



# Rural Residents More Likely to be Enrolled in High Deductible Health Plans

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## Overview

Enrollment in high deductible health plans (HDHPs)\* has grown in recent years as employers and individuals respond to rising health insurance premiums. Prior research indicates that rural individuals are more likely than their urban counterparts to face high out-of-pocket health care costs relative to income, a difference related both to the lower income of rural residents generally and to the quality of the private plans through which they have coverage.<sup>1</sup> While HDHPs may be attractive to rural enrollees due to their lower premiums, the income status of rural residents may limit their participation in savings accounts and make deductible and co-insurance costs burdensome. This study examines rural residents' enrollment in HDHPs prior to the Affordable Care Act (ACA) and the implications for the evolving Health Insurance Marketplaces.

Using the 2007-2010 National Health Interview Survey (NHIS), this study analyzes rates of HDHP enrollment by socio-economic characteristics among rural and urban residents with private health insurance under age 65, as well as rural-urban differences in plan features. These data are linked to the Rural-Urban Continuum Codes to examine residents living in urban areas, rural areas adjacent to urban areas, and rural areas not adjacent to urban areas.

## Findings

Among those with private insurance during 2007-2010, residents of rural, not adjacent areas are somewhat more likely to have either an HDHP or consumer-directed health plan (CDHP)\* than residents of rural adjacent or urban areas (Figure 1). Regardless of residence, CDHPs are less common than HDHPs. Regional variation in HDHP enrollment is pronounced, with the highest rates of rural HDHP enrollment in the Midwest and West.

Among those who work for a small employer (fewer than 25 employees), the rate of HDHP enrollment is highest among adults living in rural, not adjacent areas compared to urban adults (Figure 2). Compared to urban workers, the rate of HDHP enrollment is also highest among rural, not adjacent workers who are paid an hourly wage. Among those who work for county, state, or federal governments, a larger proportion of rural, not adjacent adults have an HDHP than urban adults. The latter finding is of particular interest given that public employers tend to offer health insurance plan choices that are more comprehensive than those offered by private employers. At the state and federal levels, individuals living in rural and urban areas would presumably have the same basic plan options (although perhaps not the same number of carriers). This suggests that rural public workers may be more likely to select HDHP coverage from the options available to them than urban public workers. At the local level, county and town governments in rural areas may lack the resources to offer their employees plans with lower deductibles. Slightly more than one-third of workers who are self-employed have high-deductible coverage, and this is highest in rural adjacent areas. Rural, not adjacent residents are less likely to have prescription drug coverage with their HDHP than are urban residents.

\* HDHPs are health insurance plans with lower premiums and higher cost-sharing than traditional plans that offer catastrophic coverage once consumers meet an established out-of-pocket threshold. When HDHPs are offered with tax-advantaged health savings accounts they are known as consumer-directed health plans (CDHP). The 2010 NHIS defines HDHPs based on an annual deductible of \$1,200 or more for individual coverage or \$2,400 or more for family coverage, an amount adjusted annually for inflation.

## Key Findings

Rural residents with private insurance are more likely to have an HDHP than are urban, especially when they live in remote, rural areas.

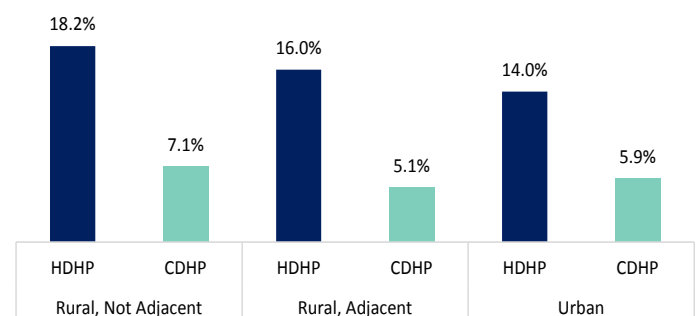
Although HDHP enrollment is lowest among those working in the public sector, a greater proportion of workers living in rural, not adjacent areas have an HDHP plan than their urban counterparts.

Rural, not adjacent residents are less likely to have prescription drug coverage with their HDHP than are urban residents.

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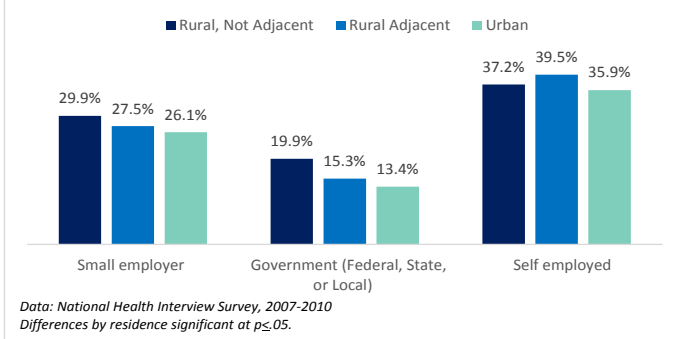
This Research & Policy Brief is based on a longer Working Paper. To view the full report, please visit the Maine Rural Health Research Center at: <http://usm.maine.edu/muskie/cutler/mrhrc-publications>

Figure 1: Rates of HDHP Enrollment Among Persons with Private Health Insurance, 2007-10



Note: Due to missing responses to the CDHP question, combined HDHP and CDHP rates are slightly smaller than reported for all HDHPs. Data: National Health Interview Survey, 2007-10; differences by residence significant at p<\_05

**Figure 2: Employment Type for Adults with HDHPs by Residence**



We find no differences in premium costs or family medical spending between rural and urban residents when enrolled in an HDHP. However, those with high-deductible coverage pay more in premiums and family out-of-pocket costs than those with other types of private coverage, regardless of residence. While this finding is counterintuitive given that HDHPs usually have lower absolute premiums than more comprehensive plans, it likely reflects greater cost-sharing borne by the enrollee versus an employer (either because they are purchasing it directly or because employer contributions are lower). Rural residents with HDHPs are less likely to have an associated savings account than urban residents (26% vs. 30%).

