. Error
Has trouble speaking/communicating	93.18	6.82	0.36
Has trouble learning/understanding/paying attention?	82.21	17.79	0.52
Has a developmental disability?	88.94	11.06	0.44
Has a disability?	72.17	27.83	0.59
Has a potentially disabling mental health/developmental condition?	87.35	12.65	0.45
Has emotional/developmental/behavioral problems?	86.87	13.13	0.46
Has activity limitations?	78.77	21.23	0.55
Needs/uses prescriptions?	81.36	18.64	0.51
Needs/gets special therapy?	90.36	9.64	0.41
Has trouble taking care of self?	93.96	6.04	0.33

Source: 2017 Ohio Medicaid Assessment Survey

Table A61(b): Percent of Adult (19-64 years old) Respondents Indicating they have a Particular Health Need (2017)

Item	No	Yes	Std. Error
Needs/gets treatment/counseling for mental health/substance abuse/emotional condition?	86.62	13.38	0.28
Has current need for domestic tasks/personal care/emotional/social support?	94.15	5.85	0.18

Has a developmental disability?	94.11	5.89	0.19
Has a disability?	76.94	23.06	0.33
Needs help with coordinating health care?	80.31	19.69	0.71
Has difficulty doing/needs assistance with daily activities?	89.38	10.62	0.24
Needs assistance with domestic tasks?	68.68	31.32	0.81
Needs assistance with personal care?	91.38	8.62	0.47
Needs social/emotional support?	70.92	29.08	0.80
Needs day-to-day long-term assistance?	89.52	10.48	0.24
Needs/gets special therapy?	90.47	9.53	0.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(a): Percentage of Adult (19-64 years old) Respondents and Children with a Developmental Disability (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	No	92.91	93.89	95.22	95.18
Adults	Yes	7.09	6.11	4.78	4.82
Adults	Std. Error	0.52	0.26	0.39	0.45
Children	No	87.62	88.53	90.04	90.65
Children	Yes	12.38	11.47	9.96	9.35
Children	Std. Error	1.13	0.62	1.05	0.95

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(b): Percentage of Adult (19-64 years old) Respondents Indicating they have a Developmental Disability (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	95.58	96.54	97.50	96.66
Yes	No	84.81	85.46	84.69	86.88
No	Yes	4.42	3.46	2.50	3.34
Yes	Yes	15.19	14.54	15.31	13.12
No	Std. Error	0.51	0.23	0.30	0.43
Yes	Std. Error	1.36	0.79	1.58	1.72

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(c): Percentage of Respondents Indicating their Child has a Developmental Disability (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	93.59	92.82	95.07	94.72
Yes	No	82.26	83.36	83.37	83.21
No	Yes	6.41	7.18	4.93	5.28
Yes	Yes	17.74	16.64	16.63	16.79
No	Std. Error	1.09	0.66	0.77	0.86
Yes	Std. Error	1.87	1.09	2.13	2.11

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(d): Percentage of Respondents Indicating their Child Needs/Uses Prescription Pills (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	81.17	81.02	83.55	80.77
Yes	18.83	18.98	16.45	19.23
Std. Error	1.29	0.72	1.29	1.18

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(e): Percentage of Respondents Indicating their Child Needs/Uses Prescription Pills (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	88.55	84.16	88.01	83.42
Yes	No	74.50	77.23	77.60	76.05
No	Yes	11.45	15.84	11.99	16.58
Yes	Yes	25.50	22.77	22.40	23.95
No	Std. Error	1.16	0.87	1.30	1.31
Yes	Std. Error	2.12	1.18	2.37	2.29

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(f): Percentage of Adult (19-64 years old) Respondents and Children who Need/Get Special Therapy (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	No	90.95	89.47	93.42	91.10

Adults	Yes	9.05	10.53	6.58	8.90
Adults	Std. Error	0.55	0.34	0.45	0.60
Children	No	90.95	89.76	92.23	90.17
Children	Yes	9.05	10.24	7.77	9.83
Children	Std. Error	1.03	0.58	0.91	1.04

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(g): Percentage of Respondents Indicating their Child Needs/Gets Special Therapy (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	94.20	93.03	96.18	94.29
Yes	No	88.03	85.82	87.05	82.74
No	Yes	5.80	6.97	3.82	5.71
Yes	Yes	11.97	14.18	12.95	17.26
No	Std. Error	1.10	0.62	0.65	0.98
Yes	Std. Error	1.67	1.03	1.84	2.21

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(h): Percentage of Adult (19-64 years old) Respondents Indicating they Need/Get Special Therapy (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	93.48	92.25	95.24	93.49
Yes	No	83.30	80.70	85.20	77.78
No	Yes	6.52	7.75	4.76	6.51
Yes	Yes	16.70	19.30	14.80	22.22
No	Std. Error	0.57	0.34	0.41	0.59
Yes	Std. Error	1.36	0.88	1.58	2.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(i): Percentage of Respondents Indicating their Child has an Emotional/Developmental/Behavioral Problems (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	86.87	85.92	89.54	87.74

Yes	13.13	14.08	10.46	12.26
Std. Error	1.15	0.67	1.06	1.03

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(j): Percentage of Respondents Indicating their Child has an Emotional/Developmental/Behavioral Problems (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	92.68	90.22	94.20	92.24
No	Yes	7.32	9.78	5.80	7.76
No	(Std. Error:)	1.15	0.73	0.82	0.91
Yes	No	81.65	80.72	83.40	79.61
Yes	Yes	18.35	19.28	16.60	20.39
Yes	(Std. Error:)	1.89	1.15	2.12	2.29

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(k): Percentage of Respondents Indicating their Child has Trouble Taking Care of Self (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	94.02	93.50	95.85	93.79
Yes	5.98	6.50	4.15	6.21
Std. Error	0.87	0.48	0.70	0.77

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(l): Percentage of Respondents Indicating their Child has Trouble Taking Care of Self (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	96.31	96.04	98.46	96.78
Yes	No	91.95	90.44	92.45	88.42
No	Yes	3.69	3.96	1.54	3.22
Yes	Yes	8.05	9.56	7.55	11.58
No	Std. Error	0.86	0.48	0.37	0.60
Yes	Std. Error	1.44	0.87	1.51	1.83

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(m): Percentage of Respondents Indicating their Child has Trouble Learning/Understanding/Paying Attention (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	81.37	81.84	84.71	82.10
Yes	18.63	18.16	15.29	17.90
Std. Error	1.35	0.74	1.21	1.25

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(n): Percentage of Respondents Indicating their Child has Trouble Learning/Understanding/Paying Attention (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	87.66	87.53	92.09	88.92
Yes	No	75.71	74.98	75.12	69.83
No	Yes	12.34	12.47	7.91	11.08
Yes	Yes	24.29	25.02	24.88	30.17
No	Std. Error	1.49	0.82	0.94	1.17
Yes	Std. Error	2.13	1.26	2.37	2.63

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(o): Percentage of Respondents Indicating their Child has Trouble Speaking/Communicating (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	93.17	92.51	94.46	94.31
Yes	6.83	7.49	5.54	5.69
Std. Error	0.94	0.53	0.75	0.81

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(p): Percentage of Respondents Indicating their Child has Trouble Speaking/Communicating (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	95.99	96.22	97.58	97.96
Yes	No	90.62	88.01	90.36	87.64
No	Yes	4.01	3.78	2.42	2.04

Yes	Yes	9.38	11.99	9.64	12.36
No	Std. Error	1.02	0.49	0.53	0.48
Yes	Std. Error	1.52	0.98	1.56	2.02

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(q): Percentage of Adult (19-64 years old) Respondents Indicating that because of a Physical, Mental, or Emotional Condition Lasting 6 Months or More they have Difficulty doing or Need Assistance doing Day-to-Day Activities (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	87.00	89.47	90.15	90.81
Yes	13.00	10.53	9.85	9.19
Std. Error	0.67	0.33	0.60	0.57

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(r): Percentage of Adult (19-64 years old) Respondents Indicating that because of a Physical, Mental, or Emotional Condition Lasting 6 Months or More they have Difficulty doing or Need Assistance doing Day-to-Day Activities (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	89.61	93.16	93.46	93.23
Yes	No	79.12	77.76	75.17	77.33
No	Yes	10.39	6.84	6.54	6.77
Yes	Yes	20.88	22.24	24.83	22.67
No	Std. Error	0.77	0.32	0.57	0.56
Yes	Std. Error	1.43	0.91	1.97	1.98

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(s): Percentage of Adult (19-64 years old) Respondents Indicating they Need/Get Treatment/Counseling for Mental Health/Substance Abuse or for an Emotional Condition (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	86.68	85.75	90.10	86.77
Yes	13.32	14.25	9.90	13.23
Std. Error	0.68	0.39	0.57	0.69

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(t): Percentage of Adult (19-64 years old) Respondents Indicating they Need/Get Treatment or Counseling (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	91.90	89.42	93.33	89.70
Yes	No	70.89	74.14	75.44	70.38
No	Yes	8.10	10.58	6.67	10.30
Yes	Yes	29.11	25.86	24.56	29.62
No	Std. Error	0.66	0.40	0.53	0.70
Yes	Std. Error	1.74	0.99	1.93	2.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(u): Percentage of Adult (19-64 years old) Respondents Indicating they Need Assistance with Personal Care, such as Bathing, Dressing, Toileting, or Feeding (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	89.25	91.70	90.62	93.14
Yes	10.75	8.30	9.38	6.86
Std. Error	1.29	0.61	1.45	1.13

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(v): Percentage of Adult (19-64 years old) Respondents Indicating they Need Assistance with Personal Care, such as Bathing, Dressing, Toileting, or Feeding (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	90.44	94.13	91.91	94.28
Yes	No	87.80	88.51	88.88	90.79
No	Yes	9.56	5.87	8.09	5.72
Yes	Yes	12.20	11.49	11.12	9.21
No	Std. Error	1.92	0.74	1.85	1.43
Yes	Std. Error	1.65	1.02	2.30	1.84

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(w): Percentage of Adult (19-64 years old) Respondents Indicating they Need Domestic Assistance, such as Shopping, Laundry, Housekeeping, Cooking, or Transportation (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-	Suburban

			Appalachian	
No	63.84	68.90	68.77	73.40
Yes	36.16	31.10	31.23	26.60
Std. Error	2.04	1.07	2.20	2.03

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(x): Percentage of Adult (19-64 years old) Respondents Indicating they Need Domestic Assistance, such as Shopping, Laundry, Housekeeping, Cooking, or Transportation (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	66.39	74.71	71.90	78.72
Yes	No	60.74	61.30	64.50	62.38
No	Yes	33.61	25.29	28.10	21.28
Yes	Yes	39.26	38.70	35.50	37.62
No	Std. Error	2.91	1.40	2.91	2.48
Yes	Std. Error	2.83	1.68	3.38	3.46

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(y): Percentage of Adult (19-64 years old) Respondents Indicating they Need Social/Emotional Support, such as Companionship, Recreation, and Socialization (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	71.06	70.59	69.74	72.99
Yes	28.94	29.41	30.26	27.01
Std. Error	1.91	1.07	2.25	2.05

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(z): Percentage of Adult (19-64 years old) Respondents Indicating they Need Social/Emotional Support, such as Companionship, Recreation, and Socialization (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	75.30	74.56	75.16	76.05
Yes	No	65.89	65.31	62.41	66.62
No	Yes	24.70	25.44	24.84	23.95
Yes	Yes	34.11	34.69	37.59	33.38

No	Std. Error	2.56	1.40	2.78	2.59
Yes	Std. Error	2.79	1.66	3.59	3.29

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(a2): Percentage of Adult (19-64 years old) Respondents Indicating they Need help Coordinating Health Care, such as Making Appointments for Doctor's Visits or Therapies (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	80.40	80.11	78.26	82.56
Yes	19.60	19.89	21.74	17.44
Std. Error	1.77	0.94	2.09	1.85

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(b2): Percentage of Adult (19-64 years old) Respondents Indicating they Need help Coordinating Health Care, such as Making Appointments for Doctor's Visits or Therapies (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	83.11	84.72	82.49	84.96
Yes	No	77.12	74.03	72.55	77.59
No	Yes	16.89	15.28	17.51	15.04
Yes	Yes	22.88	25.97	27.45	22.41
No	Std. Error	2.48	1.17	2.53	2.33
Yes	Std. Error	2.51	1.53	3.46	3.04

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(c2):): Percentage of Adult (19-64 years old) Respondents Indicating they have a Current Need for Domestic/Personal Care/Emotional/Social Assistance (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	92.44	94.19	95.11	94.93
Yes	7.56	5.81	4.89	5.07
Std. Error	0.53	0.24	0.45	0.44

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(d2): Percentage of Adult (19-64 years old) Respondents Indicating they have a Current Need for Domestic/Personal Care/Emotional/Social Assistance (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	94.62	96.75	96.99	96.50
Yes	No	85.83	86.08	86.63	86.20
No	Yes	5.38	3.25	3.01	3.50
Yes	Yes	14.17	13.92	13.37	13.80
No	Std. Error	0.56	0.22	0.40	0.45
Yes	Std. Error	1.27	0.73	1.60	1.52

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(e2): Percentage of Respondents Indicating their Child has Activity Limitations (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	77.77	78.37	82.30	78.00
Yes	22.23	21.63	17.70	22.00
Std. Error	1.40	0.78	1.29	1.36

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(f2): Percentage of Respondents Indicating their Child has Activity Limitations (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	84.52	84.39	90.26	85.32
Yes	No	71.68	71.11	71.70	64.96
No	Yes	15.48	15.61	9.74	14.68
Yes	Yes	28.32	28.89	28.30	35.04
No	Std. Error	1.52	0.89	1.03	1.38
Yes	Std. Error	2.20	1.28	2.46	2.68

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(g2): Percentage of Adult (19-64 years old) Respondents and with a Potentially Disabling Mental Health/Developmental Condition (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban

Adults	No	94.01	94.94	94.81	95.05
Adults	Yes	5.99	5.06	5.19	4.95
Adults	Std. Error	0.45	0.24	0.42	0.44
Children	No	87.37	86.47	89.85	88.10
Children	Yes	12.63	13.53	10.15	11.90
Children	Std. Error	1.11	0.65	1.03	1.00

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(h2): Percentage of Adult (19-64 years old) Respondents Indicating they have a Potentially Disabling Mental Health/Developmental Condition (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	96.59	96.95	97.39	96.55
Yes	No	86.19	88.59	83.22	86.64
No	Yes	3.41	3.05	2.61	3.45
Yes	Yes	13.81	11.41	16.78	13.36
No	Std. Error	0.43	0.22	0.32	0.43
Yes	Std. Error	1.23	0.69	1.72	1.64

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(i2): Percentage of Respondents Indicating their Child has a Potentially Disabling Mental Health/Developmental Condition (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	92.98	90.59	94.40	92.43
Yes	No	82.30	81.51	83.79	80.39
No	Yes	7.02	9.41	5.60	7.57
Yes	Yes	17.70	18.49	16.21	19.61
No	Std. Error	1.10	0.70	0.79	0.89
Yes	Std. Error	1.83	1.11	2.08	2.21

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(j2): Percentage of Adult (19-64 years old) Respondents and Children with a Disability (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	No	74.14	76.41	79.64	79.44
Adults	Yes	25.86	23.59	20.36	20.56
Adults	Std. Error	0.86	0.46	0.78	0.81
Children	No	71.61	71.52	76	71.53
Children	Yes	28.39	28.48	24	28.47
Children	Std. Error	1.47	0.83	1.41	1.44

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(k2): Percentage of Adult (19-64 years old) Respondents Indicating they have a Disability (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	80.77	83.17	85.77	83.94
Yes	No	54.04	55.06	52.02	54.31
No	Yes	19.23	16.83	14.23	16.06
Yes	Yes	45.96	44.94	47.98	45.69
No	Std. Error	0.94	0.47	0.76	0.85
Yes	Std. Error	1.88	1.10	2.28	2.40

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(l2): Percentage of Respondents Indicating their Child has a Disability (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	80.43	78.32	85.80	80.34
Yes	No	63.63	63.34	62.96	55.84
No	Yes	19.57	21.68	14.20	19.66
Yes	Yes	36.37	36.66	37.04	44.16
No	Std. Error	1.63	0.97	1.21	1.48
Yes	Std. Error	2.27	1.34	2.55	2.76

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(m2): Percentage of Adult (19-64 years old) Respondents Indicating they Need Long-term Day-to-Day Assistance (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	87.18	89.63	90.23	90.92
Yes	12.82	10.37	9.77	9.08
Std. Error	0.67	0.33	0.60	0.57

Source: 2017 Ohio Medicaid Assessment Survey

Table A62(n2): Percentage of Adult (19-64 years old) Respondents Indicating they Need Long-term Day-to-Day Assistance (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	89.75	93.26	93.52	93.32
Yes	No	79.38	78.17	75.42	77.58
No	Yes	10.25	6.74	6.48	6.68
Yes	Yes	20.62	21.83	24.58	22.42
No	Std. Error	0.76	0.32	0.57	0.56
Yes	Std. Error	1.41	0.90	1.95	1.96

Source: 2017 Ohio Medicaid Assessment Survey

Health Status/Condition

Table A63(a): Percentage Distribution of Overall General Health Status for Adult (19-64 years old) Respondents and Children (2017)

Group	Response	Percent	Std. Error
Adults	Poor	5.47	0.18
Adults	Fair	14.28	0.28
Adults	Good	27.49	0.36
Adults	Very Good	32.64	0.37
Adults	Excellent	20.12	0.32
Children	Poor	0.57	0.09
Children	Fair	3.25	0.23
Children	Good	11.72	0.42
Children	Very Good	27.45	0.58

Children	Excellent	57.00	0.64

Source: 2017 Ohio Medicaid Assessment Survey

Table A63(b): Percentage Distribution of Overall General Health Status for Adult (19-64 years old) Respondents and Children (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Excellent	17.66	20.59	19.53	21.42
Adults	Very Good	28.98	33.07	32.46	34.99
Adults	Good	29.17	27.16	27.68	26.83
Adults	Fair	16.34	14.21	14.84	11.95
Adults	Poor	7.85	4.97	5.49	4.82
Children	Excellent	54.11	57.15	55.7	60.5
Children	Very Good	29.56	26.75	29.69	25.78
Children	Good	12.29	11.9	11.62	10.64
Children	Fair	3.61	3.56	2.66	2.41
Children	Poor	0.43	0.64	0.34	0.67

