

## Taking Account...

### Study looks at mortality rates and Medicare Part D

The Medicare Modernization Act of 2003 introduced Medicare Part D in January 2006, leading to a large expansion in prescription drug insurance coverage. Part D now covers 39 million individuals and has cost the U.S. government a cumulative \$353 billion. Despite the size of the program, the benefits of Medicare Part D in terms of health outcomes have not generally been rigorously studied.

However, a [recent study](#) by Abe Dunn of the Bureau of Economic Analysis (BEA) and Adam Hale Shapiro of the Federal Reserve Bank of San Francisco presents new evidence about the impact of Medicare Part D, and more broadly, the effect of prescription drug coverage expansion on mortality.

The study supports BEA's health care satellite account, as it aids in understanding the link between health care inputs and health outcomes. This connection is essential for properly accounting for the economic importance of new advances in the health sector. Focusing on a clear event, such as the implementation of Part D, that has changed health care inputs nationally allows for a better understanding of this connection.

Using the Medicare Current Beneficiary Survey (MCBS), the study estimated demographically adjusted rates of prescription drug coverage for Medicare enrollees aged 65 and older

across U.S. counties before the implementation of Part D. It found that the areas with lower levels of coverage before the reform experienced greater drug insurance expansion as a result of Part D. That information was combined with county-level mortality data from the Centers for Disease Control and Prevention for the years 2000 to 2010. Over this period, the probability of a cardiovascular-related mortality dropped significantly, while mortality rates for noncardiovascular causes of death remained statistically unchanged.

The authors also compared the growth in expenditures caused by the reform with the monetized benefit of lower mortality rates. They found that the additional value of life-years gained is between \$3.9 billion and \$5.4 billion, which greatly exceeds the additional out-of-pocket costs for cardiovascular-related drugs of about \$870 million. In fact, the total benefit exceeds the total estimated additional spending on cardiovascular drugs from the program of \$3.8 billion.

Even the lower estimates of the additional value of life-years gained are around \$1.9 billion to \$2.7 billion, still above the additional out-of-pocket costs. When the financial risk protection of the program is considered, it is likely that the benefits of the program greatly outweighed the deadweight loss of the reform across all scenarios.

While geographic variation

has been employed in other studies, the authors introduced two additional factors critical to identifying the effects on mortality. First, they analyzed the effects of mortality by disease category, finding strong persistence in the disease-specific cause of death within counties over time. Second, they considered how the reform will affect the population's health in the future. If drug insurance expansion is successful, it will improve the survival of individuals on the margin of dying—that is, those that have relatively poor health.

This implies that in subsequent periods the population of individuals living with a serious chronic health condition will increase. Considering this “delayed mortality” is crucial when studying health care and mortality in the United States since chronic conditions account for 75 percent of health care costs and cause seven out of ten deaths each year.

The authors conducted robustness checks. Using the full prereform period of 2000–2004 and including county-specific or county-disease-specific trends produced similar results. The authors also applied an analysis that combined mortality data from the 65 and older population and the 55–64 populations, finding that cardiovascular deaths for people aged 65 and older declined significantly more as a result of the reform relative to the under 65 population.