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Medicaid Income Eligibility Transitions among Rural Adults

Erika Ziller, PhD, Deborah Thayer, MBA, Jennifer Lenardson, MHS

INTRODUCTION

The Affordable Care Act (ACA) has allowed states to expand their Medicaid programs to all adults aged 18 to 64 with income below 138 percent of the federal poverty level (FPL) and, as of 2018, 32 states had implemented expansion. The ACA also offers private plan premium support to individuals with income from 100 percent to 400 percent of poverty through state or federal Marketplaces. Individuals may move between sources of coverage based on changes in income, family size, and access to employer health plans.¹ Prior to states' expansion of Medicaid, estimates suggested that a majority of persons who gained coverage through the ACA provisions would experience income fluctuations.²

Movement between Medicaid and Marketplace or other private health insurance plans may increase administrative costs, create benefit and provider discontinuity, or lead to patient difficulties in paying medical bills and accessing care.³⁻⁵ Eligibility transitions could be a particular concern for states with large rural populations, given that rural residents are more likely than their urban counterparts to work seasonally, in part-time positions where hours may fluctuate, and for low wages.⁶ However, little is known about whether rural adults may be more likely to experience changes in eligibility for expanded Medicaid in a given year. This brief uses data from the national Survey of Income and Program Participation to examine the extent to which rural and urban residents' incomes shift above or below the Medicaid expansion eligibility threshold of 138 percent of FPL during a calendar year (2010).

BACKGROUND

Historically, disruptions in health insurance coverage affect a significant proportion of Americans. During 2001-2004, an estimated 12 percent of individuals with private insurance and 42 percent of individuals with public insurance reported losing coverage in the past year.⁷ In 2008-2011, prior to the implementation of the ACA, just 42 percent of individuals with nongroup coverage retained their insurance over twelve months, and just 27 percent retained their coverage over a two-year time frame.⁸ Within six months of initial enrollment in Medicaid during 2000-2004, 20 percent of adults had disenrolled and this rose to nearly half (43 percent) by twelve months. Among these disenrollees, 17 percent had re-enrolled in Medicaid at six months, while 34 percent had some other insurance, and 49 percent were uninsured.⁹

At the person level, eligibility transitions have been shown to impact access to care, health status, and financial well-being. In general, loss of health insurance has been associated with reduced access to

Key Findings

- Among adults aged 18 to 64, rural residents were more likely than those in urban areas to begin 2010 with incomes below 138 percent of the federal poverty level (the threshold for Medicaid Expansion under the Affordable Care Act). This was particularly true for states that have not implemented Medicaid expansion.
- Compared with their urban counterparts, rural adults were also more likely to experience an income shift during the year that would have changed their eligibility for expanded Medicaid.
- This somewhat higher rate of income eligibility transition among rural versus urban adults appears to be driven by the generally lower incomes of those in rural areas.

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* Two additional states (Maine and Virginia) have passed Medicaid Expansion but not yet implemented the program.

care,¹⁰⁻¹² higher health care costs¹³ and cost-related non-adherence,¹⁴ discontinuity of care,¹⁵ and worse patient outcomes.^{16,17} Among adults covered through the Oregon Health Plan, persons with disrupted or lost coverage were less likely to have a primary care visit and were more likely to have medical debt than those with continuous coverage.¹⁸ Adults with coverage gaps were less likely to have a usual source of care or to receive needed medications and other health care services than those who were continuously insured.^{4,19} Among adults ages 51-61, intermittently uninsured persons were at increased risk for declines in overall health and mobility, similar to the chronically uninsured.⁵ Continuous health insurance coverage prior to enrollment in Medicare is associated with fewer or less costly health service use compared with persons without continuous coverage.²⁰

At the system level, excessive changes in Medicaid eligibility and potential movement between programs increases administrative costs,¹ and may reduce the overall impact of coverage expansions on coverage rates. For example, some policy experts have expressed concern that fatigue with frequent coverage changes may lead people to stop signing up for insurance over time, undermining the original intent of the ACA.¹³

The effectiveness of the ACA at ensuring coverage stability and minimizing disruptions depends, in part, on how states manage movement between their Medicaid programs and state- or federally-facilitated Marketplaces. However, it is unclear whether this is a greater concern for rural residents. Given the nature of rural employment and earnings, these potential disruptions may be more common among rural populations and create particular challenges for states with large rural populations. To address this knowledge gap, this study examines whether rural residents are more likely than their urban counterparts to experience income shifts that could change their eligibility for expanded Medicaid.

