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The Uninsured: An Analysis by Age, Income, and Geography

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Key Findings

- Assuming Medicaid expansion in each of the fifty states and the District of Columbia, a larger proportion of the rural (non-metropolitan) uninsured (43.5%) than the urban uninsured (38.5%) would be eligible for Medicaid.
- In both urban and rural places, across the adult non-elderly population, uninsured rates decline dramatically with age.
- Within each age group of the uninsured, rural people are less likely to have incomes above 400% of the federal poverty level (FPL), meaning that overall more rural uninsured would be eligible for some form of health insurance assistance under the Patient Protection and Affordable Care Act (ACA), either subsidized coverage in new marketplaces, or through Medicaid if all states were to implement expansion.
- While over half of the uninsured in both rural and urban areas are younger than 40 years, the uninsured in rural areas are disproportionately older across all income categories, which reflects the age distribution in the population.

Introduction

Recent analysis of 2010 health insurance data produced by the RUPRI Center for Rural Health Policy Analysis has shown that the proportion of the rural population that is uninsured and living at or below 138% of the federal poverty level (FPL) exceeds the urban proportion (9.9% as compared to 8.5%, respectively), and that a higher proportion of rural persons (10.7% as compared to 9.6%) are in households with incomes between 138% and 400% FPL.¹ We extend the previous work to differentiate the uninsured by income and age. Our analysis is based on data from the U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE),² estimates of the uninsured (for all of the previous calendar year) population by county, including age-level breakdowns.

Rural and Urban Uninsured Rates by Age and Income

Under the ACA, three significant income categories are used for eligibility purposes: (1) at or below 138% FPL (133% plus a 5% disregard of adjusted gross income), and therefore eligible for coverage under Medicaid expansion; (2) above 138% but below 400% FPL and eligible to receive subsidies in the form of premium tax credits on a sliding scale in the health insurance marketplaces (HIMs); and (3) at or above 400% FPL and ineligible for subsidies although still able to purchase health insurance through the HIMs. In states without Medicaid expansion, individuals earning above 100% FPL will be able to purchase subsidized HIM coverage,³ but in the interest of presenting uniform results, we will use the 138% FPL cutoff. There are also reduced cost-sharing provisions for individuals earning at or below 250% FPL. Table 1 presents the age distribution of



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of uninsured non-elderly adults across these income categories. The two columns labeled “Uninsured Rate” in Table 1 show that uninsured rates are highest for the youngest persons, and lowest for those near retirement age: 42.5% among rural 18-to-39-year-olds with incomes less than or equal to 138% FPL, and 33.5% among rural 18-to-39-year-olds with incomes above 138% but at or below 250% FPL. In contrast, the uninsured rate is only 4.4% for 50-to-64-year-olds who are above 400% FPL. This pattern of high to low uninsured rates by income group persists for all age groups, and across urban and rural areas.

Across the top row of the table, we show that the overall rural uninsured rate is slightly higher (22.3%) than the urban rate (21.4%). However, rural uninsured rates are actually lower than urban uninsured rates for all age groups and for all income levels below 400% FPL. It is unclear why this is; however, rural attitudes toward risk may be more conservative, and there may be easier access to the individual insurance market through personal connections with insurance brokers in rural areas. Rural uninsured rates may be higher than urban rates at incomes above 400% FPL simply due to the fact that rural high-earners’ incomes are on average lower than those of urban high-earners. In addition, there are fewer high-income jobs providing employer-sponsored group coverage in rural areas.⁴

Rural and Urban Uninsured Populations by Age and Income

While the above discussion focuses on the uninsured as a proportion of the overall population, Table 1 also presents analysis of uninsured populations by age and geographic subgroups. The columns labeled “Percent of Uninsured Age Group” show that, in the 18-to-39-year-old age group, almost half (46.5%) of the rural uninsured fall into the lowest income group, a higher proportion than in urban areas (40.9%). While the same pattern holds for other age groups, the proportion of lower-income persons drops as age increases, and overall, 44.5% of rural uninsured persons fall into the lowest income group (at or below 138% of FPL), as compared to 39.7% of the urban population (not shown in table). This likely exemplifies the long-held finding⁵ of lower incomes and less employment in rural areas, all else equal.

