

## Executive Summary: The Asset Cost of Poor Health

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Health care costs are a major concern of the elderly. In assessing the financial risks of poor health late in life, however, focusing on out-of-pocket expenditures for health care may substantially understate the actual risks that households face. Poor health may also trigger a number of other costs, such as home renovation or relocation, loss of earnings, and the costs of hiring various service providers. Further, poor health is an ongoing condition that may deplete resources over a long period of time. To provide evidence on the full cost of poor health, **Poterba, Venti, and Wise** examine the effect of poor health on the evolution of near- and post-retirement assets. They label this the “asset cost of poor health,” and view it as more inclusive than many other measures of the financial cost of poor health, since it captures both out-of-pocket medical expenses and other health-related costs.

Several approaches have been used to estimate components of the cost of poor health, mostly focusing on out-of-pocket expenditures for health care. Marshall, McGarry, and Skinner's 2010 *Journal of Economic Perspectives* paper, one of the most recent studies of this issue, obtains a comprehensive measure of these costs, based on core (living) and exit (deceased) interviews in the Health and Retirement Study (HRS). They give careful consideration to the imputation of missing values and to the treatment of unusually large reported expenditures. They estimate that spending in the last year of life is \$11,618 on average, with the 90th percentile equal to \$29,335, the 95th percentile \$49,907, and the 99th equal to \$94,310. These estimates are substantially larger than those in some earlier studies, but they may still underestimate the total cost of poor health by omitting indirect costs.

An alternative approach is to infer the financial consequences of poor health from the change in assets following specific health shocks. Studies in this spirit show that specific major health events can have substantial financial repercussions. However, they neglect the costs of poor health that are not directly associated with specific health events.

Rather than compiling a comprehensive accounting of out-of-pocket costs associated with poor health or health events, these authors estimate the asset cost of poor health by estimating how the evolution of household assets varies as a function of household health status. The goal is to capture not only the relationship between assets and the out-of-pocket cost of health care per se, but also other costs that are associated with poor health. They hope to capture the cumulative effect on assets of all of the adverse consequences of poor health over a long period of time. They do not attempt to specifically identify the types of expenditures associated with poor health that cause households to draw down assets.

This analysis is based on data from the first nine waves, from 1992 to 2008, of the HRS. The researchers study the original HRS cohort, which includes households containing at least one respondent between the ages of 51 and 61 in the base year. They focus on the asset cost of poor health for persons in two-person households, and briefly summarize results for single person households.

One of their innovations is the creation of a measure of “latent” health that can be used to categorize respondents by health status. They emphasize the properties of the index that are particularly important for the analysis, such as its stability over time and its substantial predictive power for subsequent mortality. The analysis of the evolution

of household net worth for households stratified by their latent health status suggests that the asset cost of poor health is very large. Among persons with similar assets in 1992, those with good health in 1992 accumulated at least 50 percent more in assets by 2008 than those in poor health in 1992.

The baseline estimates here compare persons in the top third of the distribution of latent health in 1992 to persons in the bottom third of the health distribution in 1992 within each 1992 asset quintile. The researchers find that by 2008, persons in the top third of the health distribution on average accumulate at least 50 percent more assets than persons in the bottom third of the health distribution who had the same level of assets in 1992. For example, among persons in third asset quintile, between 1992 and 2008 persons in the top third of the health distribution accumulated \$135,694 more assets than persons in the bottom third of the health distribution using the matching method. The difference-in-difference method produces similar results. Both estimation strategies suggest that asset cost of poor health is substantial and is greater for persons with high asset balances in 1992.

The authors explore how the asset cost of poor health is attenuated by the receipt of Social Security benefits and defined benefit (DB) pension annuities, as well as earned income. The diagram below is a schematic illustration of the potential ways that poor health may affect the evolution of assets. It illustrates two key pathways. First, poor health may be associated with high post-retirement medical costs which may be financed by drawing down assets and thus reducing the post-retirement accumulation of assets. Second, poor health may contribute to low earnings while working and to a shorter working life. Low lifetime earnings in turn reduce post-retirement asset balances

in three ways. First, low post-retirement earnings affect asset growth directly by restricting the ability of households to meet medical costs without tapping into assets. Second, low pre-retirement earnings reduce the level of Social Security and private pension annuities that are available to pay health-related costs in retirement. Third, low pre-retirement earnings result in low asset balances upon entry into retirement. These findings confirm the relevance of the pathway that links poor health to low lifetime earnings. The findings suggest not only that poor health is associated with lower lifetime earnings, but also that it is correlated with low earnings in 1992, low annuity income, and low assets in 1992.

