



August 2016

POVERTY AND HEALTH AMONG OHIO ADULTS: THE ROLE OF MEDICAID

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INTRODUCTION

Poverty is one of the most powerful influences on health, and researchers have spent decades documenting how poor people and communities have unusually high rates of illness and mortality. Given our nation's commitment to health and wellness, policymakers invest in programs like Medicaid that help provide access to health care for all residents, including the poor. This policy brief describes how poverty is currently associated with health status and health care utilization in Ohio, and how Medicaid influences these relationships. The 2015 Ohio Medicaid Assessment Survey (OMAS) -- a very large, scientifically rigorous survey - offers useful data to examine these topics.

Poverty involves many complex components, but policymakers' attention falls mostly on only one aspect: annual family income. Because it is relatively easy to measure, government programs that serve the poor use income as key criterion of eligibility. Typically this involves considering all pre-tax cash income as well as the number of people in the family and comparing those figures to thresholds set by the US Census Bureau. In 2015, for example, the federal poverty level (FPL) for a one-person household was \$11,770; a family of 4 was \$24,230. And in Ohio, living in a family with an annual income of \leq 138% FPL is a key criterion for an adult's eligibility for Medicaid.¹

How poverty causes, and is caused by poor health

Most people recognize the association of poverty and poor health. While this association is strong, the causal mechanisms remain unclear. One possible answer is stress. Struggling to pay bills or worrying about losing a job, can increase production of hormones like cortisol. With chronic stress, high and prolonged levels of cortisol can lead to a host of problems like hyperglycemia, poor thyroid function and impaired cognitive development, especially in children.² Another answer is the environment. People in poverty often can only afford to live in less-desirable areas, such as those with significant pollution, limited access to parks, libraries and other resources, as well as higher-than-average rates of violence, crime and substance use. Such factors can directly compromise health, as well as contribute to stress.³ A third mechanism is behavior. People in poverty are much more likely to adopt unhealthy behaviors like smoking, poor diet and lack of exercise.⁴ Much of this may stem from the stress in their lives and coping mechanisms familiar to them through their upbringing and current environment.

It is also important to consider how health "causes" poverty. Each year, an untold number of Ohioans experience a catastrophic illness or injury that costs them thousands of dollars in medical bills — especially if they are uninsured or lack adequate coverage. Indeed, before the Affordable Care Act (ACA), over half of personal bankruptcies nationwide were due to medical debt.⁵ And for those already living in poverty, physical and mental conditions limit many individuals' ability to attain education or employment. Still others are limited by caregiving responsibilities for children or adult family members with special health care needs.⁶

Medicaid can buffer how poverty causes, and is caused by health. It provides health services that help enable poor individuals and their family members to go to school or stay employed. By covering medical bills, it helps many sick and injured avoid financial catastrophe. In 2010 alone, Medicaid kept at least 2.6 million Americans out of poverty, making it the nation's third largest anti-poverty program.⁷ Since implementation of the ACA and Medicaid expansion, the size and importance of the program has only grown.

HIGHLIGHTS

- Over half (56.3%) of lower income adults have Medicaid, a significant increase from 35.3% in 2012.
- Income is strongly associated with smoking, health outcomes and worrisome patterns of health care utilization.
- Medicaid is as effective as employer-sponsored insurance in providing lower income adults with access to care consistent with a patient-centered medical home.

OBJECTIVES

This brief has two objectives: (1) Describe the health status and health care utilization of Ohio's low income population; and (2) assess how Medicaid influences health care utilization in Ohio's low income population. Given the breadth of the topic and limited space available, the brief will focus on adults.

METHODS

OMAS is a telephone survey that samples both landline and cell phones in Ohio. The survey examines access to the health system, health status, and other characteristics of Ohio's Medicaid, Medicaid eligible, and non-Medicaid populations. In 2015, researchers completed 42,876 interviews with adults and 10,122 proxy interviews of children. The 2015 OMAS is the sixth iteration of the survey. For details, please see the OMAS Methodology Report.⁸

For adults, "low income" was defined as living in a household with an annual income ($\leq 138\%$ FPL).¹ Values were imputed for respondents with missing data (e.g., those who refused to answer). For questions involving health insurance, analyses were limited to adults 19-64 years old, since seniors are almost entirely covered by Medicare. Excluding them from analyses helps highlight important differences among younger Ohioans who represent the vast majority of the state's Medicaid population.