APPROACH

This study addresses the following research questions: 1) What percent of rural adults aged 18 to 64, living in a Medicaid expansion state, experience a change in income that could affect their Medicaid eligibility in a given year, and does this differ from urban households? and 2) If a rural-urban difference exists in the percentage of adults who experience income fluctuations above/below 138 percent FPL, what factors may account for this difference?

Data source: This study used data from the 2008-2012 panel of the Survey of Income and Program Participation (SIPP). The SIPP is a nationally representative, longitudinal survey conducted by the Census Bureau that collects detailed data on individual and household socio-demographic

characteristics, income, health insurance status, employment, participation in government programs, assets and liabilities, health care expenditures, and health status. Households are interviewed quarterly about their demographic, financial, and health experiences over the prior four months and these “waves” of data are compiled into month-by-month longitudinal records for each individual in the household. The first interviews of the current SIPP panel were conducted with more than 52,000 households beginning in September 2008.

Our study population consists of a nationally representative sample of rural and urban adults under age 65. Given our interest in looking at changes over a discrete calendar year, we examined Medicaid income eligibility transitions that occurred during 2010. Since the SIPP is a multi-year longitudinal survey, a large number of respondents cease participating over the full panel period — referred to as survey attrition. We selected 2010 because it was the latest full calendar year available in the 2008 panel that hadn’t experienced substantial attrition. Finally, we limited analyses of income eligibility shifts to adults who lived in the 32 states that had implemented Medicaid expansion as of June 2018 (although they have passed Medicaid expansion, we excluded Maine and Virginia as expansion has not yet been implemented).

Variables: The dependent variable in this study was Medicaid income eligibility transition, and was measured monthly as movement from above to below 138 percent of the FPL (the threshold of expanded Medicaid eligibility) and vice-versa. Our independent variable is rural or urban residence based on county level designation of metropolitan statistical area (MSA) or non-MSA. Covariates in our multivariable analysis included starting income, region of the country, age, race/ethnicity, and marital status.

Analyses: We used a combination of bivariate and multivariable analyses to assess the relationships between rural residence and Medicaid income eligibility changes. We measured the extent to which rural and urban residents move between Medicaid and subsidy eligibility tiers over the course of a year using chi-square tests of significance. We also compared rural and urban Medicaid eligibility shifts across different income levels. Finally, in an effort to understand factors behind rural-urban differences in Medicaid income eligibility shifts, we used logistic regression to compare the odds of experiencing an eligibility transition for rural and urban adults controlling for income and other characteristics.

The SIPP employs a complex sampling strategy, including oversampling of low-income and minority populations. As a result, all our analyses use SIPP person weights and the statistical techniques

available in SUDAAN for clustered and stratified data to ensure that the standard errors produced by the weighted analyses are not biased downward.

Limitations: The SIPP poses some analytic challenges including sample attrition over the course of the four years during which they are followed. To the extent that this attrition is non-random, it could bias our findings. However, because we focused on a shorter, discrete time period than the full study period (i.e., the 2010 calendar year rather than the four years of the study), the impact of attrition is lessened because fewer individuals drop out in a year than over more than four years. As noted previously, 2010 was selected as the calendar year that best balanced currency of data while minimizing loss of sample. Thus, these findings reflect the status of income transitions at the time the ACA was passed, rather than during early or full implementation. As a result, current data may yield different results, especially since the U.S. has emerged from the 2008 recession during this time. This is particularly important as recovery has been uneven, with rural areas lagging urban areas in economic growth.

Finally, to protect the privacy of respondents, SIPP only reports rural or urban residence for respondents who live in states where both the metropolitan and non-metropolitan populations are over 250,000 or states where the metropolitan or non-metropolitan population is 0. For the 2010 survey year, about 3,700 respondents (four percent of the sample) had missing information on rural versus urban residence. While the rural sample remained robust at about 19 percent of the total sample that year, it is possible that this small number of missing rural and urban respondents could have an effect on the findings.