Age Distribution of the Uninsured: Implications for the ACA

As the ACA is implemented, the age distribution of the uninsured will be important for two reasons. First, the ACA limits age-banding of premiums: the oldest HIM enrollees may be charged no more than three times the rate (3:1) charged to the youngest. Currently, this ratio has been found to be 4:1 or greater (see Figure 1). Assuming consistent cost distribution across age groups, if firms attempt to maintain neutral revenue, they will likely have to raise the lowest rates as they lower the highest ones. Second, it is commonly assumed that younger uninsured persons at a given income level may be more reluctant than older uninsured persons to voluntarily take up insurance coverage, even at current rates.⁶ Table 1 shows that high-income 18-to-39-year-olds are more than twice as likely to be uninsured as those in the 40-to-49-year-old group in both rural and urban counties. It also highlights the importance of income in driving the decision, as high-earning younger adults are insured at well above average levels. Outreach efforts will need to focus particularly on the youngest uninsured to enroll those paying full premiums and those whose incomes qualify them for significant subsidies.

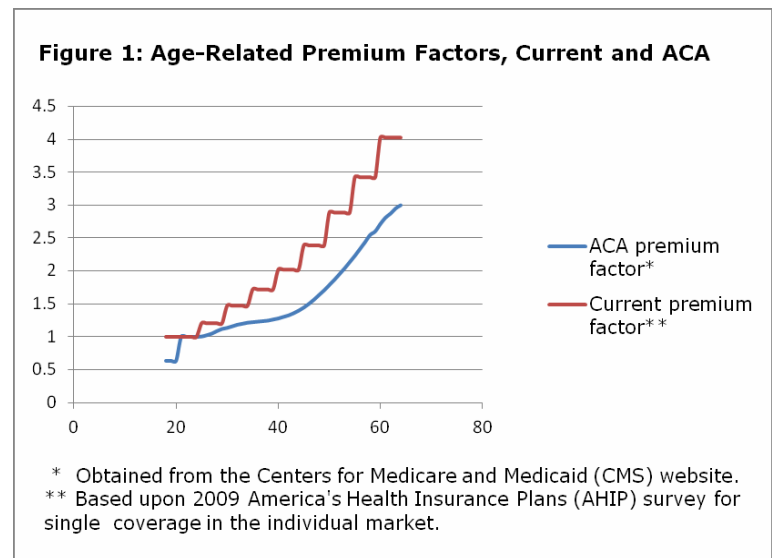


Table 2 presents the same underlying data now analyzed by income category, showing over half of the uninsured non-elderly adults in both rural and urban areas are younger than 40 years.

Table 1. Non-Elderly Uninsured by Place of Residence, 2010

	TOTAL		RURAL			URBAN		
	Nonelderly Uninsured	Percent of Uninsured Age Group	Number Uninsured	Percent of Uninsured Age Group	Uninsured Rate*	Number Uninsured	Percent of Uninsured Age Group	Uninsured Rate*
TOTAL	40,745,824	100.0%	6,640,117	100.0%	22.3%	34,105,831	100.0%	21.4%
Adults, 18-39 years								
≤138% of FPL	10,160,634	41.7%	1,720,575	46.5%	42.5%	8,440,059	40.9%	44.4%
>138% to ≤250% FPL	6,922,506	28.4%	1,049,220	28.4%	33.5%	5,873,286	28.4%	37.7%
>250% to ≤400% FPL	4,305,579	17.7%	598,869	16.2%	20.6%	3,706,710	18.0%	22.6%
>400% of FPL	2,962,467	12.2%	328,682	8.9%	13.2%	2,633,785	12.8%	10.9%
Adults, 40-49 years								
≤138% of FPL	3,276,549	39.9%	597,222	43.2%	42.5%	2,679,327	39.2%	44.5%
>138% to ≤250% FPL	2,421,445	29.5%	409,615	29.6%	27.9%	2,011,830	29.5%	32.2%
>250% to ≤400% FPL	1,523,698	18.5%	246,150	17.8%	14.4%	1,277,548	18.7%	16.1%
>400% of FPL	992,475	12.1%	128,821	9.3%	6.2%	863,778	12.6%	5.3%
Adults, 50-64 years								
≤138% of FPL	3,049,758	37.3%	636,679	40.8%	32.8%	2,413,079	36.5%	34.8%
>138% to ≤250% FPL	2,356,648	28.8%	455,822	29.2%	22.6%	1,900,826	28.7%	26.8%
>250% to ≤400% FPL	1,588,963	19.4%	287,765	18.4%	11.7%	1,301,198	19.7%	13.8%
>400% of FPL	1,185,102	14.5%	180,697	11.6%	4.4%	1,004,405	15.2%	4.1%

*Uninsured rate is calculated within each demographic category as the rural or urban "Number Uninsured" divided by the total rural or urban population belonging to the category (not shown in table).