Though we find rural-urban differences in HDHP enrollment at the bivariate level, these differences cease to exist when controlling for selected socio-economic factors. Characteristics associated with rural residence—such as being White, not Hispanic, being married, and not currently working—are also associated with higher odds of enrollment in HDHPs versus lower deductible private plans. Compared to the Northeast, other U.S. regions have higher odds of HDHP enrollment. Rural-urban differences in HDHP enrollment may be driven by regional differences in health insurance markets, with large segments of the privately insured rural population living in areas where HDHPs are more common (e.g., Midwest and West).

This study may understate the extent of the cost-sharing burden of rural residents and the degree to which this differs from urban residents because the NHIS defines HDHP at relatively low deductible amounts.\* Additionally, we do not examine the availability of plans in different markets. Limited plan choice and the premium costs of those plans in rural areas may promote HDHP enrollment.

### Discussion and Policy Implications

Growth in privately purchased high-deductible plans is likely given current market trends and provisions within the Affordable Care Act (ACA).<sup>2,3</sup> Of those selecting a Marketplace Plan as of March 1, 2014, 18% chose bronze plans which are similar to high-deductible plans,<sup>4</sup> while one online broker reports 43% enrollment in bronze plans among its customers.<sup>5</sup> Our findings suggest that rural individuals, particularly those in more remote rural areas, may be more likely to have enrolled in bronze plans than their urban counterparts.

The greater affordability of HDHPs may increase access to health insurance in rural communities. However, the impact of these plans on rural health access and services use has not been studied. With prior studies showing that rural residents tend to have lower service use compared to urban residents,<sup>6,7</sup>

it will be important to monitor whether HDHP enrollment, with higher out-of-pocket costs and annually renewing deductibles, contributes to this pattern of lower utilization.

Rural residents with HDHPs are less likely to have prescription drug coverage than their urban counterparts. With higher prescription costs and copayments potentially reducing medication adherence for those with chronic disease,<sup>8,9</sup> rural residents may face costlier and poorer outcomes under an HDHP when prescriptions are not covered, especially since adults ages 50-64 who live in rural, not adjacent areas are more likely to have an HDHP than are urban adults. Rural residents may benefit from the ACA requirement that plans cover prescription drugs when they are offered through the Health Insurance Marketplaces and are eligible for a subsidy.

HDHPs may be the most affordable option for many consumers and the transparency of health care costs to consumers under high-deductible plans may promote cost-conscious use of health services. However, given the complexity of high-deductible plans, consumers may find it difficult to understand the trade-off between low premium prices and high out-of-pocket costs, including deductibles. Among those covered by an HDHP, rural residents are more likely to have low incomes and to have more limited educational attainment than urban residents. These differences suggest it will be important to monitor HDHP enrollment, plan affordability, and health plan literacy among plans available through the Health Insurance Marketplaces. To the extent that enrollment in ACA plans mirrors current trends toward higher rural enrollment in HDHPs, plan outreach and education should include information about deductible and cost-sharing responsibilities and ensure that enrollees understand plan features such as first-dollar coverage of preventive care and the need to plan for annual out-of-pocket costs and potential use of savings accounts.

### Endnotes

- Ziller EC, Coburn AF, Yousefian AE. Out-of-Pocket Health Spending and the Rural Underinsured. *Health Aff (Millwood)*. 2006;25(6):1688-1699.
- Haviland AM, Marquis MS, McDevitt RD, Sood N. Growth of Consumer-Directed Health Plans to One-Half of All Employer-Sponsored Insurance Could Save \$57 Billion Annually. *Health Aff (Millwood)*. 2012; 31(5):1009-1015.
- Fronstin P. *Employers May Move by 2018 to Avoid Tax*. [Web Page]. 2010, May 24. Available at: <http://healthcare.nationaljournal.com/2010/05/a-future-for-consumerdirected.php#1587338>. Accessed September 29, 2011.
- Assistant Secretary for Planning and Evaluation. *Health insurance marketplace: March enrollment report for the period October 1, 2013 to March 1, 2014*. Rockville, MD: US Department of Health and Human Services;2014.
- Millman J. As Obamacare hits enrollment milestone, some call for cheaper plans. *The Washington Post*, 2014, March 28.
- Larson SL, Fleishman JA. Rural-Urban Differences in Usual Source of Care and Ambulatory Service Use: Analyses of National Data Using Urban Influence Codes. *Med Care*. 2003; 41(7 Suppl):III65-III74
- Bennett KJ, Olatosi B, Probst JC. *Health Disparities: A Rural-Urban Chartbook*. Columbia, SC: South Carolina Rural Health Research Center; 2008.
- Chernew ME, Shah MR, Wegh A, et al. Impact of Decreasing Copayments on Medication Adherence Within a Disease Management Environment. *Health Aff (Millwood)*. 2008;27:103-112.
- Heisler M, Langa KM, Eby EL, et al. The Health Effects of Restricting Prescription Medication Use Because of Cost. *Med Care*. 2004; 42(7):626-34.