

This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Explorations in the Economics of Aging

Volume Author/Editor: David A. Wise, editor

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-90337-0

ISBN13: 978-0-226-90337-8

Volume URL: <http://www.nber.org/books/wise09-2>

Conference Date: May 2009

Publication Date: March 2011

Chapter Title: Comment on "The Risk of Out-of-Pocket Health Care Expenditure at the End of Life"

Chapter Authors: David R. Weir

Chapter URL: <http://www.nber.org/chapters/c11936>

Chapter pages in book: (128 - 131)

- Hurd, M. D., and S. Rohwedden. 2009. The level and risk of out-of-pocket health care spending. University of Michigan Retirement Research Center, Working Paper no. 2009-218, September.
- Johnson, R. W., G. B. T. Mermin, and C. E. Uccello. 2006. How secure are retirement nest eggs? Center for Retirement Research at Boston College Issue Brief 45, April.
- McCorkle, R., N. Strumpf, I. Nuamah, D. Adler, M. Cooley, C. Jepson, E. Lusk, and M. Torosian. 2000. A randomized clinical trial of a specialized home care intervention on survival among elderly post-surgical cancer patients. *Journal of the American Geriatrics Society* 48: 1707–13.
- McGarry, K., and R. Schoeni. 2005. Medicare gaps and widow poverty. *Social Security Bulletin* 66 (1): 58–74.
- Merlis, M., D. Gould, and B. Mahato. 2006. Rising out-of-pocket spending for medical care: A growing strain on family budgets. *The Commonwealth Fund*, February, vol. 10.
- Mor, V., J. Zinn, J. Angelelli, J. M. Teno, and S. C. Miller. 2004. Driven to tiers: Socioeconomic and racial disparities in the quality of nursing home care. *Milbank Memorial Fund Quarterly* 82 (2): 227–56.
- Murkofsky, R. L., R. S. Phillips, E. P. McCarthy, R. B. Davis, and M. B. Hamel. 2003. Length of stay in home care before and after the 1997 Balanced Budget Act. *Journal of the American Medical Association* 289 (21): 284–48.
- New York Times*. 2008. The plight of the underinsured. June 12.
- Paez, K. A., L. Zhao, and W. Hwang. 2009. Rising out-of-pocket spending for chronic conditions: A ten-year trend. *Health Affairs* 28 (1): 15–25.
- Palumbo, M. G. 1999. Uncertain medical expenses and precautionary saving near the end of the life cycle. *Review of Economic Studies* 66 (2): 395–421.
- Sing, M., J. S. Banthien, T. M. Selden, C. A. Cowan, and S. P. Keehan. 2006. Reconciling medical expenditure estimates from the MEPS and NHEA. 2002. *Health Care Financing Review* 28 (1): 25–40.
- Skinner, J. S. 2007. Are you sure you're saving enough for retirement? *Journal of Economic Perspectives* 21 (3): 59–80.
- Smith, J. P. 1999. Healthy bodies and thick wallets: The dual relation between health and economic status. *Journal of Economic Perspectives* 13 (2): 145–66.
- . 2005. Consequences and predictors of new health events. In *Analyses in the economics of aging*, ed. D. A. Wise, 213–40. Chicago: University of Chicago Press and NBER.
- Trejos, N. 2008. With out-of-pocket medical expenses rising, it might be time for insurance change. *The Washington Post*, December 7.
- Webb, A., and N. Zhivan. 2010. How much is enough? The distribution of lifetime health care costs. Center for Retirement Research at Boston College, Working Paper no. 2010-1, February.

Comment David R. Weir

The authors join two important themes that have generally been considered separately in prior work, including work by the authors. Out-of-pocket

David R. Weir is director of the Health and Retirement Study at the Institute for Social Research, University of Michigan.

(OOP) medical expenditures are of interest for several reasons. Because of great heterogeneity in health insurance coverage, the distribution of OOP expenditures is wide and unequal. Catastrophic expenditures (relative to the resources of a specific family) can have severe consequences for economic well-being. Out-of-pocket expenditures can also reflect the pricing mechanism of relatively complete health insurance coverage as they capture the deductibles and copay mechanisms that have been strongly pushed by economists as a way to inject some price sensitivity into consumer decisions about health care. Retirement security is also an issue of long-standing importance. Inadequate savings has been a common worry, while recent research has suggested that retirement preparation is generally adequate for most households (Scholz, Sheshadri, and Khitatrakun 2006).

So why join these themes? The primary reason is to ask whether out-of-pocket medical expenditures might threaten the retirement security of households who appear well-prepared for retirement. The primary reason to worry about that is the fiscal imbalance in the Medicare system and the fiscal pressures on the Medicaid system that provide a safety net for nursing home use. Without knowing how those imbalances will be resolved in the future it is impossible to project with certainty what the private burden of health care costs will be and therefore difficult to say whether households are prepared or not.

The authors do not attempt to tackle this difficult problem of political forecasting. Rather, they look at recent trends in out-of-pocket medical expenditures to assess economic risks in the current situation.

