



## Rural Disabled Medicare Beneficiaries Spend More Out-of-Pocket Than Their Urban Counterparts

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### OVERVIEW

Medicare provides near-universal coverage for seniors and is an important source of health insurance for individuals with disabilities; however, many beneficiaries face gaps between the care they need and costs covered by Medicare. Most beneficiaries either participate in Medicare Advantage (a managed care version of Medicare that offers reduced cost-sharing) or seek supplemental coverage to meet this gap, including private plans offered by former employers or purchased individually, or public coverage through Medicaid. These options have different cost-sharing arrangements, with Medicaid, employer-based plans, and Medicare Advantage plans offering the greatest protection against high out-of-pocket spending.<sup>1</sup> However, despite high rates of supplemental coverage, median out-of-pocket spending as a percent of income among Medicare beneficiaries was 17% in 2007.<sup>2</sup> Since rural beneficiaries are more likely to purchase supplemental indemnity coverage individually, to participate in Medicaid, or to go without supplemental coverage altogether,<sup>3</sup> it is likely that their out-of-pocket spending differs from those of urban residents, although the magnitude and direction of these differences may vary for individual beneficiaries.

This study used data from the 2006-2010 Medical Expenditure Panel Survey (MEPS) to examine rural-urban differences in out-of-pocket spending for health care services, supplemental coverage, and variation in spending by type of service. Pooling five years of data increased our rural sample size, but findings should be interpreted as annual averages across the time period. We analyzed multiple measures of out-of-pocket spending, including: total out-of-pocket spending (in dollars); out-of-pocket spending as percent of personal income; and, out-of-pocket spending as percent of total healthcare expenditures. We conducted separate analyses for two distinct groups of Medicare beneficiaries—those age 65 and older (the elderly) and those under the age of 65 who qualify for Medicare because of their disability. Although many elderly beneficiaries may also have disabling conditions, we refer to the latter group as “disabled beneficiaries” throughout this brief. Rural-urban residence categories are based on the Office of Management and Budget’s non-metropolitan and metropolitan designations.

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### Key Findings

Rural disabled and elderly Medicare beneficiaries are less likely to participate in Medicare Advantage or to have any form of supplemental insurance coverage.

Rural elderly beneficiaries pay a higher proportion of dental and prescription drug spending on an out-of-pocket basis compared to urban; the proportion of expenditures for medical care paid by elderly beneficiaries does not differ by residence.

The proportion of total spending paid out-of-pocket is 40% higher among rural disabled Medicare beneficiaries compared to urban disabled beneficiaries.

Rural-urban differences in out-of-pocket spending among disabled beneficiaries persist after controlling for presence and type of supplemental coverage, suggesting that rural beneficiaries experience a smaller protective effect from supplemental plans (including Medicaid).

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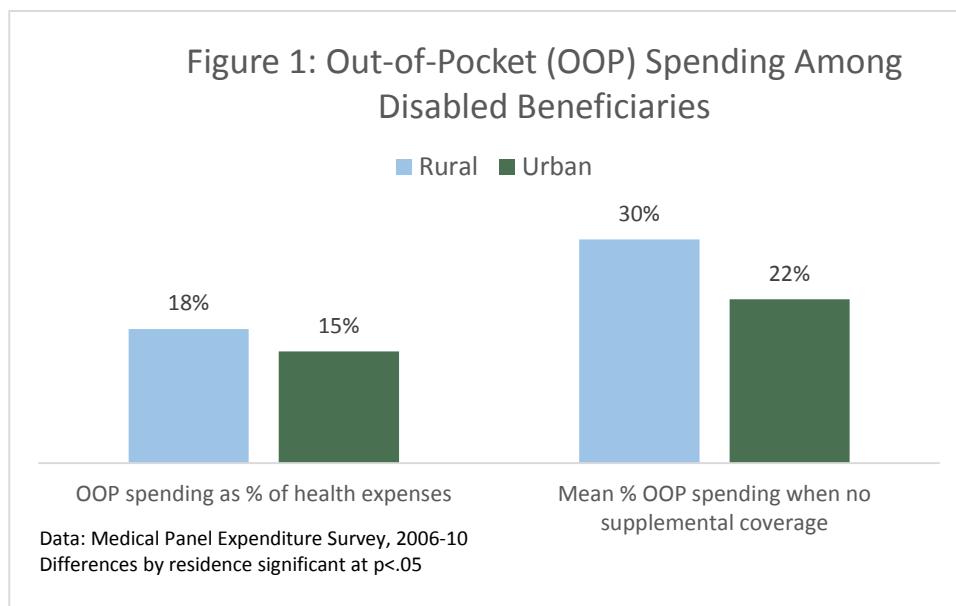
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## FINDINGS

