

## A Look Inside the “Doughnut Hole”

### How Drug-Benefit Limits Affect Retiree Prescription Use

**M**edicare’s Part D standard drug benefit has a gap in coverage—the so-called doughnut hole. At 2007 benefit levels, coverage ends after \$2,400 in pharmaceutical spending, including copays but excluding premiums, and resumes again when total drug costs reach \$5,451. Between 24 and 38 percent of Medicare enrollees are expected to reach the coverage gap in 2007. As a result, many seniors with high drug expenses, especially the chronically ill, will face higher out-of-pocket costs. It is still too early to assess the effects of Part D, which began in 2006. However, it is possible to glimpse the likely effects by examining how retirees fare under private insurance plans with similar benefit caps.

A team of RAND researchers led by Geoffrey F. Joyce used data from a private employer to examine the effect of benefit caps on prescription-drug use by retirees. The data include enrollees from all 50 states and contain three years of outpatient medical and pharmacy claims (2003–2005). The employer offered multiple prescription plans to retirees. One had a cap of \$2,500 per year (similar to Part D) in plan spending. The employer also offered an uncapped plan. The analysis compared prescription use under the capped plan with use under the uncapped plan. The analysis focused on enrollees with the highest prescription costs, who are most likely to be affected by a cap. This group included those spending \$2,400 or more in the \$2,500-cap plan. The researchers measured changes in drug use across seven therapeutic classes: antidepressants,

**Key findings:**

- High-cost enrollees in a retiree plan that capped yearly drug benefits at \$2,500 discontinued medication at higher rates than comparable patients in an uncapped plan.
- The drug classes with the greatest differences in discontinuation rates between the two plans were antihypertensives and cardiac drugs.
- Enrollees in the capped plan reinitiated drug use at higher rates when benefits resumed.

antidiabetic drugs, cholesterol-lowering drugs, antihypertensives, cardiac drugs, anti-inflammatories, and antiulcerants.

#### Enrollees in the Capped Plan Discontinued Drug Use at Higher Rates

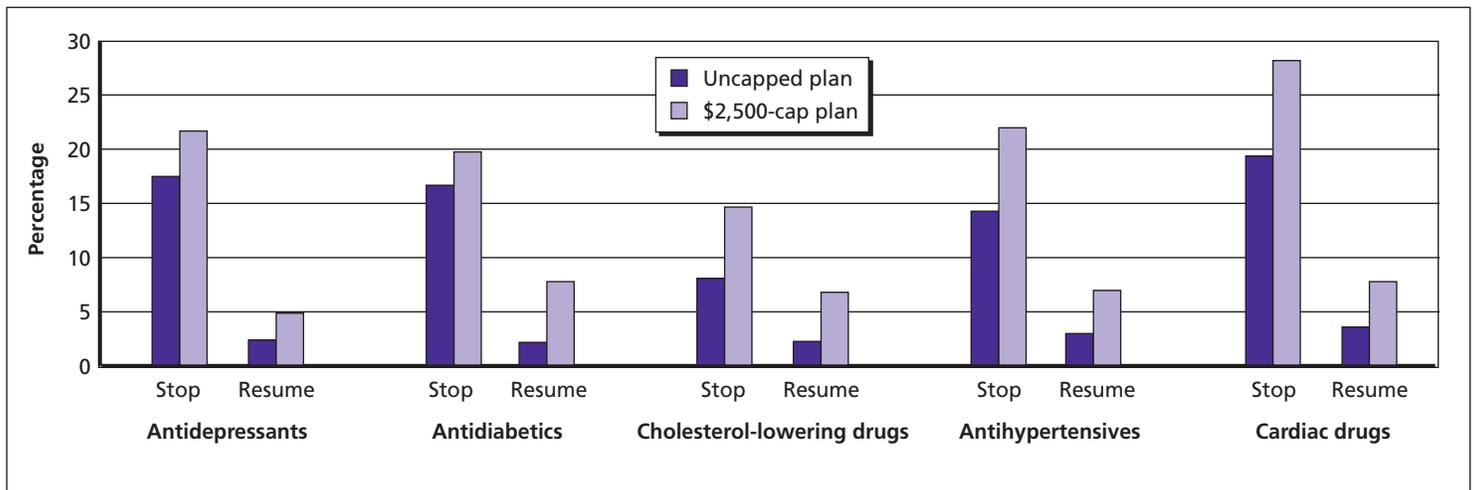
The findings showed that

- High-cost enrollees in the capped plan discontinued medication at higher rates than patients in the uncapped plan (see figure) across all the classes of drugs.
- Rates of discontinuation between the two plans diverged in the latter part of each year as more enrollees in the capped plan reached the limit. By December of each year, this divergence reached its highest level. Use of antihypertensives, antidepressants,

**This Highlight summarizes RAND Health research reported in the following publication:**

Joyce GF, Goldman DP, Karaca-Mandic P, and Zheng Y, “Pharmacy Benefit Caps and the Chronically Ill,” *Health Affairs*, Vol. 26, No. 5, September 2007.

**Percentage of Users Who Stopped Taking Prescription Drugs in 2004 When They Exceeded Their Benefit Cap and Reinitiated Use When Coverage Resumed in 2005**



SOURCE: Joyce, Goldman, Karaca-Mandic, and Zheng, 2007.

NOTE: Findings for anti-inflammatories and antiulcerants, while consistent with the patterns for other drug classes, were confounded by the widespread availability of over-the-counter alternatives and other market factors, and so are not depicted.

antidiabetics, and cholesterol-lowering drugs was 15 to 28 percent lower among members of the capped plan. Reductions in use were even greater for the two classes of drugs with broadly available over-the-counter substitutes—anti-inflammatories and antiulcerants.

- The drug classes with the greatest differences in discontinuation rates were antihypertensives (22 percent compared with 14 percent under the uncapped plan) and cardiac drugs (28 percent compared with 19 percent under the uncapped plan).
- Enrollees in the \$2,500-cap plan also reinitiated drug use at higher rates when benefits resumed, suggesting that decisions to discontinue were strongly influenced by the benefit limit.

The study also found other responses to the benefit caps:

- High-cost enrollees in capped plans stopped use of brand-name drugs at higher rates than for less-expensive, generic versions.
- High-cost enrollees who reached their spending limit in the capped plans also switched to other plans at higher rates. This finding suggests that a benefit cap’s long-term ability to contain costs is limited by the likelihood that users who encounter the ceiling will switch to a less-restrictive plan.

**Implications for Medicare Part D**

The findings suggest that prescription-benefit limits can disrupt drug therapy for high-cost prescription users, including the chronically ill. This result is consistent with a growing body of evidence that higher drug-cost sharing can reduce adherence to prescriptions, leading to adverse health outcomes and subsequently higher medical costs. Of course, Medicare’s drug benefit differs from the study’s plans in one important respect: Its benefits resume after spending reaches \$5,451 within a calendar year. Whether this additional benefit—which might affect 10 to 15 percent of the population—will result in different beneficiary responses remains unclear.

The central policy challenge for Medicare is to motivate prescription users to spend prudently without leading them to forgo needed and cost-effective medication. An increasing number of plans have addressed this challenge by providing coverage for most generic drugs within the “doughnut hole”—a promising trend with little additional cost. One question about benefit design that deserves further exploration is whether Part D could be redesigned at the same actuarial cost but with continuous coverage. For example, higher cost sharing in the form of copayments that do not vary throughout the year could result in better long-term clinical outcomes. Additional research and demonstrations would shed light on this possibility. ■

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