Source: 2017 Ohio Medicaid Assessment Survey

Table A63(c): Percentage Distribution of Adult (19-64 years old) Respondents' Overall General Health Status (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	No	Poor	6.00	3.22	3.90	3.61
Adults	Yes	Poor	13.47	10.49	12.67	11.58
Adults	No	Fair	13.43	10.65	12.16	9.64
Adults	Yes	Fair	25.16	25.46	26.93	24.82
Adults	No	Good	28.51	26.61	27.58	26.43
Adults	Yes	Good	31.19	28.89	28.11	29.04
Adults	No	Very Good	31.70	36.25	34.79	37.38
Adults	Yes	Very Good	20.71	23.05	21.97	21.65
Adults	No	Excellent	20.35	23.27	21.58	22.94
Adults	Yes	Excellent	9.47	12.11	10.32	12.91
Adults	No	Std. Error: Poor	0.58	0.22	0.50	0.40
Adults	Yes	Std. Error: Poor	1.28	0.63	1.58	1.42

Adults	No	Std. Error: Fair	0.81	0.39	0.79	0.65
Adults	Yes	Std. Error: Fair	1.64	0.95	2.04	2.07
Adults	No	Std. Error: Good	1.06	0.56	1.02	0.96
Adults	Yes	Std. Error: Good	1.77	1.00	2.00	2.19
Adults	No	Std. Error: Very Good	1.07	0.60	1.10	1.04
Adults	Yes	Std. Error: Very Good	1.55	0.97	1.89	2.09
Adults	No	Std. Error: Excellent	0.93	0.52	0.94	0.90
Adults	Yes	Std. Error: Excellent	1.20	0.75	1.35	1.75

Source: 2017 Ohio Medicaid Assessment Survey

Table A63(d): Percentage Distribution of Children's Overall General Health Status (by Medicaid Status and OMAS County Type Classifications) (2017)

Group	Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Children	No	Poor	0.21	0.50	0.04	0.00
Children	Yes	Poor	0.63	0.82	0.75	1.87
Children	No	Fair	1.17	2.10	1.36	1.81
Children	Yes	Fair	5.81	5.31	4.38	3.48
Children	No	Good	6.96	9.26	9.11	7.86
Children	Yes	Good	17.11	15.09	14.95	15.57
Children	No	Very Good	27.69	25.53	28.95	21.50
Children	Yes	Very Good	31.25	28.21	30.67	33.41
Children	No	Excellent	63.97	62.62	60.54	68.82
Children	Yes	Excellent	45.20	50.58	49.24	45.67
Children	No	Std. Error: Poor	0.11	0.15	0.03	0.00
Children	Yes	Std. Error: Poor	0.23	0.24	0.35	0.85
Children	No	Std. Error:	0.37	0.30	0.39	0.44

		Fair				
Children	Yes	Std. Error: Fair	1.26	0.62	1.15	0.96
Children	No	Std. Error: Good	0.94	0.69	1.00	0.91
Children	Yes	Std. Error: Good	1.83	0.98	1.88	1.95
Children	No	Std. Error: Very Good	1.99	1.03	1.88	1.46
Children	Yes	Std. Error: Very Good	2.19	1.25	2.39	2.71
Children	No	Std. Error: Excellent	2.09	1.13	2.01	1.65
Children	Yes	Std. Error: Excellent	2.32	1.38	2.61	2.76

Source: 2017 Ohio Medicaid Assessment Survey

Table A64(a): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they have/had High Blood Pressure/Hypertension, Congestive Heart Failure, Coronary Heart Disease, or a Heart Attack (2017)

Item	No	Yes	Std. Error
Blood Pressure/Hypertension	71.84	28.16	0.35
Congestive Heart Failure	97.74	2.26	0.12
Coronary Heart Disease	95.98	4.02	0.16
Heart Attack	96.38	3.62	0.15

Source: 2017 Ohio Medicaid Assessment Survey

Table A64(b): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they have/had High Blood Pressure/Hypertension, Congestive Heart Failure, Coronary Heart Disease, or a Heart Attack (by OMAS County Type Classifications) (2017)

Item	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Blood Pressure/Hypertension	No	67.69	72.87	70.52	73.49

Blood Pressure/Hypertension	Yes	32.31	27.13	29.48	26.51
Blood Pressure/Hypertension	Std. Error	0.93	0.48	0.95	0.86
Heart Attack	No	94.73	96.90	95.77	96.70
Heart Attack	Yes	5.27	3.10	4.23	3.30
Heart Attack	Std. Error	0.46	0.18	0.45	0.34
Coronary Heart Disease	No	94.08	96.63	94.68	96.66
Coronary Heart Disease	Yes	5.92	3.37	5.32	3.34
Coronary Heart Disease	Std. Error	0.49	0.20	0.53	0.35
Congestive Heart Failure	No	96.89	97.80	97.90	98.26
Congestive Heart Failure	Yes	3.11	2.20	2.10	1.74
Congestive Heart Failure	Std. Error	0.36	0.16	0.28	0.23

Source: 2017 Ohio Medicaid Assessment Survey

Table A65(a): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had Diabetes (2017)

Response	Percent	Std. Error
Borderline	0.51	0.05
No	88.94	0.25
Yes	10.56	0.24

Source: 2017 Ohio Medicaid Assessment Survey

Table A65(b): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had Diabetes (by OMAS County Type Classifications) (2017)

Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Borderline	0.43	0.51	0.59	0.53
No	86.50	89.24	89.46	89.86
Yes	13.07	10.25	9.95	9.61
Std. Error: Borderline	0.09	0.08	0.16	0.14

Std. Error: No	0.70	0.33	0.61	0.60
Std. Error: Yes	0.69	0.33	0.60	0.58

Source: 2017 Ohio Medicaid Assessment Survey

Table A66(a): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had High Blood Pressure/Hypertension (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	68.92	75.54	72.16	75.42
Yes	No	63.96	64.41	63.12	62.83
No	Yes	31.08	24.46	27.84	24.58
Yes	Yes	36.04	35.59	36.88	37.17
No	Std. Error	1.08	0.53	1.06	0.92
Yes	Std. Error	1.83	1.05	2.22	2.34

Source: 2017 Ohio Medicaid Assessment Survey

Table A66(b): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had Heart Attack (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	95.64	97.65	96.38	97.17
Yes	No	91.95	94.53	93.01	94.11
No	Yes	4.36	2.35	3.62	2.83
Yes	Yes	8.05	5.47	6.99	5.89
No	Std. Error	0.48	0.19	0.49	0.36
Yes	Std. Error	1.13	0.46	1.15	1.04

Source: 2017 Ohio Medicaid Assessment Survey

Table A66(c): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had Coronary Heart Disease (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	94.86	97.39	95.24	97.21
Yes	No	91.71	94.24	92.13	93.62
No	Yes	5.14	2.61	4.76	2.79
Yes	Yes	8.29	5.76	7.87	6.38

No	Std. Error	0.56	0.21	0.58	0.37
Yes	Std. Error	1.05	0.50	1.25	1.07

Source: 2017 Ohio Medicaid Assessment Survey

Table A66(d): Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had Congestive Heart Failure (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	No	97.61	98.49	98.51	98.73
Yes	No	94.69	95.61	95.17	95.61
No	Yes	2.39	1.51	1.49	1.27
Yes	Yes	5.31	4.39	4.83	4.39
No	Std. Error	0.37	0.17	0.25	0.21
Yes	Std. Error	0.91	0.41	0.99	0.93

Source: 2017 Ohio Medicaid Assessment Survey

Table A66(e Percent of Adult (19-64 years old) Respondents Reporting Ever Being Told they had Diabetes (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Borderline	0.37	0.34	0.37	0.46
Yes	Borderline	0.62	1.02	1.58	0.90
No	No	86.88	90.71	90.72	90.48
Yes	No	85.35	84.61	83.74	86.39
No	Yes	12.75	8.94	8.91	9.05
Yes	Yes	14.03	14.37	14.68	12.71
No	Std. Error: Borderline	0.10	0.06	0.15	0.15
Yes	Std. Error: Borderline	0.19	0.24	0.54	0.43
No	Std. Error: No	0.83	0.36	0.66	0.65
Yes	Std. Error: No	1.27	0.79	1.56	1.47
No	Std. Error: Yes	0.82	0.36	0.65	0.64
Yes	Std. Error:	1.26	0.76	1.49	1.41

	Yes				

Source: 2017 Ohio Medicaid Assessment Survey

Table A67(a): Percentage Distribution of Calculated Body Mass Index Categories for Adult (19-64 years old) Respondents and Children (2017)

Group	Response	Percent	Std. Error
Adults	Underweight	2.06	0.12
Adults	Normal/Healthy weight	29.92	0.38
Adults	Overweight	32.15	0.38
Adults	Obese	35.88	0.39
Children	Underweight	8.46	0.47
Children	Normal/Healthy weight	52.36	0.82
Children	Overweight	15.96	0.61
Children	Obese	23.22	0.70

Source: 2017 Ohio Medicaid Assessment Survey

Table A67(b): Percentage Distribution of Calculated Body Mass Index Categories for Adult (19-64 years old) Respondents and Children (by OMAS County Type Classifications) (2017)

Group	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
Adults	Underweight	1.75	2.07	2.28	2.15
Adults	Std. Error: Underweight	0.23	0.17	0.33	0.31
Adults	Normal/Healthy weight	26.38	31.33	27.56	30.44
Adults	Std. Error: Normal/Healthy	0.89	0.52	0.94	0.94
Adults	Overweight	31.16	32.35	31.58	32.90
Adults	Std. Error: Overweight	0.96	0.52	0.97	0.96
Adults	Obese	40.70	34.26	38.59	34.51
Adults	Std. Error: Obese	1.02	0.53	1.03	0.96
Children	Underweight	7.67	8.19	8.90	9.69
Children	Std. Error: Underweight	1.21	0.64	1.16	1.26

Children	Normal/Healthy weight	50.07	52.87	50.02	54.98
Children	Std. Error: Normal/Healthy	2.08	1.15	2.04	1.93
Children	Overweight	15.98	15.52	17.68	15.83
Children	Std. Error: Overweight	1.56	0.84	1.68	1.42
Children	Obese	26.28	23.43	23.40	19.50
Children	Std. Error: Obese	1.89	0.98	1.70	1.54

Source: 2017 Ohio Medicaid Assessment Survey

Table A67(c): Percentage Distribution of Adult (19-64 years old) Respondent's Calculated Body Mass Index Categories (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Underweight	1.29	1.97	2.03	1.95
Yes	Underweight	3.16	2.37	3.39	3.24
No	Normal/Healthy weight	25.92	32.50	27.19	30.71
Yes	Normal/Healthy weight	27.79	27.63	29.21	28.95
No	Overweight	32.90	33.41	32.54	33.90
Yes	Overweight	25.83	28.97	27.24	27.30
No	Obese	39.88	32.12	38.24	33.44
Yes	Obese	43.21	41.04	40.16	40.51
No	Std. Error: Underweight	0.23	0.19	0.35	0.32
Yes	Std. Error: Underweight	0.62	0.36	0.89	1.01
No	Std. Error: Normal/Healthy	1.04	0.61	1.04	1.03
Yes	Std. Error: Normal/Healthy	1.67	1.03	2.20	2.31
No	Std. Error: Overweight	1.13	0.60	1.10	1.06
Yes	Std. Error: Overweight	1.81	1.04	2.07	2.28

No	Std. Error: Obese	1.19	0.60	1.15	1.05
Yes	Std. Error: Obese	1.94	1.12	2.22	2.45

Source: 2017 Ohio Medicaid Assessment Survey

Table A67(d): Percentage Distribution of Children's Calculated Body Mass Index Categories for Children (by Medicaid Status and OMAS County Type Classifications) (2017)

Medicaid	Response	Appalachian	Metropolitan	Rural Non-Appalachian	Suburban
No	Underweight	7.63	8.12	9.98	9.22
Yes	Underweight	7.71	8.27	7.34	10.73
No	Normal/Healthy weight	54.58	59.66	56.81	62.00
Yes	Normal/Healthy weight	45.27	43.35	40.22	39.38
No	Overweight	15.49	15.03	15.93	15.48
Yes	Overweight	16.51	16.20	20.21	16.62
No	Obese	22.3	17.18	17.28	13.3
Yes	Obese	30.51	32.18	32.23	33.27
No	Std. Error: Underweight	1.62	0.73	1.62	1.40
Yes	Std. Error: Underweight	1.79	1.13	1.58	2.58
No	Std. Error: Normal/Healthy weight	2.71	1.42	2.58	2.19
Yes	Std. Error: Normal/Healthy weight	3.13	1.85	3.31	3.48
No	Std. Error: Overweight	1.91	1.07	2.00	1.65
Yes	Std. Error: Overweight	2.47	1.36	2.99	2.60
No	Std. Error: Obese	2.33	1.08	1.80	1.46
Yes	Std. Error: Obese	2.98	1.74	3.17	3.48

Source: 2017 Ohio Medicaid Assessment Survey

Modeling Health Outcomes/Conditions

The set of estimates that follow are from our efforts to fit survey-weighted logit and ordinal logit models to selected health status indicators. While we did consider generalized logistic

regression models that relax the assumption of proportional odds, also referred to as the equal slopes assumption (Williams 2005), built into Stata's svy: ologit models, we discarded that option in favor of the simplicity and ease of interpretation of the standard ordinal logit model (Heeringa et al. 2017:317). Note that in models with diabetes as the dependent variable individuals told they had borderline diabetes are excluded. We also use a simpler measure of income/poverty: whether an individual's income, in federal poverty levels, is in the 0-138% range (low income = "Yes") or not. We also exclude all "don't know" and "refused" responses. We also use the full range of the indicator for insurance type rather than the binary "Medicaid" versus "Not Medicaid" dummy variable since it allows for the exploration of more nuanced differences between the uninsured and the array of health insurance coverage types.

Body Mass Index

Table A68: Ordinal Logit Estimates: Adult (19-64 years old) Respondents' Body Mass Index Category (2017)

Variable	Odds Ratio	Std. Errort		P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.8303	0.0333	-4.6400	0.0000	0.7676	0.8981
Rural Non-Appalachian	0.9194	0.0441	-1.7500	0.0800	0.8369	1.0100
Suburban	0.8565	0.0400	-3.3100	0.0010	0.7816	0.9387
Age Group (base: 19-24)						
25-34	1.8820	0.1222	9.7400	0.0000	1.6570	2.1375
35-44	2.5337	0.1757	13.4100	0.0000	2.2116	2.9026
45-54	2.9168	0.2009	15.5500	0.0000	2.5486	3.3383
55-64	2.6328	0.1793	14.2100	0.0000	2.3038	3.0089
65+	1.7910	0.1592	6.5600	0.0000	1.5047	2.1318
Race/Ethnicity (base: White)						
Asian	0.3817	0.0427	-8.6100	0.0000	0.3066	0.4753
Black/African-American	1.2944	0.0596	5.6000	0.0000	1.1827	1.4166
Hispanic	1.1199	0.0926	1.3700	0.1710	0.9523	1.3170
Other	1.0464	0.0973	0.4900	0.6250	0.8722	1.2555
Gender (base: Female)						
Male	1.0327	0.6124	0.0500	0.9570	0.3230	3.3016
Education (base: < High School)						

High School Graduate or Equivalent	1.0333	0.0591	0.5700	0.5660	0.9238	1.1559
Some College	1.0684	0.0673	1.0500	0.2930	0.9444	1.2088
Associate Degree	1.0047	0.0654	0.0700	0.9430	0.8843	1.1414
College Graduate	0.7690	0.0484	-4.1700	0.0000	0.6798	0.8700
Advanced Degree	0.6888	0.0469	-5.4800	0.0000	0.6028	0.7871
Marital Status (base: Never Married)						
Divorced/Separated	1.0248	0.0536	0.4700	0.6390	0.9250	1.1354
Married	1.1085	0.0498	2.2900	0.0220	1.0151	1.2105
Unmarried Couple	1.1026	0.0647	1.6600	0.0960	0.9828	1.2370
Widowed	0.9765	0.0648	-0.3600	0.7200	0.8575	1.1121
Insurance Status/Type (base: Uninsured)						
Exchange Coverage	1.1248	0.1246	1.0600	0.2880	0.9053	1.3975
Employer-sponsored Coverage	1.1239	0.0698	1.8800	0.0600	0.9952	1.2693
Medicaid and Medicare	1.6429	0.1530	5.3300	0.0000	1.3688	1.9718
Medicaid, no Medicare	1.3494	0.0934	4.3300	0.0000	1.1783	1.5454
Medicare, no Medicaid	1.4007	0.1187	3.9800	0.0000	1.1863	1.6539
Other	1.0155	0.1135	0.1400	0.8910	0.8157	1.2641
Other directly purchased	0.7658	0.0683	-2.9900	0.0030	0.6430	0.9120
Unknown	0.9242	0.0945	-0.7700	0.4400	0.7564	1.1292
Low income						

Yes	1.0529	0.0338	1.6100	0.1080	0.9887	1.1213
Working						
Yes	1.0356	0.0372	0.9700	0.3310	0.9651	1.1112
Usual source of care						
Yes	1.2820	0.0654	4.8700	0.0000	1.1601	1.4168
Smoking Status						
Former Smoker	1.1148	0.0380	3.1900	0.0010	1.0427	1.1918
Current Smoker	0.6558	0.0250	-11.0700	0.0000	0.6085	0.7066
Alcohol use (base: 4 or more)						
5 or more	1.1319	0.6713	0.2100	0.8340	0.3540	3.6192
/cut1	-2.9708	0.1226			-3.2110	-2.7306
/cut2	0.2340	0.1129			0.0128	0.4552
/cut3	1.6939	0.1138			1.4708	1.9171

n = 34,841

Design df 34,663

F(36, 34628) = 29.13

Table A69: Ordinal Logit Estimates: Children's Body Mass Index Category (2017)