### Differences in out-of-pocket spending

Among Medicare beneficiaries with healthcare spending between 2006 and 2010, rural disabled beneficiaries had lower average out-of-pocket spending compared to rural elderly beneficiaries and all urban beneficiaries. Regardless of residence, disabled beneficiaries spent about 9% of their income on out-of-pocket expenses compared to less than 6% for elderly beneficiaries. However, rural disabled beneficiaries were responsible for 18% of their health care spending, compared to 14% for urban disabled beneficiaries (Figure 1).

Rural elderly beneficiaries are more likely to lack supplemental coverage or to have an individually purchased plan (i.e., Medigap) than urban elderly beneficiaries and they are less likely to have a Medicare Advantage plan (Figure 2). Though roughly one-third of Medicare elderly beneficiaries have an employer-sponsored plan, only one-fifth of disabled beneficiaries have this type of coverage. Rural elderly beneficiaries are less likely to have dental benefits than urban elderly beneficiaries (Figure 2).



### Differences in supplemental coverage and their impact on spending

Across rural and urban residence and age categories, the proportion of total healthcare expenditures paid out-of-pocket--about 25%--was highest among those beneficiaries with Medicare-only (no supplemental plan). For rural disabled beneficiaries, those with only fee-for-service Medicare coverage pay 30% of their spending, the largest percentage we found when examining presence and type of supplemental coverage (Figure 1). Medicaid provides the greatest financial protection from high out-of-pocket spending, although with important rural-urban differences. Dually eligible rural beneficiaries with disabilities (covered by Medicare and Medicaid) pay a larger proportion of their total spending out-of-pocket versus urban beneficiaries (7% versus 5%). Given that such a large segment of disabled Medicare beneficiaries have Medicaid (about 40%), this may account for much of the observed rural-urban difference in the disabled Medicare population.

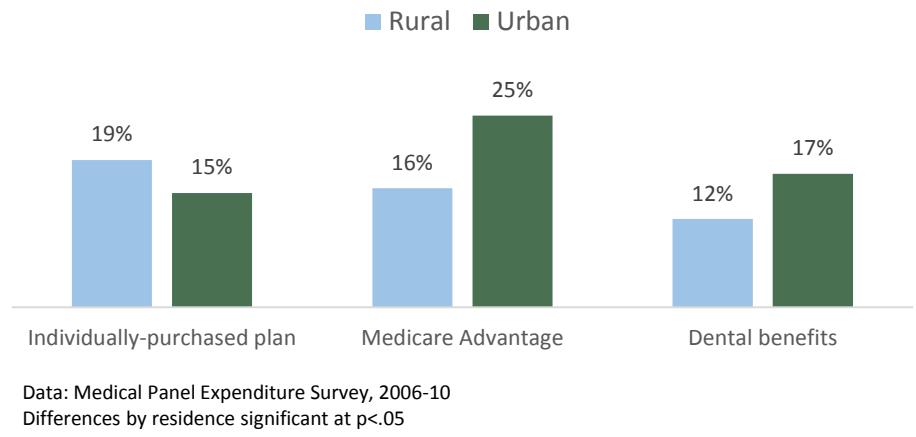
### Out-of-pocket spending vary by type of service

Out-of-pocket spending for health care services among elderly Medicare beneficiaries do not generally vary by residence. The two exceptions are dental care and prescription drugs. Regardless of dental benefits, rural elderly are less likely to have a dental care visit, have fewer mean visits, and pay a higher proportion of their dental expenditures themselves (75% vs. 68% for urban elderly). In contrast to their urban counterparts, rural elderly beneficiaries are equally likely to have any prescription drug use (92%), but have a higher mean number of prescriptions, higher total prescription spending, and pay a higher proportion of their total prescription spending compared to the urban elderly (38% vs. 35%).