All analyses adjusted for survey design and sampling weights. Unless otherwise noted, all findings presented are statistically significant at $p < 0.05$ for their corresponding tests.

RESULTS

Across Ohio, 2.34 million adults (26.6% of all adults) live in low income households. They are especially common for African-American and Hispanic adults (Chart 1), although white adults comprise 70.9% of the state's low income population. In addition, Ohio's low income population is disproportionately female (60.0%) and young, although the age trend is somewhat inflated by the number of college students with low household incomes.

Different types of counties also have different proportions of low income households, from 30.8% in rural Appalachian counties, to 27.8% in metropolitan counties, to 23.1% in rural non-Appalachian counties, to 20.3% in suburban counties.

Health insurance also varies markedly by income. Of the nearly 1.3 million non-elderly adults with household incomes $\leq 100\%$ FPL, 768,000 (59.9%) have Medicaid, 164,000 (12.8%) have employer-sponsored insurance, 13.5% have other types of coverage and 13.9% are uninsured (Chart 2). In contrast, among higher-income adults ($> 138\%$ FPL), 452,000 (8.9%) have Medicaid, 3.5 million (69.4%) have employer-sponsored, 15.0% have other types of coverage and 6.6% are uninsured.

Chart 2: Health insurance type/status for adults 19-64 in households with incomes $\leq 100\%$, 101-138% and $> 138\%$ of the Federal Poverty Level (FPL)

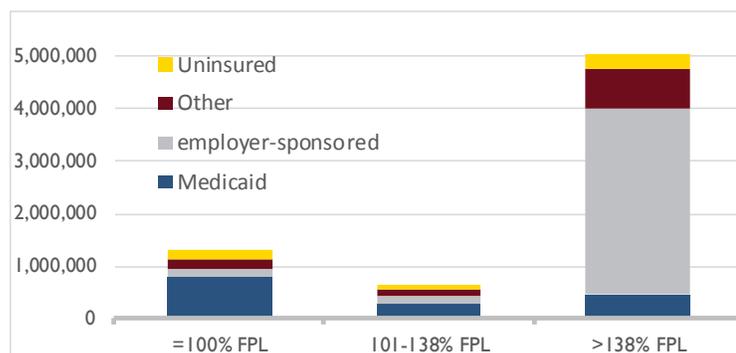
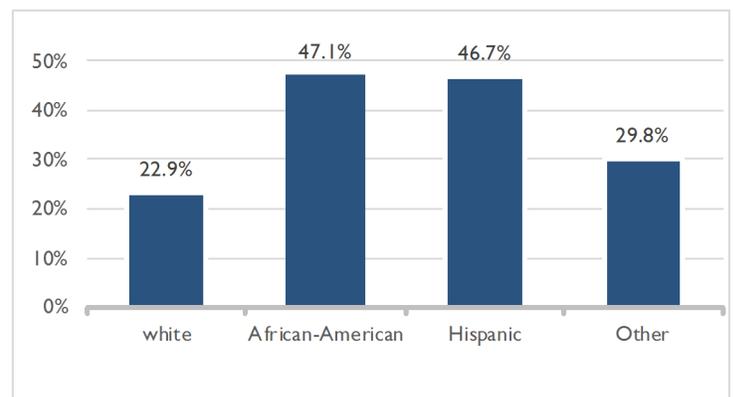


Chart 1: Percent of Ohio adults living in low income households: Difference by Race/Ethnicity



Comparing the bars in Chart 2 also illustrates that the vast majority of adults with employer-sponsored insurance live in higher income households ($> 138\%$ FPL), whereas 70% of Medicaid adults live in low income households.

Health status and health behaviors

Household income is strongly associated with a variety of health behaviors and health outcomes (Chart 3). The percentage of adults who are current smokers, for example, ranges from 40.2% among people at $< 64\%$ FPL to 12.6% among those at $> 400\%$ FPL. Similarly striking trends occur for having

special health care needs and mental health impairment (i.e., on at least 14 of the last 30 days, a mental health or emotional problem interfered with work or other usual activities).