	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.8772	0.0856	-1.3400	0.1800	0.7244	1.0622
Rural Non-Appalachian	0.9648	0.1088	-0.3200	0.7510	0.7734	1.2036
Suburban	0.8213	0.0949	-1.7000	0.0880	0.6549	1.0301
Gender (base: Female)						
Male	1.3108	0.0841	4.2200	0.0000	1.1559	1.4864
Race/Ethnicity (base: White)						
Asian	0.6131	0.0931	-3.2200	0.0010	0.4553	0.8258
Black/African-American	1.2739	0.1241	2.4800	0.0130	1.0524	1.5420
Hispanic	1.3948	0.2070	2.2400	0.0250	1.0426	1.8659
Other	0.9798	0.1779	-0.1100	0.9100	0.6864	1.3985
Insurance Status/Type (base: Uninsured) Exchange Coverage	0.8267	0.4134	-0.3800	0.7030	0.3101	2.2034
Employer-sponsored Coverage	0.8981	0.1404	-0.6900	0.4920	0.6611	1.2201
Medicaid and Medicare	1.7207	0.4932	1.8900	0.0580	0.9810	3.0179
Medicaid, no Medicare	1.2777	0.2079	1.5100	0.1320	0.9287	1.7579
Medicare, no Medicaid	0.9838	0.2609	-0.0600	0.9510	0.5850	1.6545
Other	1.0010	0.2725	0.0000	0.9970	0.5871	1.7069
Other directly purchased	0.8170	0.1621	-1.0200	0.3080	0.5538	1.2053

Unknown	0.9030	0.2658	-0.3500	0.7290	0.5071	1.6080
Low Income	1.4690	0.1322	4.2800	0.0000	1.2315	1.7524
Has usual source of care	1.1655	0.2523	0.7100	0.4790	0.7624	1.7816
/cut1	-1.8993	0.4392			-2.7603	-1.0382
/cut2	0.9926	0.4411			0.1280	1.8573
/cut3	1.7883	0.4418			0.9222	2.6543

n = 5,646

Design df 5,471

F(18, 5454) = 9.34

Overall Health Status

Table A70: Ordinal Logit Estimates: Adult (19-64 years old) Respondents' Overall Health Status (2017)

Variable	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	1.0882	0.0439	2.1000	0.0360	1.0055	1.1776
Rural Non-Appalachian	1.0635	0.0515	1.2700	0.2030	0.9673	1.1693
Suburban	1.1059	0.0520	2.1400	0.0320	1.0085	1.2128
Age Group (base: 19-24)						
25-34	0.7862	0.0480	-3.9400	0.0000	0.6975	0.8861
35-44	0.5959	0.0395	-7.8200	0.0000	0.5234	0.6785
45-54	0.4587	0.0301	-11.8900	0.0000	0.4034	0.5216

55-64	0.4066	0.0266	-13.7700	0.0000	0.3577	0.4621
65+	0.9189	0.0819	-0.9500	0.3430	0.7715	1.0944
Race/Ethnicity (base: White)						
Asian	0.8572	0.1018	-1.3000	0.1950	0.6792	1.0820
Black/African-American	0.9956	0.0434	-0.1000	0.9200	0.9140	1.0845
Hispanic	0.7804	0.0666	-2.9100	0.0040	0.6603	0.9225
Other	0.9314	0.0839	-0.7900	0.4300	0.7807	1.1112
Gender (base: Female)						
Male	0.7604	0.4495	-0.4600	0.6430	0.2387	2.4226
Education (base: < High School)						
High School Graduate or Equivalent	1.6336	0.0977	8.2100	0.0000	1.4529	1.8368
Some College	1.7572	0.1146	8.6400	0.0000	1.5463	1.9968
Associate Degree	1.9595	0.1321	9.9800	0.0000	1.7170	2.2362
College Graduate	2.5924	0.1734	14.2400	0.0000	2.2739	2.9556
Advanced Degree	2.8265	0.2017	14.5600	0.0000	2.4577	3.2508
Marital Status (base: Never Married)						
Divorced/Separated	0.8959	0.0456	-2.1600	0.0310	0.8108	0.9899
Married	1.2533	0.0524	5.4000	0.0000	1.1547	1.3604
Unmarried Couple	1.0499	0.0594	0.8600	0.3890	0.9398	1.1730
Widowed	1.0162	0.0681	0.2400	0.8100	0.8912	1.1588

Insurance Status/Type (base: Uninsured)						
Exchange Coverage	1.3636	0.1624	2.6000	0.0090	1.0797	1.7221
Employer-sponsored Coverage	1.2850	0.0807	3.9900	0.0000	1.1362	1.4535
Medicaid and Medicare	0.3882	0.0367	-10.0200	0.0000	0.3226	0.4671
Medicaid, no Medicare	0.7770	0.0540	-3.6300	0.0000	0.6781	0.8903
Medicare, no Medicaid	0.5627	0.0502	-6.4400	0.0000	0.4723	0.6703
Other	1.0755	0.1161	0.6700	0.5000	0.8704	1.3290
Other directly purchased	1.5465	0.1480	4.5600	0.0000	1.2821	1.8655
Unknown	0.7971	0.0817	-2.2100	0.0270	0.6520	0.9745
Low income Yes						
	0.7651	0.0245	-8.3600	0.0000	0.7186	0.8147
Working Yes						
	2.0555	0.0761	19.4500	0.0000	1.9115	2.2102
Usual source of care Yes						
	0.7274	0.0392	-5.9100	0.0000	0.6545	0.8083
BMI Group (base: Underweight)						
Normal/Healthy weight	1.8670	0.2110	5.5200	0.0000	1.4960	2.3300
Overweight	1.2827	0.1441	2.2200	0.0270	1.0292	1.5986
Obese	0.6257	0.0701	-4.1800	0.0000	0.5024	0.7794
Smoking Status						
Former Smoker	0.7240	0.0248	-9.4500	0.0000	0.6771	0.7742

Current Smoker	0.5054	0.0193	-17.8700	0.0000	0.4689	0.5446
Alcohol use (base: 4 or more)						
5 or more	1.2473	0.7374	0.3700	0.7090	0.3915	3.9740
/cut1	-3.2067	0.1565			-3.5135	-2.8999
/cut2	-1.5266	0.1546			-1.8296	-1.2236
/cut3	0.1169	0.1542			-0.1853	0.4192
/cut4	1.9306	0.1550			1.6268	2.2345

n = 34,841

Design df 34,663

F(39, 34625) = 138.83

TableA 71: Ordinal Logit Estimates of Children's Overall Health Status (2017)

	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.9797	0.0894	-0.2200	0.8220	0.8193	1.1715
Rural Non-Appalachian	0.9386	0.1012	-0.5900	0.5570	0.7597	1.1596
Suburban	1.1396	0.1244	1.2000	0.2310	0.9200	1.4115
Age-group (base: < 6)						
6-12 years	0.2909	0.3804	-0.9400	0.3450	0.0224	3.7769
13-18 years	0.2122	0.2776	-1.1800	0.2360	0.0163	2.7580
Gender (base: Female)						

Male	1.0140	0.0666	0.2100	0.8320	0.8915	1.1533
Race/Ethnicity (base: White)						
Asian	0.7516	0.1901	-1.1300	0.2590	0.4578	1.2339
Black/African-American	1.0083	0.0969	0.0900	0.9320	0.8351	1.2174
Hispanic	1.0060	0.1443	0.0400	0.9670	0.7594	1.3328
Other	0.6893	0.1279	-2.0100	0.0450	0.4791	0.9917
BMI Group (base: Underweight)						
Normal/Healthy weight	0.9874	0.1260	-0.1000	0.9210	0.7689	1.2680
Overweight	0.7033	0.1025	-2.4200	0.0160	0.5285	0.9359
Obese	0.4563	0.0632	-5.6700	0.0000	0.3479	0.5986
Insurance Status/Type (base: Uninsured) Exchange Coverage	1.6406	0.5783	1.4000	0.1600	0.8220	3.2744
Employer-sponsored Coverage	2.0127	0.3570	3.9400	0.0000	1.4215	2.8497
Medicaid and Medicare	0.5981	0.1791	-1.7200	0.0860	0.3325	1.0758
Medicaid, no Medicare	1.1110	0.1958	0.6000	0.5500	0.7864	1.5696
Medicare, no Medicaid	1.3677	0.4960	0.8600	0.3880	0.6717	2.7846
Other	1.8875	0.5676	2.1100	0.0350	1.0468	3.4035
Other directly purchased	1.8208	0.4312	2.5300	0.0110	1.1446	2.8966
Unknown	1.1931	0.2931	0.7200	0.4720	0.7371	1.9312
Low Income	0.7714	0.0682	-2.9300	0.0030	0.6486	0.9175

Has usual source of care	1.3258	0.2428	1.5400	0.1240	0.9258	1.8985
/cut1	-5.8306	1.3722			-8.5206	-3.1405
/cut2	-4.0361	1.3593			-6.7009	-1.3713
/cut3	-2.4211	1.3606			-5.0884	0.2461
/cut4	-0.9280	1.3589			-3.5920	1.7360

n = 5,646

Design df 5,471

F(23, 5449) = 12.71 81

High Blood Pressure/Hypertension

Table A72: Logit Estimates: Adult (19-64 years old) Respondent ever told he/she had high blood pressure/hypertension? (2017)

Variable	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.8971	0.0452	-2.1500	0.0310	0.8128	0.9902
Rural Non-Appalachian	0.8996	0.0558	-1.7100	0.0880	0.7966	1.0159
Suburban	0.9142	0.0541	-1.5100	0.1300	0.8141	1.0267
Age Group (base: 19-24)						
25-34	1.5140	0.1726	3.6400	0.0000	1.2107	1.8932
35-44	2.7634	0.3104	9.0500	0.0000	2.2174	3.4439
45-54	5.5321	0.6064	15.6100	0.0000	4.4626	6.8580

55-64	10.1850	1.1187	21.1300	0.0000	8.2122	12.6317
65+	11.8243	1.4900	19.6000	0.0000	9.2365	15.1370
Race/Ethnicity (base: White)						
Asian	0.8526	0.1701	-0.8000	0.4240	0.5767	1.2605
Black/African-American	1.6158	0.0884	8.7700	0.0000	1.4515	1.7987
Hispanic	1.0697	0.1184	0.6100	0.5430	0.8611	1.3288
Other	1.2577	0.1514	1.9000	0.0570	0.9934	1.5924
Gender (base: Female)						
Male	0.8639	0.5329	-0.2400	0.8130	0.2579	2.8945
Education (base: < High School)						
High School Graduate or Equivalent	0.8584	0.0620	-2.1100	0.0350	0.7450	0.9890
Some College	0.8069	0.0640	-2.7000	0.0070	0.6907	0.9427
Associate Degree	0.8018	0.0649	-2.7300	0.0060	0.6842	0.9396
College Graduate	0.7735	0.0637	-3.1200	0.0020	0.6582	0.9091
Advanced Degree	0.7050	0.0622	-3.9600	0.0000	0.5930	0.8382
Marital Status (base: Never Married)						
Divorced/Separated	0.9811	0.0632	-0.3000	0.7670	0.8648	1.1131
Married	0.8909	0.0515	-2.0000	0.0460	0.7955	0.9977
Unmarried Couple	0.9368	0.0783	-0.7800	0.4340	0.7952	1.1035
Widowed	1.2803	0.1065	2.9700	0.0030	1.0876	1.5070

Insurance Status/Type (base: Uninsured)						
Exchange Coverage	1.0841	0.1648	0.5300	0.5950	0.8048	1.4603
Employer-sponsored Coverage	1.1233	0.0977	1.3400	0.1810	0.9473	1.3321
Medicaid and Medicare	2.0333	0.2314	6.2300	0.0000	1.6267	2.5415
Medicaid, no Medicare	1.6495	0.1518	5.4400	0.0000	1.3772	1.9756
Medicare, no Medicaid	1.9247	0.2022	6.2300	0.0000	1.5666	2.3647
Other	1.0683	0.1714	0.4100	0.6810	0.7800	1.4632
Other directly purchased	0.9511	0.1307	-0.3600	0.7150	0.7265	1.2451
Unknown	1.4350	0.2062	2.5100	0.0120	1.0828	1.9019
Low income						
Yes	1.0159	0.0428	0.3700	0.7080	0.9354	1.1033
Working						
Yes	0.7008	0.0311	-8.0100	0.0000	0.6424	0.7646
Usual source of care						
Yes	1.7437	0.1380	7.0300	0.0000	1.4932	2.0363
BMI Group (base: Underweight)						
Normal/Healthy weight	0.9641	0.1545	-0.2300	0.8200	0.7042	1.3200
Overweight	1.6535	0.2620	3.1700	0.0020	1.2121	2.2557
Obese	3.5426	0.5605	7.9900	0.0000	2.5980	4.8305
Smoking Status						

Former Smoker	1.0990	0.0478	2.1700	0.0300	1.0093	1.1967
Current Smoker	1.2181	0.0598	4.0200	0.0000	1.1063	1.3411
Alcohol use (base: 4 or more)						
5 or more	1.5781	0.9735	0.7400	0.4600	0.4710	5.2872
_cons	0.0316	0.0072	-15.1900	0.0000	0.0202	0.0493

n = 34,766

Design df 34,588

F(39, 34550) = 96.68

Diabetes

Table A73: Logit Estimates: Adult (19-64 years old) Respondent ever told he/she had diabetes? (2017)

Variable	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.8852	0.0573	-1.8900	0.0590	0.7797	1.0049
Rural Non-Appalachian	0.8201	0.0633	-2.5700	0.0100	0.7049	0.9541
Suburban	0.8712	0.0658	-1.8300	0.0680	0.7512	1.0102
Age Group (base: 19-24)						
25-34	1.7310	0.3583	2.6500	0.0080	1.1537	2.5973
35-44	3.9145	0.7723	6.9200	0.0000	2.6591	5.7626
45-54	6.9955	1.3372	10.1800	0.0000	4.8095	10.1749
55-64	11.3614	2.1531	12.8200	0.0000	7.8363	16.4720

65+	11.4140	2.3276	11.9400	0.0000	7.6533	17.0225
Race/Ethnicity (base: White)						
Asian	2.0928	0.5202	2.9700	0.0030	1.2858	3.4065
Black/African-American	1.3694	0.0982	4.3800	0.0000	1.1898	1.5761
Hispanic	1.3864	0.2013	2.2500	0.0240	1.0430	1.8430
Other	1.3134	0.1836	1.9500	0.0510	0.9986	1.7274
Gender (base: Female)						
Male	3.8022	2.4853	2.0400	0.0410	1.0560	13.6910
Education (base: < High School)						
High School Graduate or Equivalent	0.7876	0.0629	-2.9900	0.0030	0.6736	0.9210
Some College	0.8755	0.0796	-1.4600	0.1440	0.7327	1.0463
Associate Degree	0.7900	0.0757	-2.4600	0.0140	0.6547	0.9533
College Graduate	0.6307	0.0624	-4.6600	0.0000	0.5195	0.7656
Advanced Degree	0.5919	0.0663	-4.6800	0.0000	0.4752	0.7372
Marital Status (base: Never Married)						
Divorced/Separated	0.9563	0.0801	-0.5300	0.5940	0.8115	1.1270
Married	1.0282	0.0808	0.3500	0.7240	0.8814	1.1993
Unmarried Couple	0.9075	0.1106	-0.8000	0.4260	0.7147	1.1523
Widowed	1.0708	0.1082	0.6800	0.4990	0.8783	1.3054
Insurance Status/Type (base: Uninsured)	0.9459	0.2343	-0.2200	0.8220	0.5821	1.5370

Exchange Coverage						
Employer-sponsored Coverage	1.0571	0.1273	0.4600	0.6450	0.8348	1.3385
Medicaid and Medicare	1.5829	0.2218	3.2800	0.0010	1.2028	2.0831
Medicaid, no Medicare	1.3623	0.1748	2.4100	0.0160	1.0595	1.7518
Medicare, no Medicaid	1.5389	0.2119	3.1300	0.0020	1.1748	2.0157
Other	1.2130	0.2528	0.9300	0.3540	0.8062	1.8250
Other directly purchased	0.7958	0.1570	-1.1600	0.2470	0.5406	1.1714
Unknown	1.2306	0.2205	1.1600	0.2470	0.8662	1.7484
Low income						
Yes	1.2035	0.0643	3.4700	0.0010	1.0838	1.3364
Working						
Yes	0.5977	0.0364	-8.4400	0.0000	0.5304	0.6736
Usual source of care						
Yes	1.5954	0.1975	3.7700	0.0000	1.2517	2.0335
BMI Group (base: Underweight)						
Normal/Healthy weight	1.0085	0.2456	0.0300	0.9720	0.6258	1.6255
Overweight	1.7710	0.4222	2.4000	0.0160	1.1100	2.8258
Obese	4.6603	1.1028	6.5000	0.0000	2.9308	7.4104
Smoking Status						
Former Smoker	1.0762	0.0575	1.3700	0.1700	0.9691	1.1951

Current Smoker	1.0296	0.0683	0.4400	0.6610	0.9040	1.1726
Alcohol use (base: 4 or more)						
5 or more	0.3271	0.2137	-1.7100	0.0870	0.0909	1.1771
_cons	0.0072	0.0025	-14.4400	0.0000	0.0037	0.0141

n = 34,505

Design df 34,327

F(39, 34289) = 50.26

Heart Attack

Table A74: Logit Estimates: Adult (19-64 years old) Respondent ever told he/she had a heart attack? (2017)

Variable	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.7349	0.0651	-3.4800	0.0010	0.6179	0.8742
Rural Non-Appalachian	0.9263	0.0977	-0.7300	0.4680	0.7532	1.1391
Suburban	0.8440	0.0875	-1.6400	0.1020	0.6889	1.0341
Age Group (base: 19-24)						
25-34	1.8999	0.8622	1.4100	0.1570	0.7807	4.6240
35-44	4.6935	1.9318	3.7600	0.0000	2.0948	10.5160
45-54	12.3274	4.8989	6.3200	0.0000	5.6570	26.8628
55-64	21.3373	8.4277	7.7500	0.0000	9.8384	46.2759