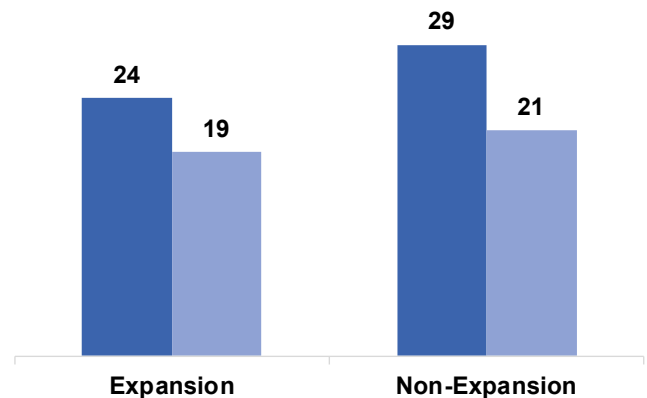
FINDINGS

In 2010, rural adults aged 18-64 were more likely to start the year with household incomes below the Medicaid expansion eligibility threshold, particularly those living in non-expansion states (Figure 1). In Medicaid expansion states, approximately one-fourth of rural adults under age 65 (24 percent) had household income below 138 percent of the FPL, compared with one-fifth of those in urban areas (20 percent). In non-expansion states, the percentage of rural adults who began the year with incomes below 138 percent FPL was 29 percent, versus 21 percent in urban. These percentages include individuals (e.g., parents or disabled adults) who may have already been eligible for Medicaid pre-ACA, as well as those newly eligible as a result of Medicaid expansion.

Among all income groups of non-elderly adults in Medicaid expansion states, those in rural counties were more likely than their urban counterparts to

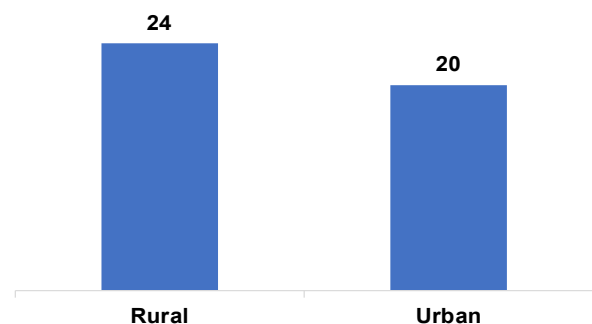
experience a change in income eligibility over the course of the year. Although a relatively modest difference, 24 percent of non-elderly adults in rural areas experienced an income shift from below to above 138 percent of the FPL—or the reverse—during the year compared with 20 percent among their urban counterparts (Figure 2).²

Figure 1. Percent of Rural and Urban Adults (18-64) in Medicaid Expansion versus Non-Expansion States with Household Income Below 138 Percent of the Federal Poverty Level (FPL), First Quarter of 2010



SOURCE: Survey of Income and Program Participation, 2010.
NOTE: Income below 138 percent of the federal poverty level in the first quarter of 2010.
p < .05

Figure 2. Percent of Rural and Urban Adults (18-64) in Medicaid Expansion States with Incomes that Shift Above or Below 138 Percent of FPL during 2010



SOURCE: Survey of Income and Program Participation, 2010.
NOTE: Change in Medicaid income eligibility is defined as a monthly shift in household income from below to above 138 percent of the federal poverty level in 2010 or the reverse.
p < .05

To better understand rural income shifts that could affect expanded Medicaid eligibility, we examined the percentage of rural and urban non-elderly adults who experienced an income shift across different starting income groups. As shown in Figure 3, more than one-third of those who started out with income eligible for expanded Medicaid experienced an increase over the course of the year that raised their income above 138 percent FPL threshold (36 percent in rural and not statistically different from urban).

Figure 3. Percent of Rural Versus Urban Adults (18-64) in Medicaid Expansion States with an Income Shift Above or Below 138 Percent FPL, by Starting Household Income as a Percent of FPL (2010)

Income as a Percent of FPL	% With an Income Shift	
	Rural	Urban
≤ 138% FPL ^{NS}	36.4	40.1
139-199% FPL ^{NS}	35.9	36.9
200-299% FPL ^{NS}	20.9	23.3
300-399% FPL ^{NS}	12.8	14.9
400% FPL or more ^{NS}	10.2	8.8

SOURCE: Survey of Income and Program Participation, 2010.

NOTE: Income shift is defined as a change in household income from at/below to above 138 percent of the federal poverty level in 2010 or the reverse.

^{NS} Rural-urban differences not significant within income group.

About the same percentage of those initially earning between 138 and 200 percent FPL experienced a decline in income that made them income eligible for expanded Medicaid at some point during the year (36 percent in rural and 37 percent in urban, a statistically non-significant difference).