### Factors associated with high out-of-pocket spending

Controlling for income, supplemental coverage, socio-demographic and regional characteristics, rural elderly beneficiaries do not experience a

**Figure 2: Supplemental Coverage Among Elderly Medicare Beneficiaries**



significant difference from their urban counterparts in the proportion of total healthcare expenditures that they pay out-of-pocket, excluding premium spending. In contrast, rural residence is a significant predictor of higher out-of-pocket spending burden among the disabled Medicare population. Controlling for supplemental coverage and socioeconomic characteristics, the proportion of total spending paid out-of-pocket is 40% higher among rural disabled beneficiaries compared to comparable urban beneficiaries. While it does not eliminate rural-urban differences in spending burden, supplemental insurance status remains an important predictor of out-of-pocket spending. As seen among elderly beneficiaries, each type of supplemental coverage reduces individuals' proportion of out-of-pocket spending compared to having no supplemental coverage, with the dually eligible experiencing the lowest relative burden. Among disabled beneficiaries, those with both Medicare and Medicaid have 81% lower out-of-pocket spending as a proportion of total spending compared to Medicare-only beneficiaries. With the exception of excellent health status, no other characteristics have a significant independent impact on out-of-pocket spending burden for this eligibility group.

### **Limitations**

Our study has some key limitations that may affect the generalizability of findings. Our data are limited to community-dwelling Medicare beneficiaries and do not examine the out-of-pocket spending burden for those residing in institutional settings. The study is also limited by the fact that our estimates of supplemental insurance coverage from MEPS data do not match those from other

sources such as the Medicare Beneficiary Survey (MCBS). Specifically, the rate of Medicare-only coverage in MEPS is higher for both elderly and disabled populations compared to the MCBS. If MEPS inaccurately categorizes some beneficiaries as lacking supplemental coverage, the likely impact on our analyses would be to somewhat underestimate the protective effect of supplemental coverage on out-of-pocket spending.

### **Policy Implications**

Rural Medicare beneficiaries face some significant disparities in spending burden for medical care compared to urban beneficiaries. While there are few differences in out-of-pocket spending based on residence for elderly Medicare beneficiaries, findings related to prescription drug spending indicate the need to monitor financial access to medications for rural beneficiaries in this age cohort.

For the disabled Medicare population, our findings suggest that rural beneficiaries are at significantly higher risk of being unable to afford needed services and that higher out-of-pocket spending may exacerbate health disparities for a particularly vulnerable population. Among disabled beneficiaries, rural-urban differences in relative out-of-pocket spending persist despite controlling for supplemental insurance, suggesting that this coverage provides a smaller protective effect among those in rural versus urban areas. The difference in rural and urban out-of-pocket spending among those with Medicaid may reflect state variation in coverage provided for individuals with disabilities with rural residents living in states that offer less comprehensive Medicaid benefits for

this population. Additional analyses are needed to understand the full consequences of out-of-pocket spending for rural disabled beneficiaries and the policy actions that may be taken to improve access and limit financial risk for this population.

In addition to the limitations identified above, it is likely that we have not fully captured the out-of-pocket spending that may be borne by rural Medicare beneficiaries. For example, Hwang and colleagues<sup>4</sup> suggest that, in addition to copayments, out-of-pocket expenses for persons with chronic illness may include travel expenses, specialized clothing, adjustments to the home, and phone bills. Some of these, such as travel and phone calls to distant specialists, may be particularly costly for rural residents and yet not captured in our analyses. Further research is necessary to identify the extent to which these non-medical expenditures may be a burden for rural beneficiaries and hinder their access to and use of needed healthcare resources.

*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>

## ENDNOTES

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