65+	21.4661	8.7819	7.5000	0.0000	9.6274	47.8625
Race/Ethnicity (base: White)						
Asian	0.9383	0.3907	-0.1500	0.8790	0.4149	2.1223
Black/African-American	0.8977	0.0980	-0.9900	0.3230	0.7247	1.1118
Hispanic	1.5543	0.3260	2.1000	0.0360	1.0303	2.3448
Other	1.2865	0.2151	1.5100	0.1320	0.9270	1.7853
Gender (base: Female)						
Male	1.1640	0.9658	0.1800	0.8550	0.2289	5.9186
Education (base: < High School)						
High School Graduate or Equivalent	0.5970	0.0592	-5.2000	0.0000	0.4916	0.7251
Some College	0.6114	0.0733	-4.1000	0.0000	0.4834	0.7733
Associate Degree	0.5693	0.0720	-4.4600	0.0000	0.4443	0.7293
College Graduate	0.4862	0.0658	-5.3300	0.0000	0.3728	0.6340
Advanced Degree	0.3743	0.0582	-6.3200	0.0000	0.2760	0.5077
Marital Status (base: Never Married)						
Divorced/Separated	1.4310	0.1781	2.8800	0.0040	1.1213	1.8262
Married	1.3901	0.1730	2.6500	0.0080	1.0892	1.7741
Unmarried Couple	1.6737	0.2915	2.9600	0.0030	1.1895	2.3548
Widowed	1.4549	0.2058	2.6500	0.0080	1.1026	1.9196

Insurance Status/Type (base: Uninsured)						
Exchange Coverage	0.5862	0.1939	-1.6100	0.1060	0.3066	1.1210
Employer-sponsored Coverage	0.5573	0.0998	-3.2700	0.0010	0.3923	0.7915
Medicaid and Medicare	1.5678	0.2966	2.3800	0.0170	1.0821	2.2717
Medicaid, no Medicare	1.2158	0.2199	1.0800	0.2800	0.8530	1.7330
Medicare, no Medicaid	1.1385	0.2127	0.6900	0.4870	0.7895	1.6419
Other	0.6533	0.2021	-1.3800	0.1690	0.3562	1.1981
Other directly purchased	0.6289	0.2041	-1.4300	0.1530	0.3329	1.1879
Unknown	1.3550	0.3351	1.2300	0.2190	0.8345	2.2002
Low income						
Yes	1.2599	0.0950	3.0600	0.0020	1.0867	1.4606
Working						
Yes	0.5847	0.0534	-5.8700	0.0000	0.4888	0.6995
Usual source of care						
Yes	2.1587	0.3679	4.5200	0.0000	1.5457	3.0147
BMI Group (base: Underweight)						
Normal/Healthy weight	1.0716	0.2849	0.2600	0.7950	0.6364	1.8043
Overweight	1.5433	0.4059	1.6500	0.0990	0.9217	2.5843
Obese	1.8781	0.4930	2.4000	0.0160	1.1227	3.1416
Smoking Status						

Former Smoker	1.5584	0.1250	5.5300	0.0000	1.3316	1.8238
Current Smoker	1.6543	0.1503	5.5400	0.0000	1.3845	1.9768
Alcohol use (base: 4 or more)						
5 or more	1.9510	1.6173	0.8100	0.4200	0.3842	9.9058
_cons	0.0013	0.0007	-12.9900	0.0000	0.0005	0.0036

n = 34,741

Design df 34,563

F(39, 34525) = 32.07

Coronary Heart Disease

Table A75: Logit Estimates: Adult (19-64 years old) Respondent ever told he/she had coronary heart disease? (2017)

Variable	Odds Ratio	Std. Error	t	P>t	[95% Conf.	Interval]
County Type (base: Rural Appalachia)						
Metro	0.8254	0.0723	-2.1900	0.0280	0.6952	0.9799
Rural Non-Appalachian	1.1495	0.1168	1.3700	0.1700	0.9419	1.4027
Suburban	0.8525	0.0871	-1.5600	0.1180	0.6978	1.0416
Age Group (base: 19-24)						
25-34	1.1444	0.5096	0.3000	0.7620	0.4781	2.7391
35-44	2.5476	1.0466	2.2800	0.0230	1.1388	5.6994
45-54	6.4862	2.5246	4.8000	0.0000	3.0246	13.9095
55-64	12.5344	4.8265	6.5700	0.0000	5.8929	26.6610
65+	11.7388	4.6763	6.1800	0.0000	5.3768	25.6286
Race/Ethnicity (base: White)						
Asian	1.0510	0.4994	0.1000	0.9170	0.4141	2.6674
Black/African-American	0.8883	0.0921	-1.1400	0.2530	0.7250	1.0884
Hispanic	1.1448	0.2520	0.6100	0.5390	0.7436	1.7624
Other	1.0092	0.1767	0.0500	0.9580	0.7161	1.4223
Gender (base: Female)						
Male	1.9800	1.2874	1.0500	0.2930	0.5536	7.0818

Education (base: < High School)						
High School Graduate or Equivalent	0.7117	0.0728	-3.3300	0.0010	0.5824	0.8696
Some College	0.7412	0.0876	-2.5400	0.0110	0.5880	0.9343
Associate Degree	0.8185	0.1018	-1.6100	0.1070	0.6415	1.0444
College Graduate	0.6659	0.0864	-3.1400	0.0020	0.5165	0.8586
Advanced Degree	0.5601	0.0855	-3.8000	0.0000	0.4152	0.7554
Marital Status (base: Never Married)						
Divorced/Separated	1.5855	0.1933	3.7800	0.0000	1.2484	2.0135
Married	1.3849	0.1650	2.7300	0.0060	1.0964	1.7492
Unmarried Couple	1.6328	0.2981	2.6900	0.0070	1.1417	2.3352
Widowed	1.4107	0.1862	2.6100	0.0090	1.0892	1.8271
Insurance Status/Type (base: Uninsured)						
Exchange Coverage	1.5217	0.4669	1.3700	0.1710	0.8340	2.7765
Employer-sponsored Coverage	0.9243	0.1805	-0.4000	0.6870	0.6303	1.3554
Medicaid and Medicare	2.5682	0.5328	4.5500	0.0000	1.7102	3.8567
Medicaid, no Medicare	1.7273	0.3362	2.8100	0.0050	1.1795	2.5294
Medicare, no Medicaid	2.0098	0.4031	3.4800	0.0010	1.3565	2.9777
Other	1.1858	0.3451	0.5900	0.5580	0.6703	2.0978

Other directly purchased	0.8539	0.2348	-0.5700	0.5660	0.4981	1.4637
Unknown	1.1357	0.3385	0.4300	0.6690	0.6332	2.0370
Low income						
Yes	1.2059	0.0844	2.6800	0.0070	1.0514	1.3833
Working						
Yes	0.4976	0.0434	-7.9900	0.0000	0.4193	0.5905
Usual source of care						
Yes	2.7365	0.5003	5.5100	0.0000	1.9123	3.9159
BMI Group (base: Underweight)						
Normal/Healthy weight	0.9038	0.2586	-0.3500	0.7240	0.5158	1.5837
Overweight	1.1079	0.3135	0.3600	0.7170	0.6362	1.9292
Obese	1.6898	0.4763	1.8600	0.0630	0.9725	2.9361
Smoking Status						
Former Smoker	1.5442	0.1129	5.9400	0.0000	1.3379	1.7822
Current Smoker	1.5170	0.1388	4.5500	0.0000	1.2678	1.8150
Alcohol use (base: 4 or more)						
5 or more	0.9200	0.5973	-0.1300	0.8980	0.2577	3.2842
_cons	0.0016	0.0009	-11.6900	0.0000	0.0005	0.0047

n = 34,632

Design df 34,454

F(39, 34416) = 33.57

Appendix B

County Population 218
Small-Area Income and Poverty Estimates 219
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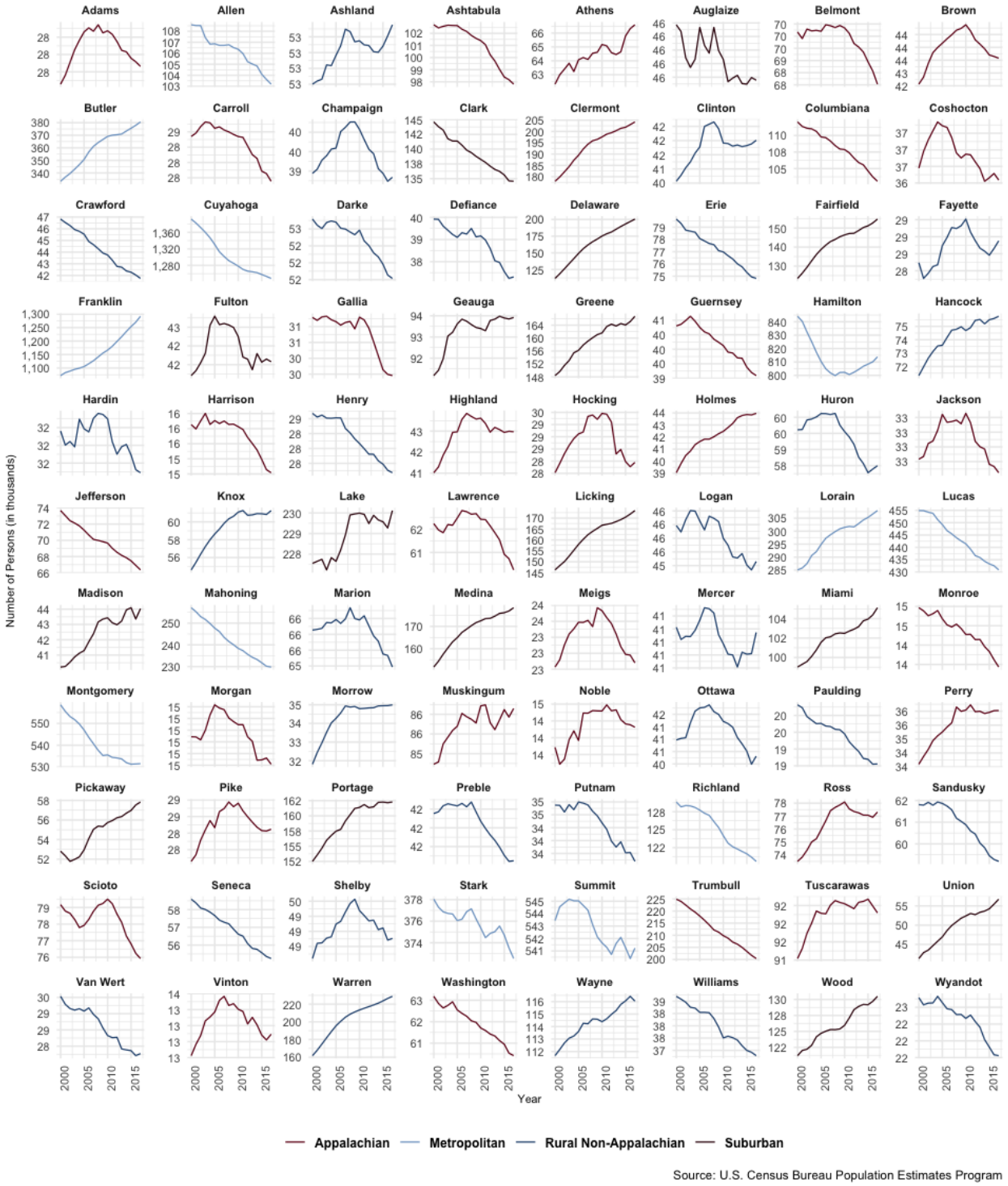
Selected Indicators from County Health Rankings 235
Access to Primary Care Physicians, Dentists, and Mental Health Providers 239

County Population

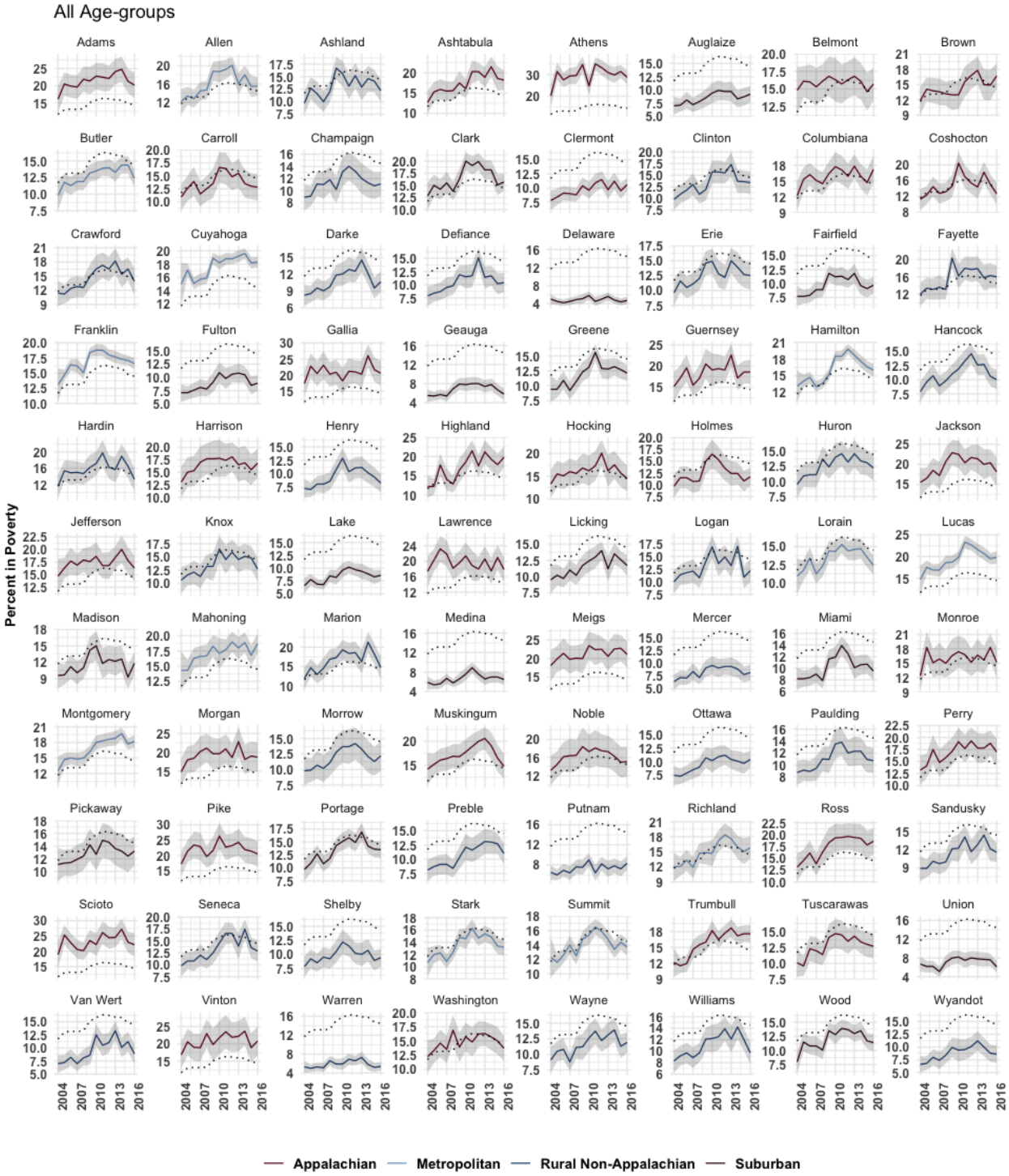
Figure B1: Distribution of County Population Size by Year (2000-2017)



Source: U.S. Census Bureau Population Estimates Program

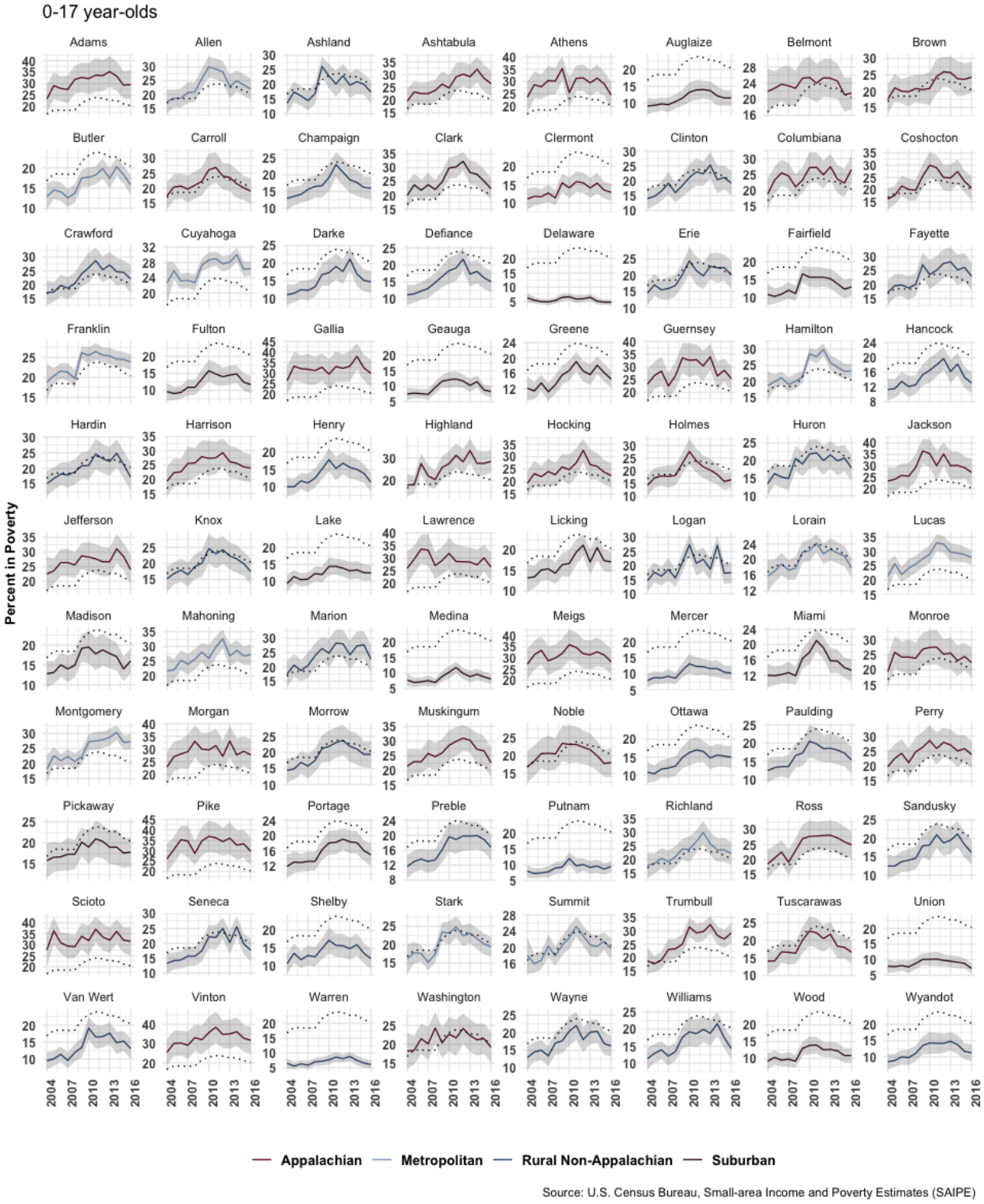
Small-Area Income and Poverty Estimates

Figure B2: Estimated Percentage Distribution of the Total County Population in Poverty (by Year)