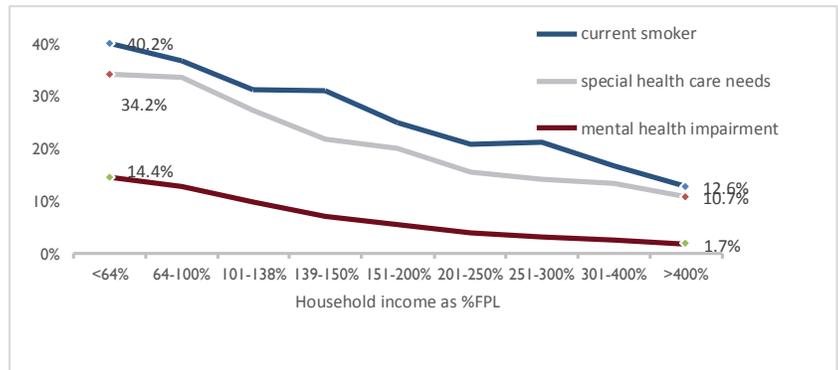
Trends for all three outcomes persist across the entire range of income levels. The 138%FPL cutoff does not interrupt the overall trend. People with the very lowest incomes (i.e., <64%FPL) tend to report higher levels of worrisome outcomes compared to those not quite so poor. Similarly, at the other end of the distribution, people with the highest incomes have lower rates than those slightly less well off.

Not all health outcomes, however, have a strong association with income. Obesity and misuse of prescription painkillers exhibit only modest trends. The prevalence of obesity, for example, does not vary significantly among adults from <64%FPL through 201-250%FPL (not shown).

Health care outcomes

While lower income adults report more health problems, they often struggle to get needed health care services or to use them efficiently. Compared to higher income adults they are more likely to have unmet health needs (36.8% vs. 16.9%) or to make frequent (3+/year) emergency room visits (12.6% vs. 3.1%) — differences that persist even after accounting for group differences in demographic and health characteristics. Access to a patient-centered medical home (PCMH) is of particular interest of policymakers,⁹ yet lower income households are less likely to experience care consistent with the PCMH model (29.1% vs. 47.3%).

Chart 3: Percent of Ohio with various health outcomes, by household income

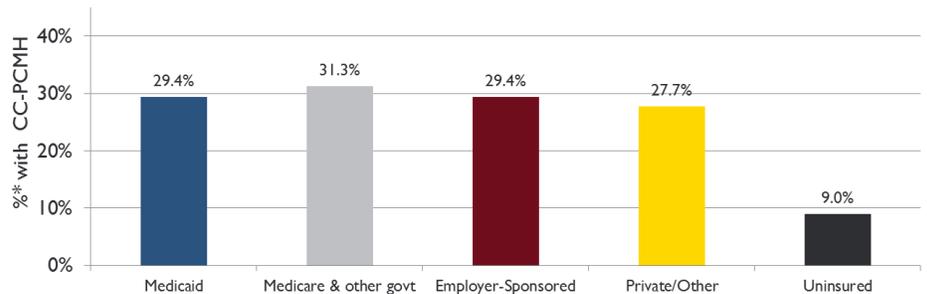


Medicaid among lower income adults

Despite the above concerns, the situation for Ohio’s lower income adults is not uniformly bleak. After all, if it is troubling that over one third (36.8%) of lower income adults have unmet health needs (see above), it is encouraging that nearly two thirds do not. To examine the value of health insurance in general, and Medicaid in particular, analyses tested the extent to which insurance coverage accounts for why some lower income adults have worrisome outcomes and others do not.

For example, after adjusting for group differences in demographic and health characteristics, lower income adults with insurance were much more likely than the uninsured to have care consistent with a patient-centered medical home (Chart 4). Moreover, those with Medicaid were just as likely as those with employer-sponsored insurance to experience such care.

