



# In the Literature

## ESTIMATING THE EFFECTS OF PRESCRIPTION DRUG COVERAGE FOR MEDICARE BENEFICIARIES

Dennis G. Shea, Ph.D.  
Joseph V. Terza, Ph.D.  
Bruce C. Stuart, Ph.D.  
Becky Briesacher, Ph.D.

*Health Services Research*  
June 2007  
42(3p1):933–49

An abstract is available at:  
<http://www.blackwell-synergy.com/doi/abs/10.1111/j.147563.2006.00659.x>

For more information about this study, contact:

**Joseph V. Terza, Ph.D.**  
Department of Epidemiology  
and Health Policy Research  
University of Florida  
jvt@ichp.ufl.edu

or

**Mary Mahon**  
Senior Public Information Officer  
The Commonwealth Fund  
212-606-3853  
mm@cmwf.org

This summary was prepared by Deborah Lorber.

Commonwealth Fund Pub. 1034  
June 2007

*In the Literature* presents brief summaries of Commonwealth Fund-supported research recently published in professional journals.

THE COMMONWEALTH FUND  
ONE EAST 75TH STREET  
NEW YORK, NY 10021-2692  
TEL 212.606.3800  
FAX 212.606.3500  
E-MAIL [cmwf@cmwf.org](mailto:cmwf@cmwf.org)  
<http://www.commonwealthfund.org>

Medicare Part D was enacted to subsidize the costs of prescription drugs for millions of Medicare beneficiaries. But, in doing so, the new benefit raises serious questions about costs and utilization—namely, how prescription drug coverage affects drug use and what the impact is on subsequent costs.

In “[Estimating the Effects of Prescription Drug Coverage for Medicare Beneficiaries](#),” (*Health Services Research*, June 2007), Dennis G. Shea of Pennsylvania State University, Joseph V. Terza of the University of Florida, and colleagues use drug utilization data from the Medicare Current Beneficiary Survey from 1999—before coverage was available through Part D—to examine the relationship between insurance coverage and prescription drug utilization. Perhaps not surprisingly, they find that Medicare beneficiaries with coverage used more prescription drugs than those without.

The study sample included 5,270 community-dwelling beneficiaries with continuous Medicare coverage, supplemental Medicare insurance, and either full-year prescription drug coverage or no prescription drug coverage at all during the year (i.e., beneficiaries with prescription benefits for only part of the year were excluded). In 1999, approximately 80 percent of noninstitutionalized Medicare beneficiaries with some form of insurance supplementation had prescription drug coverage.

Overall, the researchers found that people who lived in urban areas were more likely to have drug coverage, as were married people. Individuals with certain chronic conditions, like heart disease, cancer, arthritis, diabetes, and hypertension were also more likely to have coverage. Black people were less likely to have coverage, as were those in excellent health.

The pre-Part D findings hold relevance today, the researchers say, because they suggest “that the most important factors underlying the selection process can be captured through information in beneficiaries’ Medicare claims files, and to that extent can be managed through risk adjustment.”

The research team determined that, even when controlling for factors such as health status and income, people with drug coverage had substantially higher drug use because coverage reduces the effective out-of-pocket costs of prescriptions. The price elasticity for prescription drugs was estimated at  $-0.54$ , meaning that a 10 percent decrease in the cost of drugs results in a 5.4 percent increase in utilization. This estimate, the researchers say, is slightly higher than in previous samples, possibly because of differences in data and methods as well as to changes in the pharmaceutical market, including new drug approvals and innovations in marketing directly to consumers. “Even this slightly higher elasticity estimate, however, can lead to significant changes in the cost of the benefit,” they say, in conclusion.