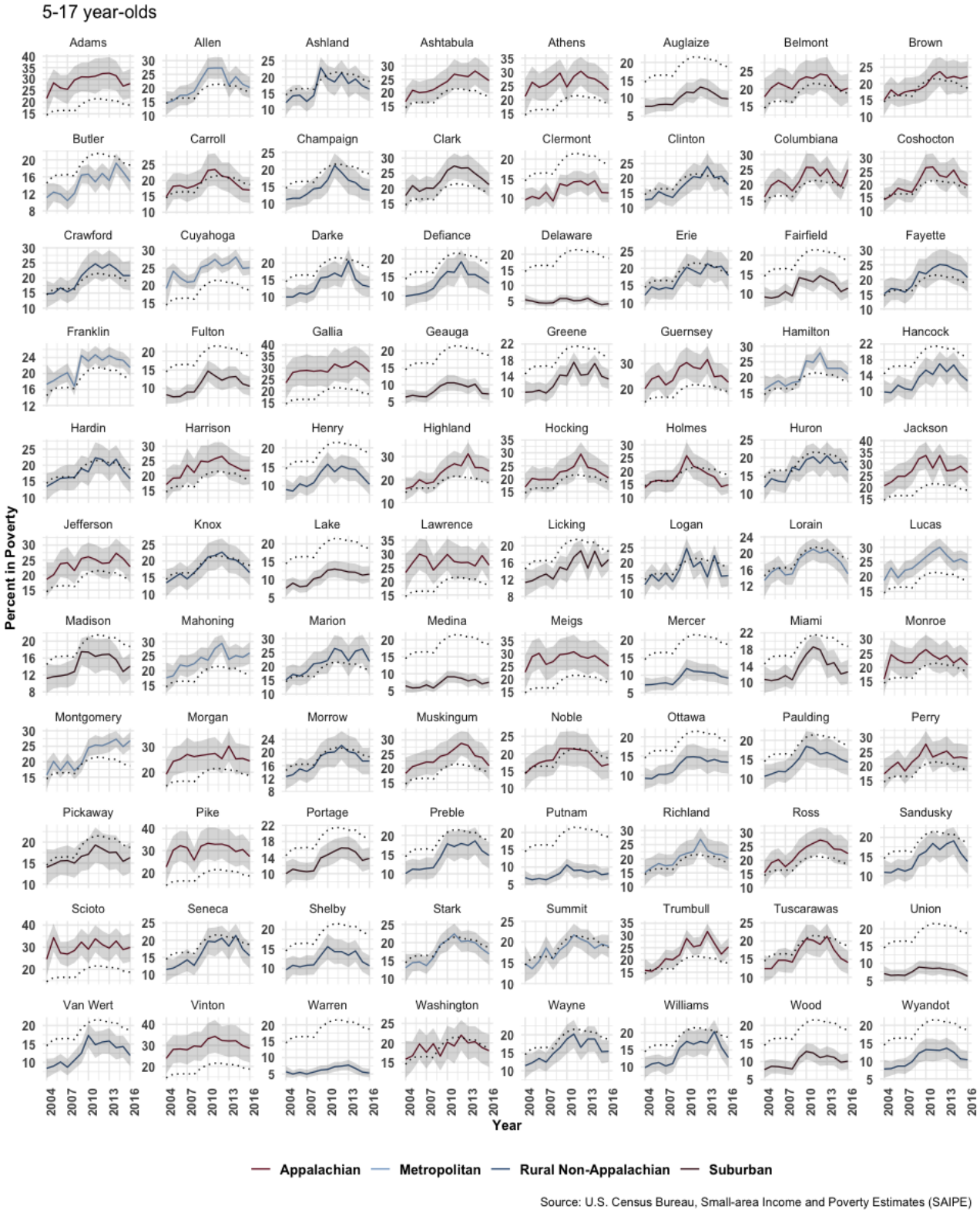
Source: U.S. Census Bureau, Small-area Income and Poverty Estimates (SAIPE)

Figure B3: Estimated Percentage Distribution of the County Population 0-17 years old in Poverty (by Year)



Source: U.S. Census Bureau, Small-area Income and Poverty Estimates (SAIPE)

Figure B4: Estimated Percentage Distribution of the County Population 5-17 years old in Poverty (by Year)

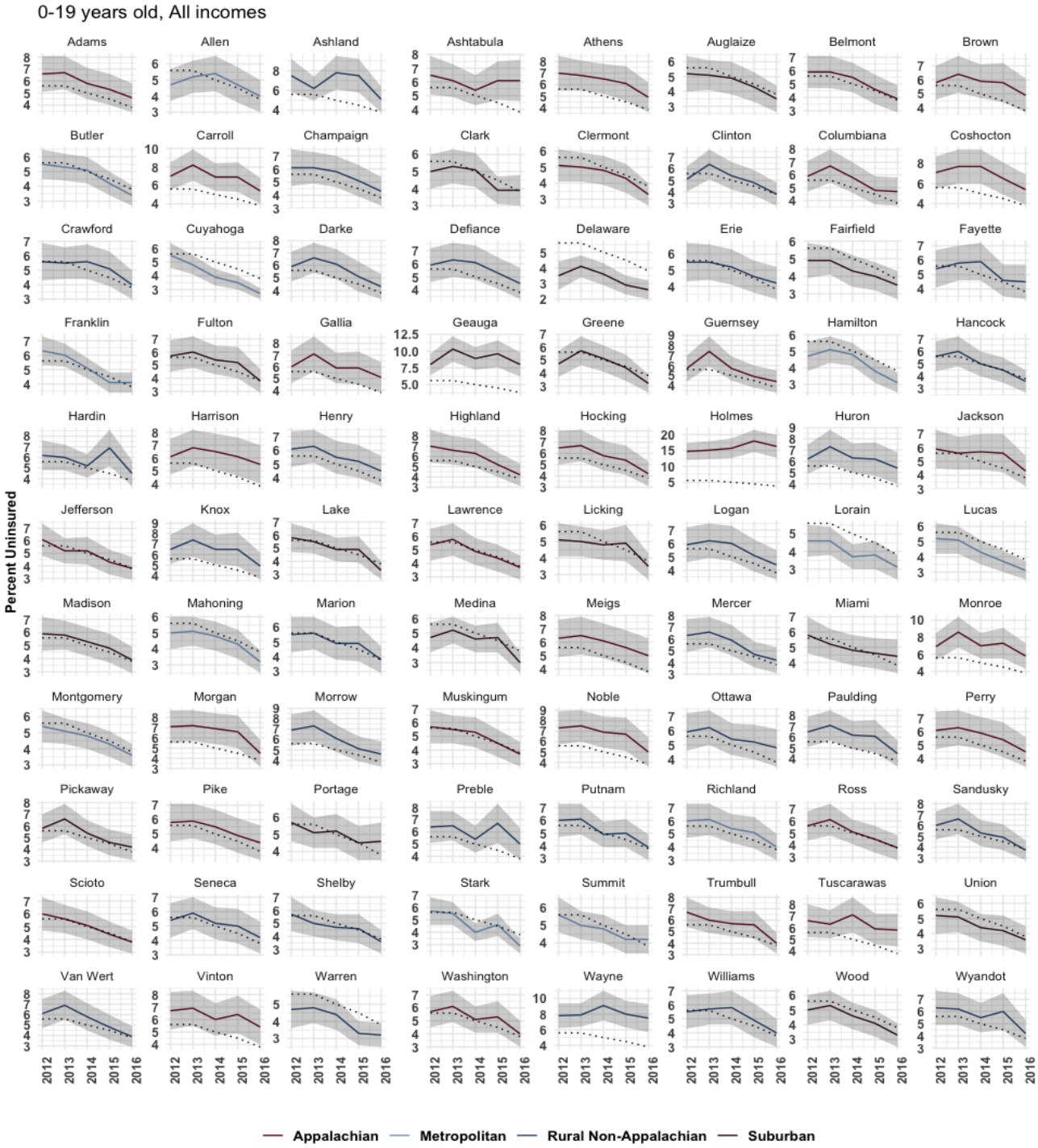


Source: U.S. Census Bureau, Small-area Income and Poverty Estimates (SAIPE)

Figure B5: Estimated Percentage Distribution of the Median Household Income in a County (by Year)

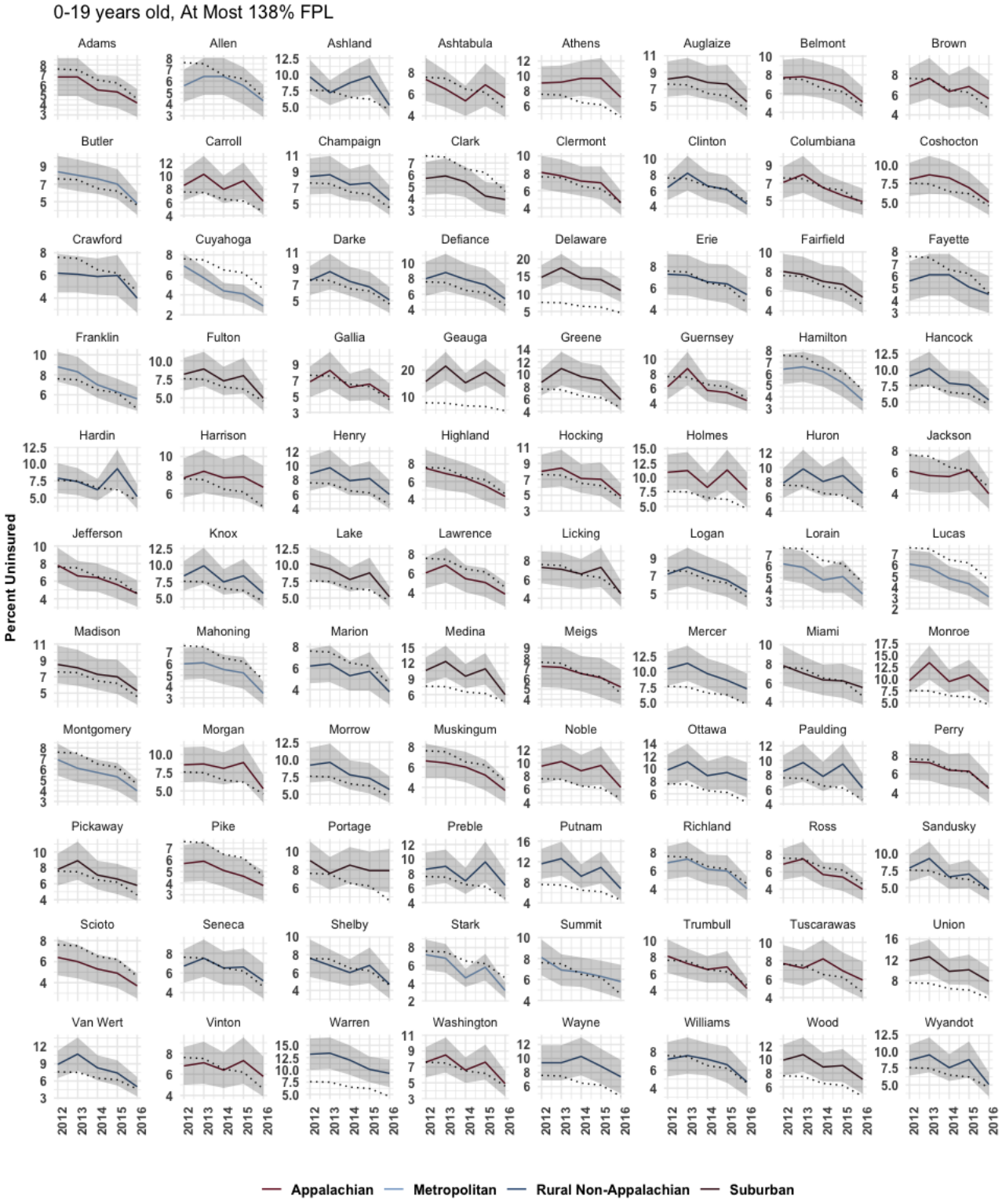
Small-Area Health Insurance Estimates

Figure B6: Estimated Percentage Distribution of the County Population 0-19 years old Without Health Insurance (by Year, All Income-groups)



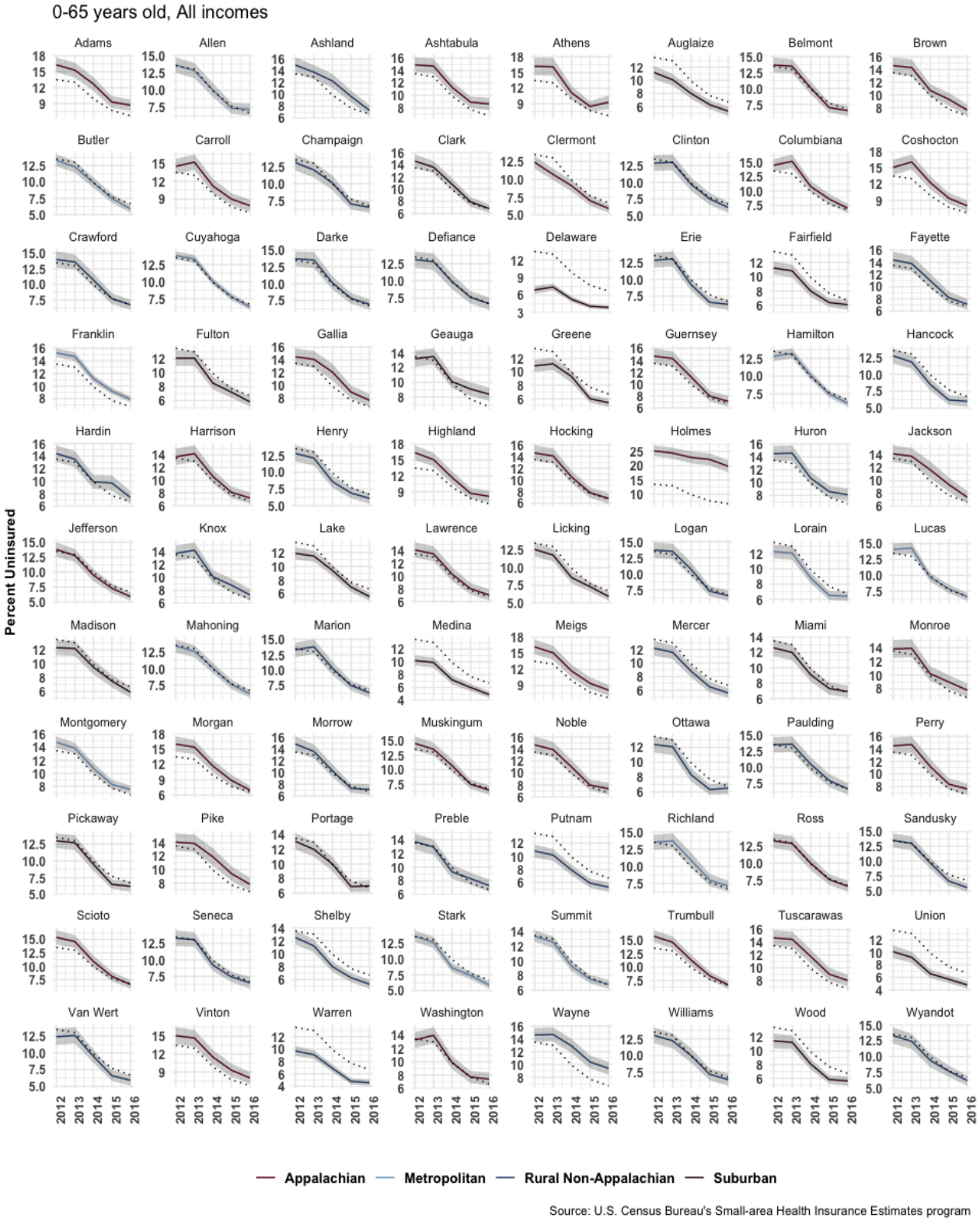
Source: U.S. Census Bureau's Small-area Health Insurance Estimates program

Figure B7: Estimated Percentage Distribution of the County Population 0-19 years old Without Health Insurance (by Year, Income at or Below 138% Federal Poverty Level)