As one might expect, non-elderly adults at higher income tiers were less likely to experience an income shift that could have made them eligible for expanded Medicaid. Only about one-fifth of non-elderly adults with incomes between 200 and 300 percent FPL experienced an income eligibility change, dropping to around 10 percent for those with incomes above 400 percent FPL. Within each individual starting income group, the rates of income eligibility transitions did not differ statistically by rural-urban residence.

The fact that we observed comparable rates of income eligibility transitions for rural and urban adults within each income group suggested that the somewhat higher rate of transitions among those in rural areas may be driven by differences in income. For example, about 38 percent of rural non-elderly adults in expansion states began the year with incomes below 200 percent FPL, compared with only about 31 percent of those in urban counties (data not shown). As Figure 3 demonstrates, individuals who started 2010 with incomes below 138 percent FPL or between 139 and 199 percent FPL were more likely to experience an income eligibility shift.

To further confirm this hypothesis, we used logistic regression to compare the odds of having an eligibility transition for rural versus urban residents controlling for starting income and the covariates described in the variable section above. When we introduced starting income into the model, the rural-urban difference in odds of experiencing a shift in Medicaid income eligibility diminished and became statistically non-significant (data not

shown). From this, we concluded that differences in starting income generally explained rural-urban differences in the odds of having an income transition.

DISCUSSION AND POLICY IMPLICATIONS

Our findings indicate that rural adults aged 18 to 64 who lived in Medicaid expansion states were more likely than their urban counterparts to begin 2010 with incomes at or below 138 percent of the FPL (the threshold for Medicaid Expansion under the Affordable Care Act). The rural-urban difference was even more pronounced within states that did not expand Medicaid (29 rural versus 21 percent in urban). This suggests that rural residents may have benefitted more from Medicaid expansion, and also been more adversely affected by decisions not to expand, than urban residents. However, this finding is limited by the fact that that this group also includes individuals who were already eligible for Medicaid—either because of disability or because they were eligible parents. This point is further tempered by the fact that, in 2010, the U.S. economy had not completely recovered from recession.

More than one in five non-elderly rural adults in expansion states (24 percent) experienced a transition between Medicaid-expansion income eligibility and non-eligibility during 2010, a rate somewhat higher than among urban adults (20 percent). This finding appears to be driven by the fact that rural residents are more likely to be poor or near-poor, which is associated with a greater rate of income eligibility transition. Assuming that 2010 income patterns generally hold, rural residents may be more likely than those in urban areas to be eligible for both expanded Medicaid and subsidized Marketplace coverage over the course of a year. If so, expansion states with sizeable rural populations may experience greater churning between their Medicaid and privately insured populations.

The somewhat higher rate of eligibility transition among rural could have implications for rural individuals, communities and states. As noted, individuals who move between insurance types or between being insured and uninsured are at risk of poorer access to health care services. These disruptions may also affect rural clinicians and health systems if they result in medical debt and/or sicker patients. At the state level, changes in eligibility increase administrative costs for Medicaid programs and Marketplace plans.

The federal government currently requires that states conduct periodic data matching to ensure that individuals are not dually covered by Medicaid and Marketplace subsidies, or that those obtaining subsidies don't have incomes below 100 percent FPL. Individuals flagged as having a data matching

problem must submit additional documentation mid-year to avoid loss of subsidized coverage. In addition, individuals who seek subsidized coverage during a special enrollment period have recently become subject to more stringent pre-enrollment verification that they have experienced a qualifying event. While these policies may aid consumers by reducing repayment of subsidies received in error, they may also make it more difficult for individuals to move easily between coverage sources or to maintain subsidized coverage when data matching suggests their income is too low.²¹

Policy at the state level may also impact the seamlessness with which individuals move between Medicaid and private insurance. Medicaid programs in rural states may wish to consider strategies to minimize disruptions in coverage and/or to support continuity of care for individuals who move between coverage types or become uninsured. Policy experts have recommended a variety of strategies, including adoption of 12-month eligibility periods for Medicaid; using annualized projected income for determining eligibility; creating a Basic Health Plan option in the State; or seeking a federal waiver—like Arkansas—to allow enrollment of the Medicaid expansion population into private plans.²²

Given that the data used in this study are from the period prior to ACA implementation, further research is needed to determine whether the observed rural-urban patterns of income shifts in 2010 persist in 2018. In addition, given variability in state decisions in whether and how to expand Medicaid, additional study is needed to identify whether rural people are more likely to experience Medicaid eligibility transitions, or actual gaps in coverage, following ACA implementation.

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