



# Risk of Large Medical Expenditures at Older Ages and Their Impact on Economic Well-being

*Susann Rohwedder, Péter Hudomiet, and Michael D. Hurd \**

The incidence of many medical conditions increases with age. Because private and public health insurance in the U.S. do not cover all medical expenses, the older population is at increased risk of large out-of-pocket (OOP) medical expenditures. In fact, OOP expenditures make up one of the largest financial risks they face. On average, older households spend well over \$100,000 OOP on health care over their remaining lifetime, and many spend much more, which can lead to financial strain.

In financial planning for retirement, households need to understand the risk of OOP medical expenditure and its impact on their economic well-being. This project examined three sets of related questions:

- ▶ How did OOP medical expenditure risk evolve between 1998 and 2018?
- ▶ How do OOP medical expenditures affect the composition of household spending, and do they lead to economic hardship?
- ▶ Do older individuals have accurate beliefs about the risk of high OOP medical expenditures?

To answer these questions, we used data from the U.S. Health and Retirement Study (HRS), a nationally representative longitudinal survey of U.S. individuals 51

or older, with comprehensive information about the health status and OOP medical expenditures of older individuals. Because we focus on risk, we analyzed a person's or the household's OOP medical spending, excluding health insurance premia.

We first documented trends in individual-level OOP spending from 1998 to 2018, distinguishing between those younger than 65 and those 65 and older, as these populations face very different health insurance environments. For the typical person, OOP healthcare expenditures are modest. Among those 65 or older, the median (i.e., 50th percentile) expenses did not exceed \$1,200 annually in 2019 dollars between 1998 and 2018 and were lower in 2018 than in 1998. The decline was especially noticeable between 2004 and 2018, amounting to a decrease of about 37% during this period. The drop was likely due to a shift in the payment channel from OOP to insurance payments after the introduction of Medicare Part D and the Affordable Care Act.

In addition to median OOP spending, we tracked trends in the risk of very large expenditures, which we captured by the 95th percentile (or top 5% of spending) of OOP expenditures in a year. The 95th percentile of OOP is much greater than the median, about 10 times, and was much

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\* **Susann Rohwedder** is a senior economist at RAND, Associate Director of the RAND Center for the Study of Aging and an affiliate member of the faculty of the Pardee RAND Graduate School. **Péter Hudomiet** is an economist at the RAND Corporation. **Michael Hurd** is principal senior researcher and director of the RAND Center for the Study of Aging. This research brief is based on working paper MRDRC WP 2023-457, UM22-09.

more volatile than the median, although it followed a similar hump-shaped pattern. For example, among those older than 65, it was \$5,600 in 1998, \$11,100 in 2004, and \$6,500 in 2018, all measured in 2019 dollars so as to adjust for inflation. Medicare Part D and the Affordable Care Act likely contributed to the decline after 2004.

Second, to examine how variation in OOP medical expenditures affects the composition of household spending, we analyzed changes in budget shares in response to changes in OOP. We found evidence that OOP spending increased the budget shares for OOP (as expected) and, importantly, reduced the budget shares for housing, transportation, utilities, and food.

To find whether OOP medical expenditures contribute to households experiencing economic hardship, we estimated the impact of OOP spending on food and medication insecurity. These were measured as households reporting not always having enough money to buy the food they needed, and households taking less medication than was prescribed because of the cost. We did not find a significant association between OOP spending and food insecurity. We concluded that food insecurity results from low economic resources and is not the result of one-time large OOP or persistent OOP spending. We found a statistically significant and economically meaningful association between OOP spending and medication insecurity: An increase from the 10th to the 90th percentile in OOP spending would increase the rate by about 15 percentage points from a base level of 15.8% among those 55 to 64, and 9.0% among those age 65 or older. In a dynamic analysis, we found that those with higher OOP were more likely to transition from medication

security into medication insecurity and to remain insecure.

Two important patterns emerged across these analyses: First, measures of distress were consistently lower in the population 65 or older than in the younger 55- to 64-year-old group and distress continued to decrease with advancing age. This is consistent with recent research findings that people of advanced old age judge their financial situation to be better than people in their 50s and 60s, as reflected in statements about satisfaction with their financial situation and feeling economically constrained. Second, white, non-Hispanic persons tend to live in households that experience less food and medication insecurity than Hispanic, Black non-Hispanic, or other non-Hispanic persons, even after controlling for age, education, and wealth.

We studied whether households have accurate beliefs about the risks of large OOP spending. If individuals are unaware of the risk of high OOP, they may fail to prepare financially for these expenses. To examine how well households understand the risk, we studied how their perceived risk of OOP medical expenditures compared to their actual risk as measured by their subsequent observed OOP spending. We found that individuals at advanced old age had accurate beliefs about the OOP expenditure risk, while younger individuals substantially overpredicted the probability of high OOP expenses. We tested multiple plausible explanations and found that individuals with greater exposure to health care costs were more accurate in their future estimates of such costs. Because older individuals tend to have greater prior OOP costs, their expectations were more accurate. We did not find evidence that individuals were unaware of OOP risks. ❖

### **Michigan Retirement and Disability Research Center**

Institute for Social Research

426 Thompson Street, Room 3026

Ann Arbor, MI 48104-2321

**Fax:** (734) 615-2180

[mrdrcumich@umich.edu](mailto:mrdrcumich@umich.edu) [www.mrdrc.isr.umich.edu](http://www.mrdrc.isr.umich.edu)

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