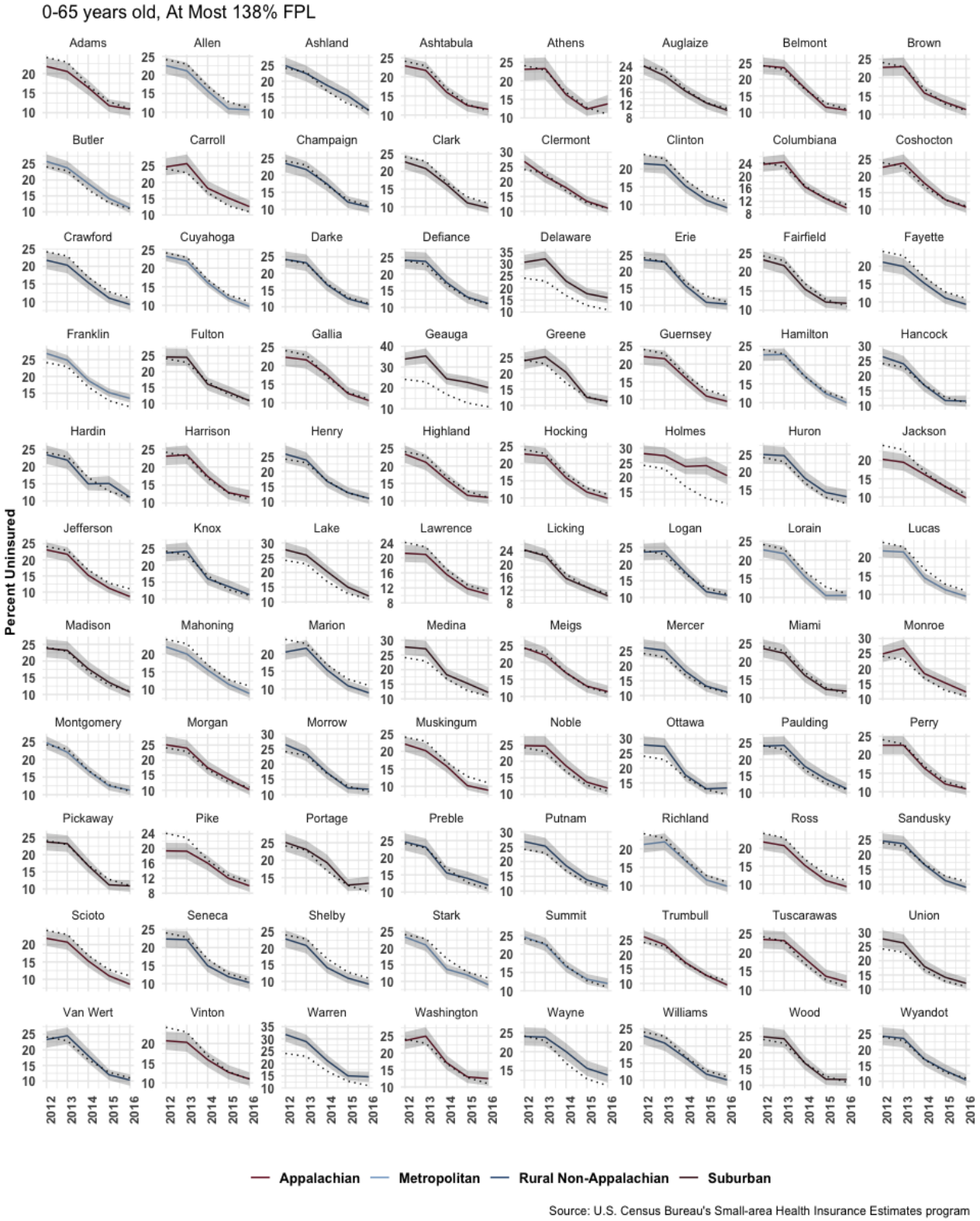
Source: U.S. Census Bureau's Small-area Health Insurance Estimates program

Figure B8: Estimated Percentage Distribution of the County Population 0-65 years old Without Health Insurance (by Year, All Income-groups)



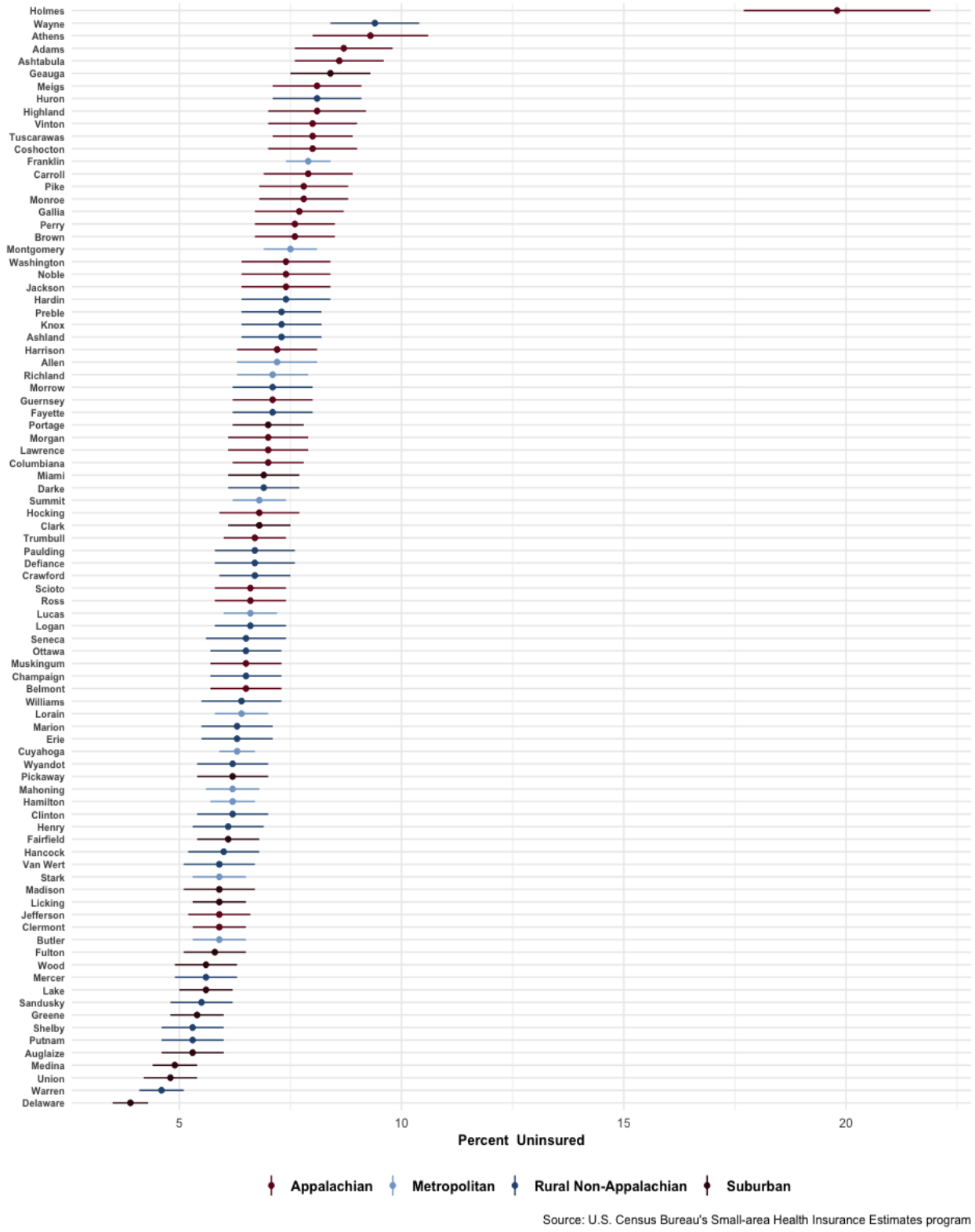
Source: U.S. Census Bureau's Small-area Health Insurance Estimates program

Figure B9: Estimated Percentage Distribution of the County Population 0-65 years old Without Health Insurance (by Year, Income at or below 138% of Federal Poverty Level)



Source: U.S. Census Bureau's Small-area Health Insurance Estimates program

Figure B10: Counties Ranked by 2016 Uninsured Rate (with 90% Confidence Intervals)



Ohio Medicaid Assessment Survey-based Estimates of the Uninsured

County-level estimates for 2017 and 2015 are mapped in Figures 9(a) through 9(d), and compared across years in Figures 9(e) and 9(f).[80] These estimates reflect considerable variation across counties, ranging from Holmes County's 2017 high of 19.2% and 15.4% of uninsured adults and children, respectively, to Union County's low of 3.2% uninsured adults and Ottawa County with 0.7% uninsured children.[81] Across years, we do see some rate shifts, with some counties' overall uninsured rates dropping while other counties reflect a rise in uninsured rates.

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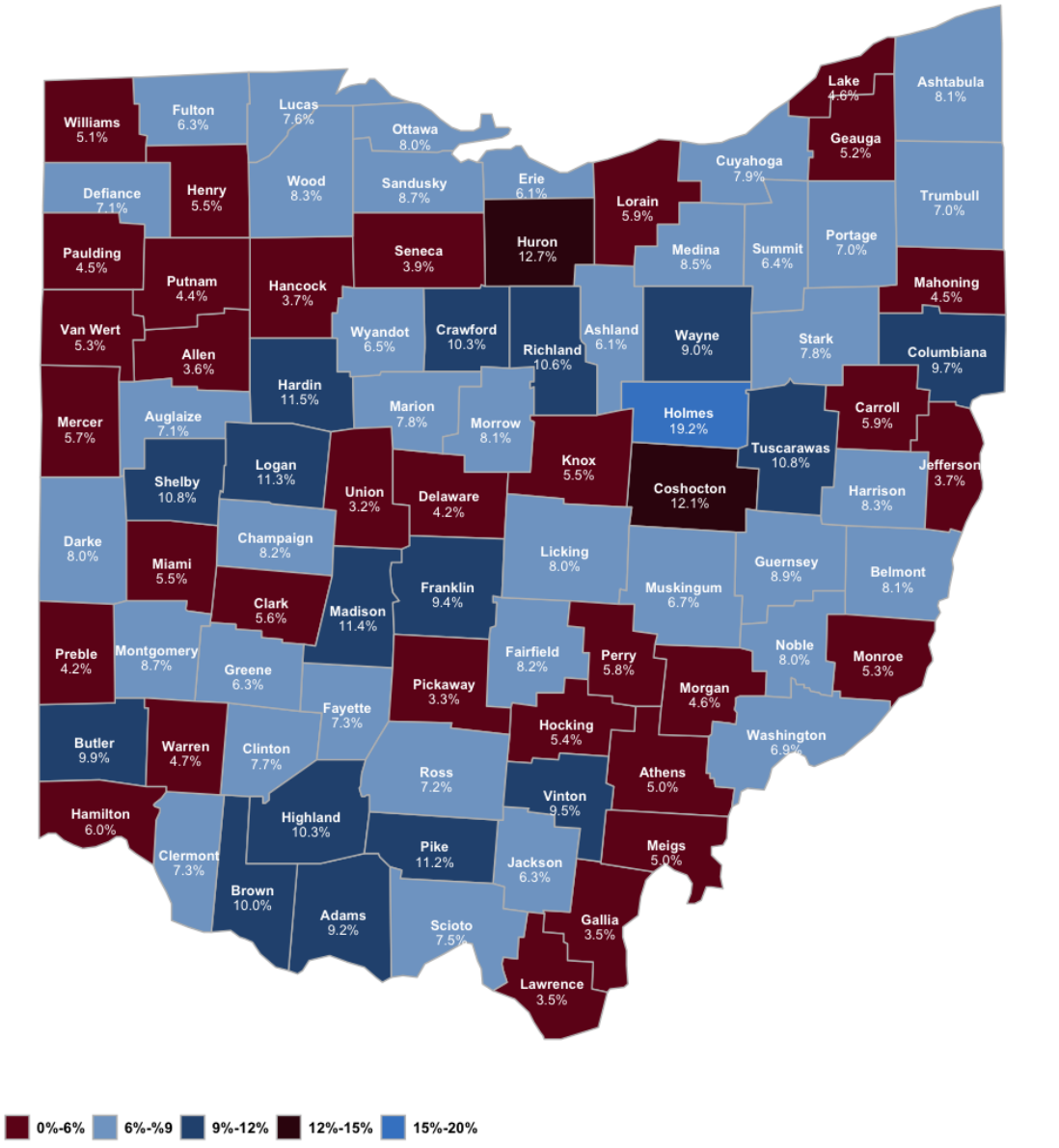
[80] Given that these are statistical estimates, it is important to pay attention to the uncertainty estimates – the confidence intervals – before determining whether there has been a significant change. If confidence intervals do not overlap one can conclude there has been a significant change. However, overlapping confidence intervals do not necessarily indicate non-significant change.

[81] Holmes County's 2017 rates are high and may have something to do with the fact that the Amish comprise almost 80% of the county's population and are one of the religious groups exempted from obtaining health care insurance under the ACA (Rohrer and Dundes, 2016). In addition, Holmes County had low household sample sizes and that alone will add more noise into the county estimates.

Figure B11: 2017 Percent of Adults without Health Insurance Coverage (by County) (2017)

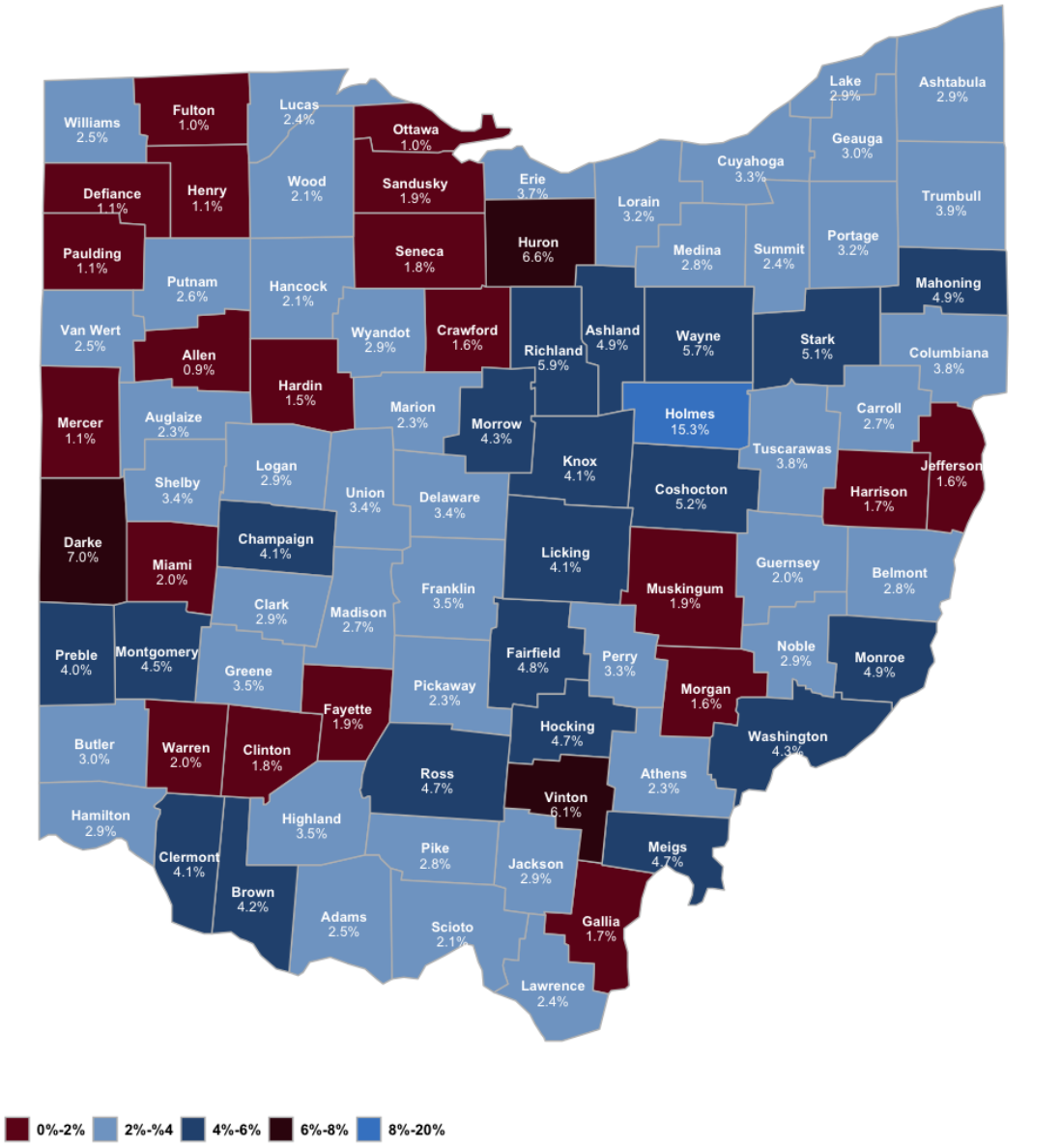
Small-area Estimates of the Percent of Uninsured Adults (2017)



Data Source: 2017 Ohio Medicaid Assessment Survey

Figure B12: 2017 Percent of Children without Health Insurance Coverage (by County) (2017)

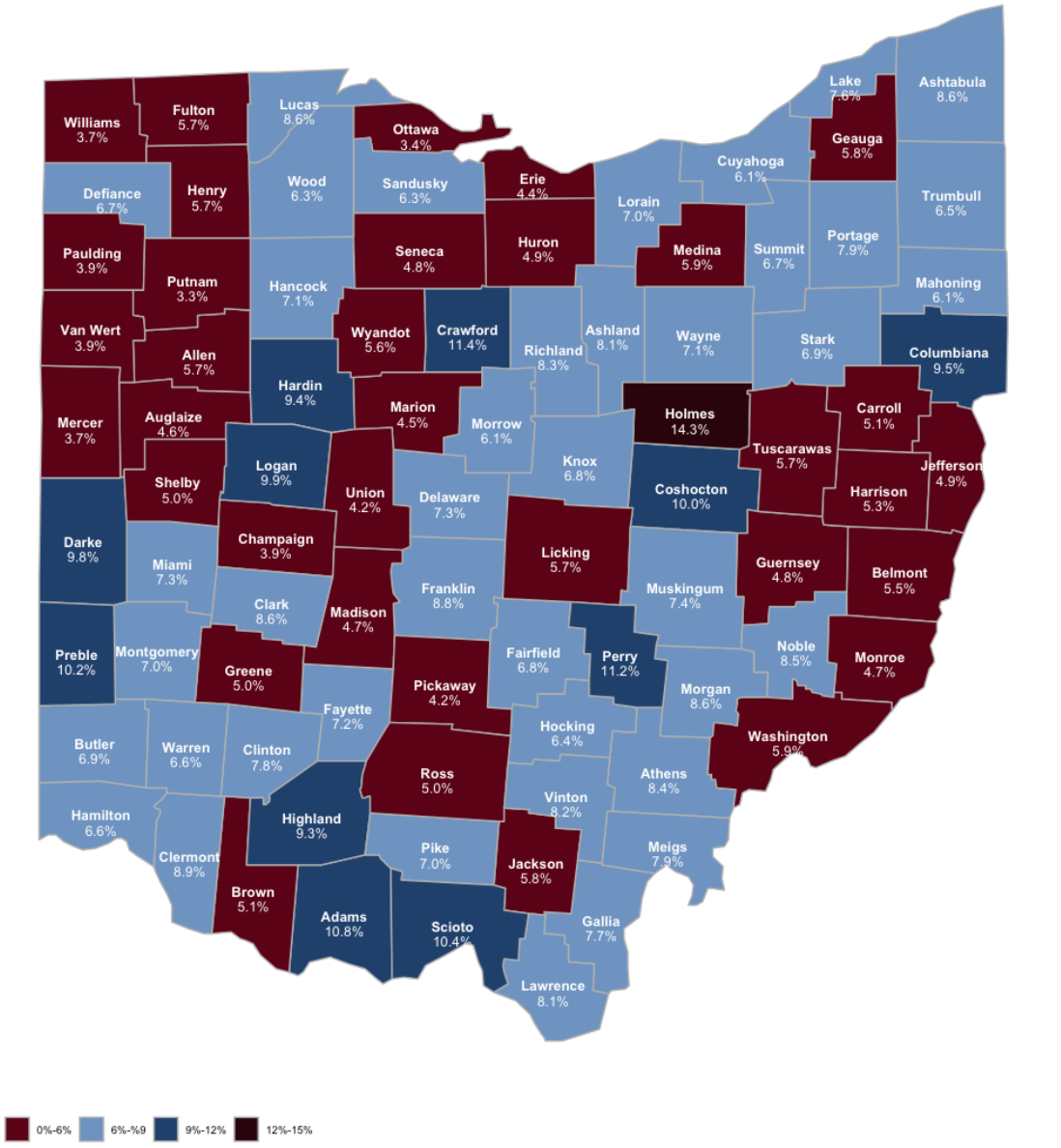
Small-area Estimates of the Percent of Uninsured Children (2017)