They observe fairly consistent increases in out-of-pocket expenditures over the past decade in multiple data sources. The share of persons with any nonzero OOP expenditures has risen considerably. This seems entirely consistent with the growth of deductible and copay mechanisms and the decline of plans offering first-dollar coverage for all services. It is also consistent with the rapid growth in use of prescription drugs. The use of prescription drugs necessarily entails the use of doctors who prescribe them, and, since both drugs and doctor visits are commonly insured with copay systems, these costs will rise as the use of drugs increases, and particularly so as the fraction of people not using any drugs declines.

To address the issue of catastrophic risk, they focus on out-of-pocket expenditures at the end of life. It is well known that total expenditures are very much higher in the last year of life and at least somewhat higher in the two years prior to death. The advantage of this focus for assessing catastrophic risk is that because everyone dies everyone is at risk for this expenditure. However, some people die alone (about 45 percent in the HRS), some while married (41 percent), and others while living with children or other family (14 percent). These arrangements can have important implications for decisions about end-of-life care and about the impact of OOP expenditures on family resources. I would suggest the authors consider estimating some of their models separately by family setting.

To assess OOP spending in the last year of life the authors use data from the Health and Retirement Study (HRS). The data pose two technical challenges: imputation for missing values, and establishing the timing of costs relative to date of death. The first can be somewhat worse for deceased respondents because the proxy reporter who reports on a deceased respondent's medical use between the last live interview and death may not have all the information. The use of linked Medicare claims data, now available for HRS, could be beneficial for both problems. Claims do not report OOP spending but they do provide the amounts and timings of utilization of hospitals and other services, which could help with imputation of OOP expenses and with the timing of when expenses occurred.

The authors use a fairly standard hot-deck approach to imputing OOP expenditures on the different categories of services captured by HRS. The use of unfolding brackets in HRS greatly improves the accuracy of imputation when exact values are not given. However, in the case of exit proxy interviews for deceased respondents, many reporters are unable even to provide a bracket range and so must be fully imputed. I believe the authors could do this better by being less restrictive. The primary cause of high OOP spending in the last year of life is the high rate of utilization, not a different ratio of OOP to covered expenses. Therefore, instead of trying to match a missing report of OOP spending on hospitals by one deceased respondent to a valid report from another deceased respondent, they could match to a live or deceased respondent who had a similar number of nights in hospital, similar chronic conditions, and perhaps similar insurance coverage. Using covariates to guide the imputation will increase precision much more than their approach of conditioning only on survival status. This could even be done as a "cold-deck" imputation, matching to records in the Medical Expenditure Panel Survey, for example, on those variables. Absent these time-consuming extensions to the imputation methods, my interpretation of the hot-deck imputations here is that they will likely not underestimate OOP because large expenditures are more likely to be remembered by family members of the deceased than small ones. The real concern for underestimation is not missing data, it is erroneous report of zero spending when in fact there was spending.

The problem for timing expenditures is that the interval from last live interview to death can be anywhere from a few days to two years or even longer if the respondent missed a wave prior to death. The best solution would be to use the Medicare claims data to establish the timing of total expenditure and to allocate OOP expenditure in the same way within intervals between interviews and between interview and death. A second-best solution would be to attempt to get a total for the two years prior to death by taking the interval from interview to death and adding to it a fraction of the prior interval, where the fraction yields the number of additional months needed to bring the total up to twenty-four months. The approach used by

the authors of cumulating costs is sufficient to demonstrate the high level and variability of end-of-life spending but not as easily compared to a two-year interval between live interviews as would be a measure of spending in the twenty-four months before death.

The authors are concerned that several studies indicate larger declines in wealth just before death than can be explained by the estimated amounts of OOP medical expenditure. They note one interpretation, which is that some health care costs are not captured by the survey. Assuming that the entire decline in assets represents health care costs seems to me a very strong assumption. Transfers to children, charitable donations, accelerated consumption (e.g., travel) in anticipation of death, lost work income by self or family, are just a few of the ways asset profiles might be altered by a terminal illness. The HRS asks exit proxy respondents whether the death was “expected.” Contrasting sudden to unexpected deaths might provide some leverage for explaining asset rundown.

Finally, to fully realize their proposed “marriage” of out-of-pocket expenditures and retirement security, the authors need a way to translate the metrics of OOP expenditure into a metric comparable to retirement security. One way to do that would be to convert the income and assets of a household into a present value and similarly discount the expected lifetime OOP expenditure stream. Then OOP expenditure can be expressed as a percentage of sustainable consumption, and simulated variation in OOP expenditure as ranges of that percentage. This would tell us how likely it is that OOP expenses could consume a given percent of retirement consumption and thereby how far below pre-retirement consumption the consumption of things other than medical expenditures might fall.

Reference

Scholz, J. K., A. Seshadri, and S. Khitatrakun. 2006. Are Americans saving “optimally” for retirement? *Journal of Political Economy* 114 (4): 607–43.