SOURCE: RUPRI Center for Rural Health Policy Analysis; 2013 analysis of U.S. Census Bureau SAHIE data from 2010.

Nonetheless, the uninsured in rural areas are disproportionately older across all income categories. Also note that in the upper income category, 28% of the rural uninsured are older than 50 years, compared to only 22% in urban areas. This difference reflects the age distribution in the general population: there is a significantly larger percentage of people aged 50 to 64 years in rural places at all income levels.⁷ These data suggest that rural people of a given age and income level tend to be slightly more likely to purchase insurance than their urban counterparts, but since there are more rural people in the demographic categories that tend to have less insurance, the overall, aggregate uninsured rates show that the rural population is less likely to be insured.¹

Table 2. Rural and Urban Uninsured Populations by Income Level, Age Distributions

Age	RURAL			URBAN		
	≤138% FPL	>138% and ≤400% FPL	>400% FPL	≤138% FPL	>138% and ≤400% FPL	>400% FPL
18-39 years	58%	54%	52%	62%	60%	59%
40-49 years	20%	22%	20%	20%	20%	19%
50-64 years	22%	24%	28%	18%	20%	22%

Note: Each column sums to 100%.

Discussion

A majority of uninsured nonelderly adults are younger than 40 years in both rural and urban areas, regardless of income relative to poverty. In rural areas, at all income levels, there is a smaller proportion of young uninsured, which is largely a reflection of the composition of the population: 42% of all rural adults are 18 to 39 years old, while 47% of urban adults are. This distribution could have implications for rating based on predicted total expenditures; younger persons are often healthier and therefore using fewer services, influencing the aggregate costs. Other variables may have more influence on geographic variation in rates, such as historical charges and negotiated rates (affected by use of provider networks), market competition among insurers, and variation in practice styles influencing use of expensive procedures and technology. More needs to be known about the independent effects of these variables, including population characteristics, on premiums and cost sharing in rating areas encompassing rural places. States have considerable flexibility in implementing the ACA's marketplace provisions. Rating areas are set in each state using various geographic boundaries (counties, three digit zip codes, or MSA/non-MSA) or the default option of metropolitan statistical areas (MSAs) and one area for all of non-MSA.⁸ The true effect of rating area design on premiums may not be obvious in the data until insurance companies' decisions are refined through their initial experiences with HIM, and even then, it will be necessary to control for many other factors.

Successful outreach efforts in rural areas may need to target older individuals more assiduously than urban efforts. The same can be said for who is enlisted to help with outreach (e.g., nonprofit groups, associations and clubs) and venues used (e.g., places where persons in the older age categories congregate).

Notes

¹"The Uninsured: An Analysis by Income and Geography," A. Barker et al, June 2013, available at <http://cph.uiowa.edu/rupri/publications/policybriefs/2013/Uninsured%20Analysis%202013.pdf>.

²The SAHIE is a data set prepared by the U.S. Census Bureau from 2010 data that estimates health insurance coverage for every U.S. county, fitted by econometric modeling and computed using the American Community Survey, demographic population estimates, aggregated federal tax returns, Medicaid, and other sources. For more details, see U.S. Census Bureau, "About SAHIE," <http://www.census.gov/did/www/sahie/about/index.html>.

³Individuals with incomes less than 100% FPL but above the Medicaid eligibility threshold in their particular state will not be eligible for subsidies, creating a "donut hole" in eligibility in states that do not expand. The average coverage level in non-expanding states is 32% FPL for jobless parents of dependent children.

⁴According to the authors' calculations using the 2008-2009 Medical Expenditures Panel Survey, only 68% of high-income rural individuals have employer-sponsored coverage, compared to 78% of urban high-income earners. The corresponding numbers for those earning less than 400% FPL are 42% and 40%, respectively.

⁵For example, see Ziller, Coburn, Anderson, and Loux, "Uninsured Rural Families," *Journal of Rural Health*, vol.24, no.1, Winter 2008.

⁶For further discussion of this assumption and its applicability under the ACA, see Blumberg and Buettgens, "Why the ACA's Limits on Age-Rating Will Not Cause 'Rate Shock': Distributional Implications of Limited Age Bands in Nongroup Health Insurance," Robert Wood Johnson Foundation, March 2013.

⁷According to the authors' calculations using 2010 SAHIE data, 35.3% of all rural non-elderly adults are aged 50 to 64 years, compared to 30.1% of urban non-elderly adults.

⁸For greater detail, see <http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/state-gra.html>