Data Source: 2017 Ohio Medicaid Assessment Survey

Figure B13: 2015 Percent of Adults without Health Insurance Coverage (by County) (2017)

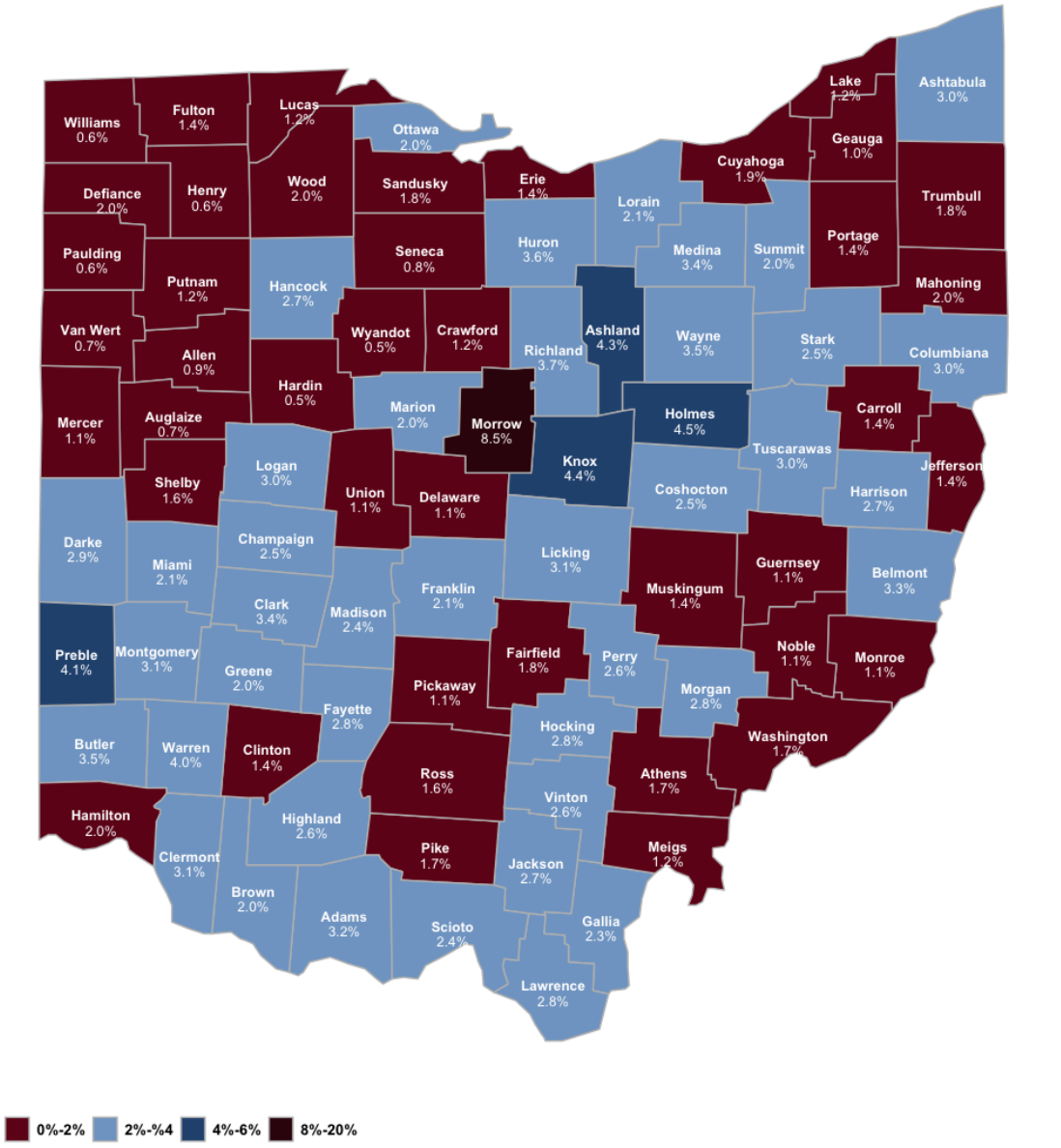
Small-area Estimates of the Percent of Uninsured Adults (2015)



Data Source: 2017 Ohio Medicaid Assessment Survey

Figure B14: 2017 Percent of Children without Health Insurance Coverage (by County) (2017)

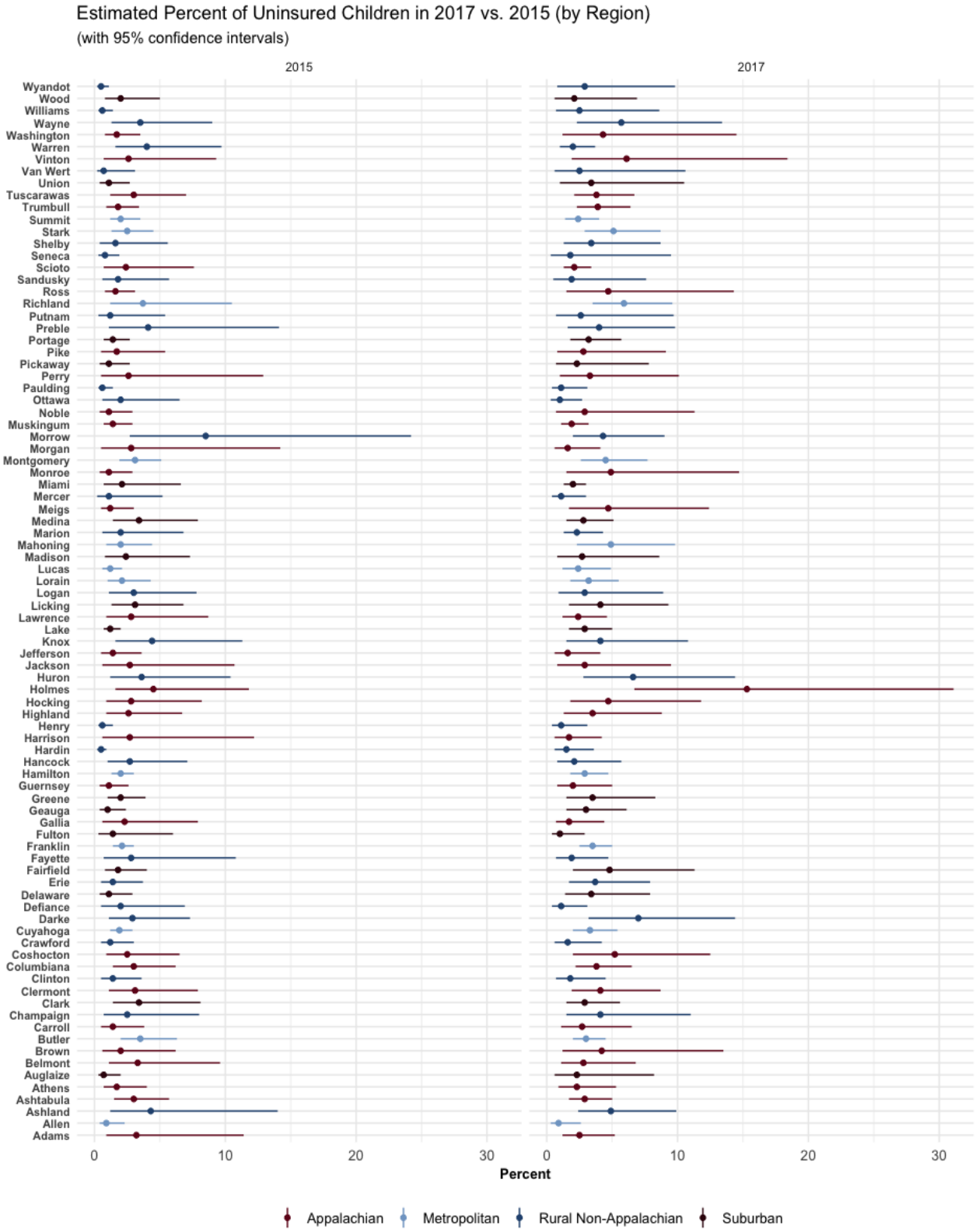
Small-area Estimates of the Percent of Uninsured Children (2015)



Data Source: 2015 Ohio Medicaid Assessment Survey

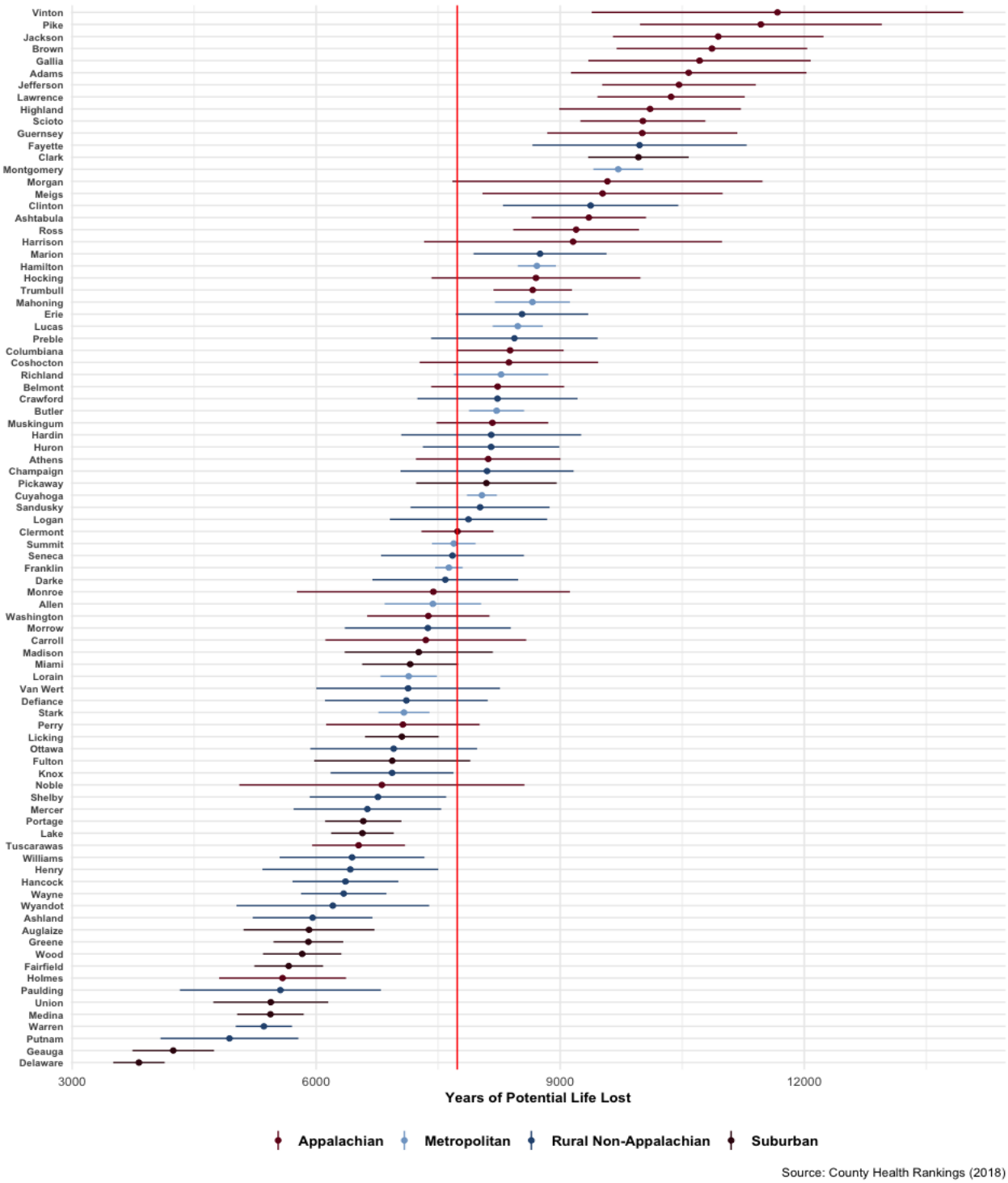
Figure B15: Adults - 2017 vs. 2015 County Estimates

Figure B16: Children – 2017 vs. 2015 County Estimates



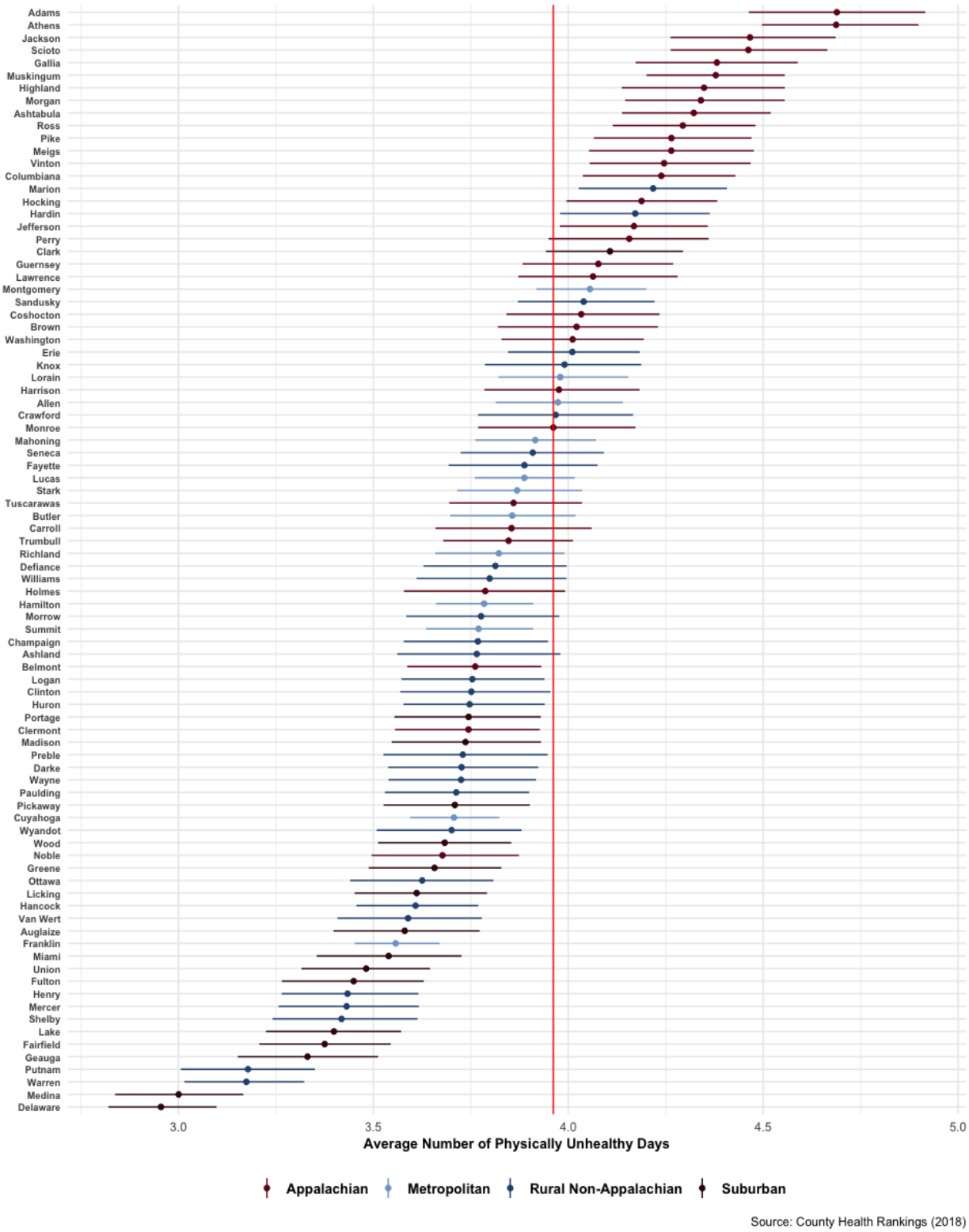
Selected Indicators from County Health Rankings

Figure B17: Distribution of Years of Potential Life Lost before Age 75 per 100,000 Population (Age-Adjusted)