Chart 4: Estimated probability of lower income adults (≤138% FPL) having care consistent with a patient-centered medical home, by insurance type/status



Trends over time

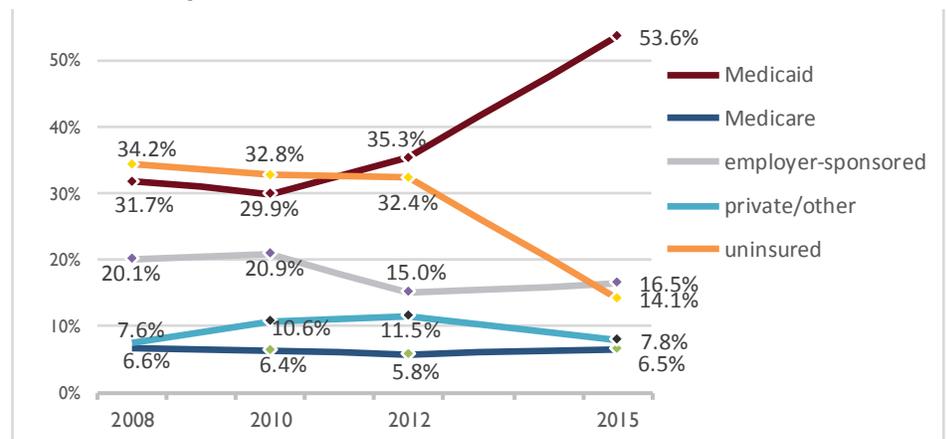
ACA and Medicaid expansion profoundly changed the health care landscape for Ohio’s lower income adults. Between 2012 and 2015 there have been significant declines in the percent of lower income adults who have problems getting needed mental health care (12.6% vs. 9.3%), needed dental care (31.9% vs. 26.1%) and who experience major health care costs (29.7% vs. 23.7%). Underlying such trends is the large number of previously uninsured low income adults enrolling in Medicaid. During this period, the proportion of low income adults who were uninsured dropped from 32.4% to 14.1%. (Chart 5).

POLICY CONSIDERATIONS

OMAS data confirm what other studies have concluded: income is strongly associated with many types of health behaviors, health outcomes and health care utilization. Policymakers should recognize that the wide range of policies and programs that influence income — from tax policy to job training to Temporary Aid to Needy Families (TANF) — are also health policies. Increasing income, especially for poor individuals and families, can have a real impact on health outcomes. Similarly, changes that reduce household income can also harm health.

Medicaid plays an key role in supporting lower income adults, and does so as effectively as other insurance types, including employer-sponsored insurance. Future administration of OMAS can continue to document Medicaid's impact in promoting health and reducing the adverse affects of poverty.

Chart 5: Insurance type/status among low income adults ($\leq 138\%$ FPL) 19-64 years old, in Ohio, 2008-2015



REFERENCES

1. Eligibility criteria for programs like Medicaid is typically based on “family” rather than “household” income. These measures are often similar, but may differ when more than one family lives within a household. Because OMAS measured household income, this brief uses it in analyses.
2. Thompson M, “[How does the 'toxic stress' of poverty hurt the developing brain?](#)” PBS NewsHour, Debuted June 27, 2015.
3. Gatrell AC, Elliot SJ. *Geographies of Health: An Introduction*. New York: John Wiley & Sons; 2015.
4. Pampel FC, Krueger PM, Denney JT. [Socioeconomic disparities in health behaviors](#). *Annual Review of Sociology*; 2010; 36:349-370.
5. Himmelstein DU, Thorne D, Warren E, Woolhandler S. [Medical bankruptcy in the United States, 2007: Results of a national study](#). *American Journal of Medicine*; 2009;122(8):741-6.
6. Wolff JL, Spillman BC, Freedman VA, Kasper JD. [A national profile of family and unpaid caregivers who assist older adults with health care activities](#). *JAMA Internal Medicine* 2016;176(3):372-9.
7. Sommers BD, Oellerich D. [The poverty-reducing effect of Medicaid](#). *Journal of Health Economics*; 2013;32(5):816-32.
8. Ohio Colleges of Medicine Government Resource Center and RTI International. *2015 Ohio Medicaid Assessment Survey: Methodology Report*. Research Triangle Park, NC: RTI International; 2015.
9. Wickizer T, Steinman KJ, Shoben A, Chisolm D, Biehler J, Phelps L. *Patient-Centered Medical Homes and the Health of Ohio's Adults and Children*. Columbus, OH: Ohio Colleges of Medicine Government Resource Center; 2016.

FOR MORE INFORMATION

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