

RAND RESEARCH AREAS

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

A Systematic Review of the Adverse Effects of Prescription Drug Cost Sharing

To stem increases in prescription drug spending, pharmacy benefit managers and health plans are changing prescription drug benefits to steer patients toward less-expensive drugs or to require patients to assume a share of the costs. A systematic review of published studies analyzed how the salient cost-sharing features of prescription drug benefits may affect access to prescription drugs and synthesized what is known about how these features may affect medical spending and health outcomes. The following are key findings from the review:

- Increased cost sharing is associated with lower rates of prescription drug treatment, worse adherence among existing users, and more frequent discontinuation of therapy. For each 10 percent increase in cost sharing, prescription drug use decreases by 2 percent to 6 percent, depending on the class of drug and the condition of the patient. Benefit caps, prior authorization requirements, and formulary restrictions also decrease prescription drug use.
- For some chronic conditions—such as congestive heart failure, lipid disorders, diabetes, and schizophrenia—increased cost sharing is clearly associated with increased use of other health care services, offsetting any potential cost savings.
- Low-income groups may be more sensitive than others to increased cost-sharing demands, but there is little evidence to support this claim, because studies conducted to date have not had access to information on patients' socioeconomic status.
- The 2006 launch of Medicare Part D presents an opportunity to assess how a yearly benefit cap affects adherence to drug therapy.
- Pharmacy benefit design is an important public health tool for improving population health, but the long-term health consequences of benefit changes are still uncertain.

This fact sheet is part of the RAND Corporation research brief series. RAND fact sheets summarize published, peer-reviewed documents.

Corporate Headquarters

1776 Main Street
P.O. Box 2138
Santa Monica, California
90407-2138
TEL 310.393.0411
FAX 310.393.4818

© RAND 2007

This fact sheet is based on:

Goldman DP, Joyce GF, and Zheng Y, "Prescription Drug Cost Sharing: Associations with Medication and Medical Utilization and Spending and Health," *Journal of the American Medical Association*, Vol. 298, No. 1, July 4, 2007, pp. 61–69. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

RAND Offices

Santa Monica, CA • Washington, DC • Pittsburgh, PA • Jackson, MS / New Orleans, LA • Cambridge, UK • Doha, QA



HEALTH

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Health](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).