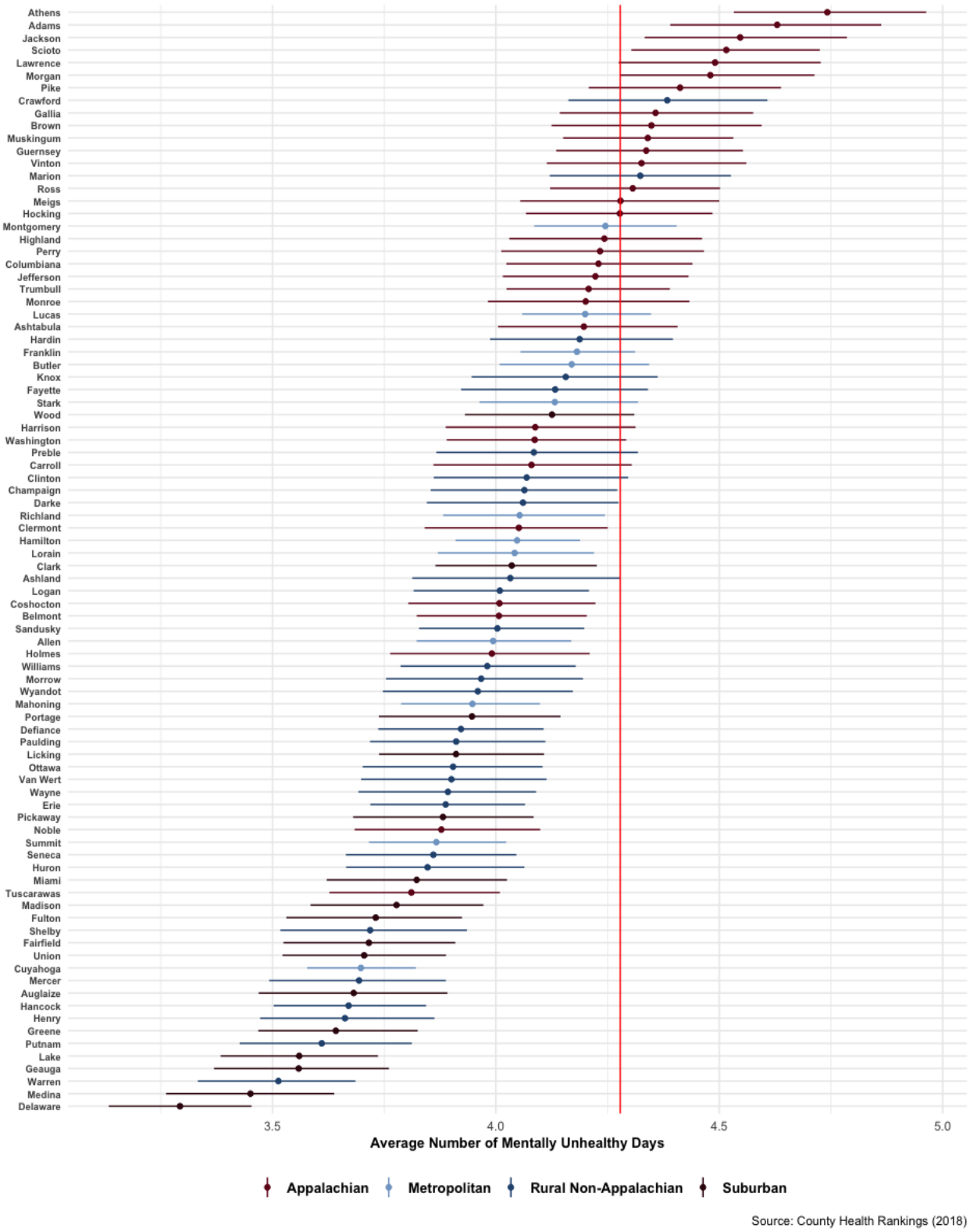
Source: County Health Rankings (2018)

Figure B18: Distribution of the Average Number of Physically Unhealthy Days Reported in Past 30 Days (Age-Adjusted)



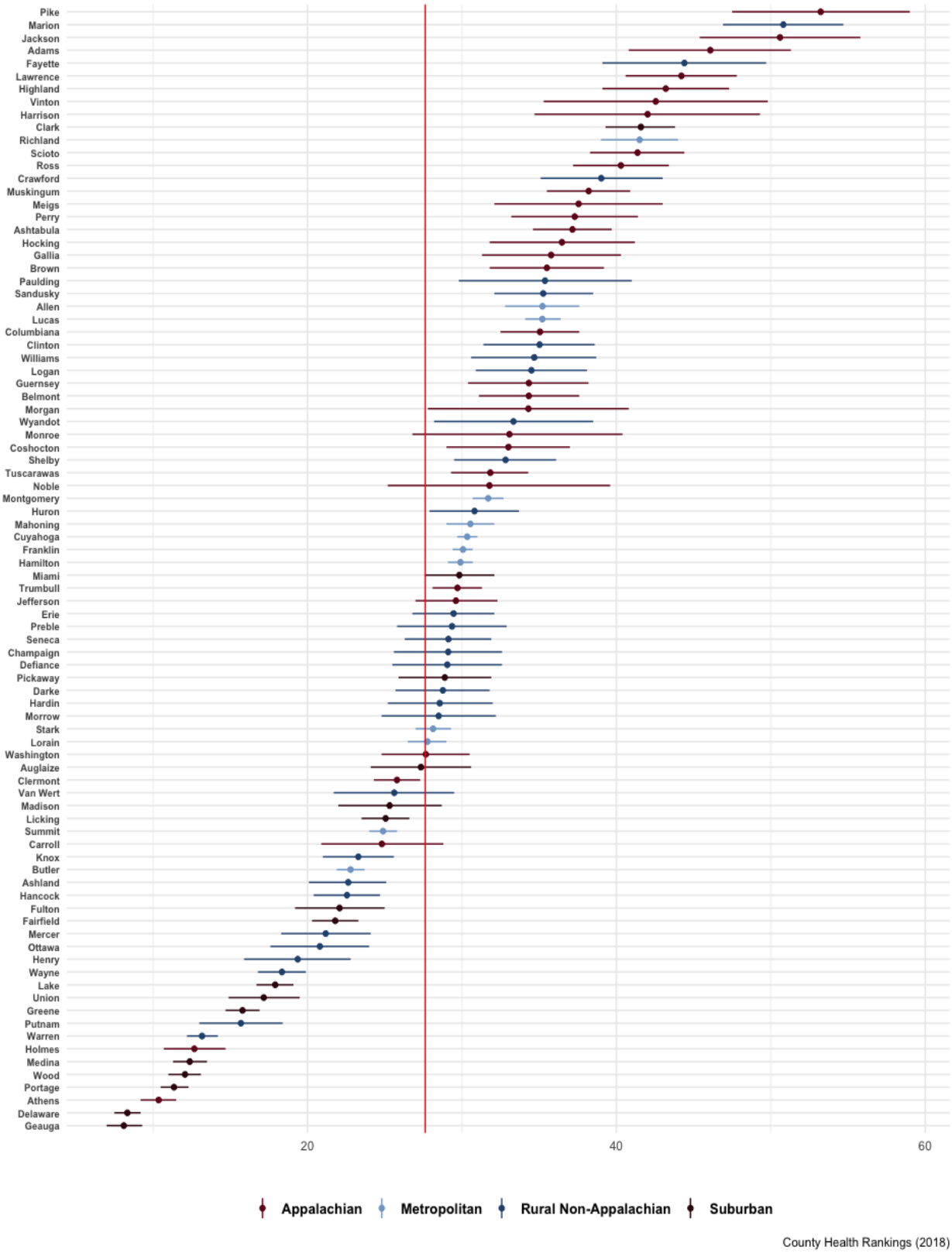
Source: County Health Rankings (2018)

Figure B19: Distribution of the Average Number of Mentally Unhealthy Days Reported in Past 30 Days (Age-Adjusted)



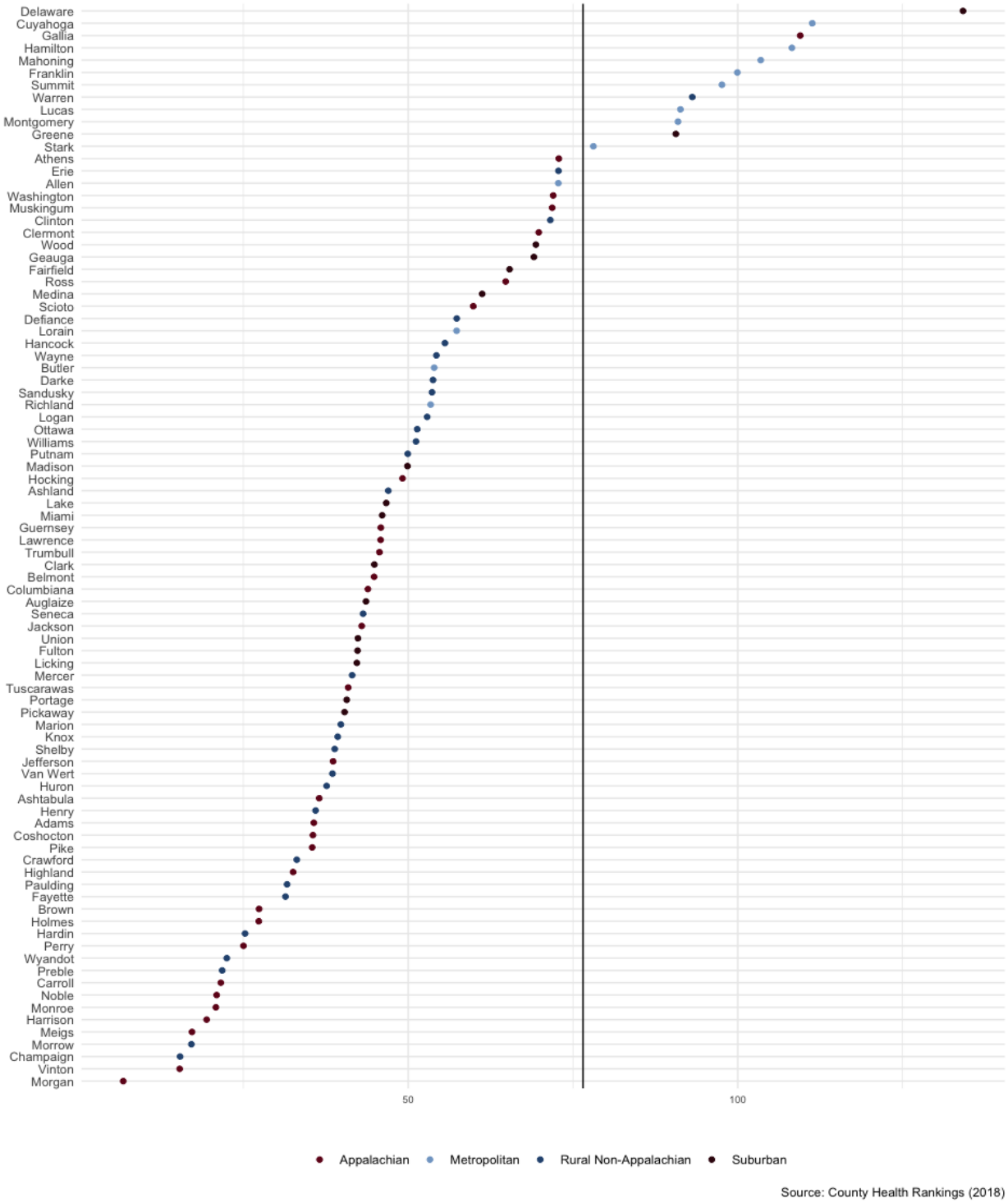
Source: County Health Rankings (2018)

Figure B20: Distribution of the Number of Births per 1,000 Female Population Ages 15-19



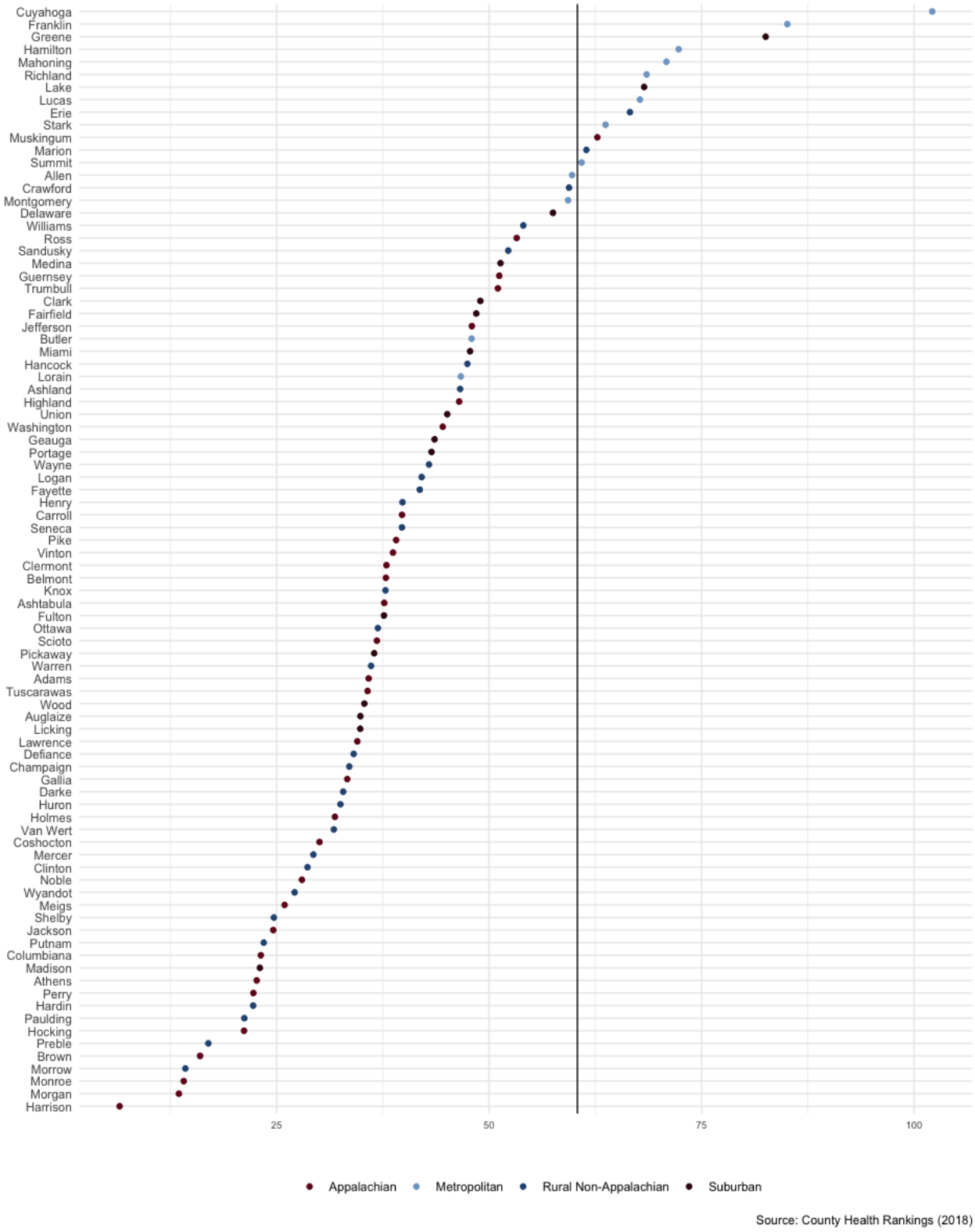
Access to Primary Care Physicians, Dentists, and Mental Health Providers

Figure B21: Distribution of Primary Care Physicians per 100,000 persons



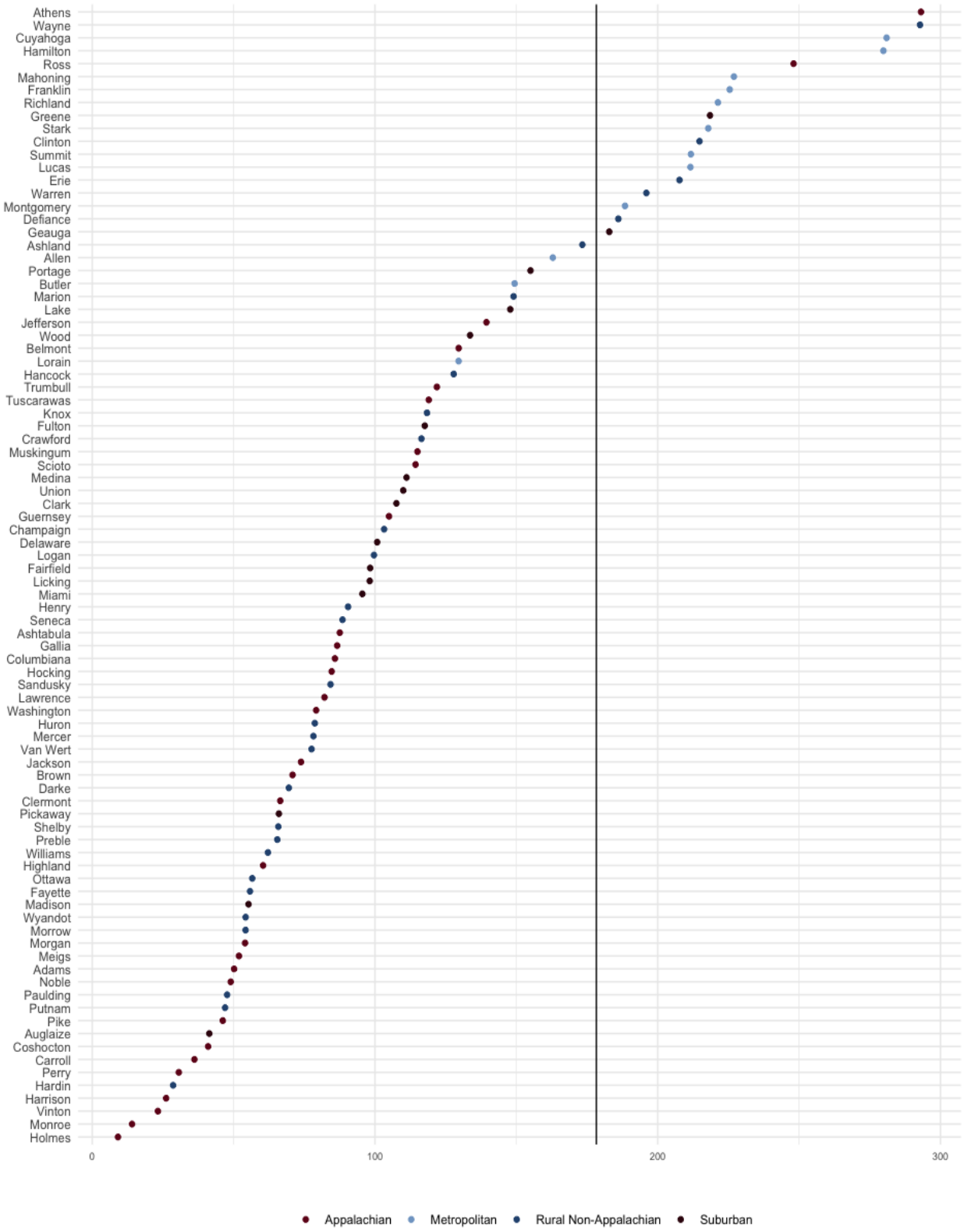
Source: County Health Rankings (2018)

Figure B22: Distribution of Dentists per 100,000 Persons



Source: County Health Rankings (2018)

Figure B23: Distribution of Mental Health Providers per 100,000 Persons



Source: County Health Rankings (2018)