

findings brief

Changes in Drug Utilization for Seniors Without Prior Prescription Drug Insurance

key findings

- After the passage of the Medicare Modernization Act, a majority of individuals without previous prescription drug coverage obtained coverage under Medicare Part D.
- Among previously uninsured seniors, utilization of prescription drugs increased with the introduction of Medicare Part D. There was rapid uptake of newly marketed generics.
- Dual eligibles had little change in prescription utilization or rates of switching between drugs after the implementation of Part D. Out-of-pocket spending was significantly reduced for this population.

Overview

Passage of the Medicare Modernization Act (MMA) in 2003 created a prescription drug benefit for Medicare beneficiaries. At the time, many decisions regarding formularies and treatment of different populations were innovative and had not yet been evaluated. The lack of empirical data regarding subpopulations led some to question how the program would affect different individuals. Beneficiaries who previously did not have prescription drug coverage and those who were dually eligible for both Medicare and Medicaid were affected significantly by implementation of this new benefit, known as Medicare Part D (Part D). For both groups, questions regarding the efficacy of the program were focused on utilization and out-of-pocket expenses.

Sebastian Schneeweiss, M.D., Sc.D., vice chief, Division of Pharmacoepidemiology and Pharmacoeconomics at Brigham and Women's Hospital, and colleagues received a HCFO grant to look at the effects of the implementation of the Part D program within these two distinct populations.

Schneeweiss and colleagues studied those without coverage before Part D, the changes to their utilization and spending after the implementation of Part D, and the effects of the benefit's coverage gap, also known as the doughnut hole. The researchers also looked at dual eligibles to determine whether or not the shift to Part D affected their utilization or caused them to switch between different drugs or types of drugs. Schneeweiss describes this study as, "a timely evaluation of changes in drug utilization and drug spending among seniors under the new Medicare drug benefit that will provide policymakers with information on the effectiveness, utilization, and spending patterns associated with the program."

Background

Estimates place the number of seniors lacking any type of prescription coverage at around 25 percent prior to implementation of the Medicare Part D program in 2006.¹ Part D is aimed at providing assistance to beneficiaries and helping to curb the practice of beneficiaries restricting their use of a prescribed medication due to its costs.



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However, little empirical data existed before the implementation of Part D that could guide policymakers about the potential behavior of those taking up the new benefit. The benefit requires cost-sharing by beneficiaries that includes monthly premiums and copayments for medications. The benefit also only covers costs up to a cap, \$2,250 in total spending for the 2006 standard benefit, where there is then a benefit gap or doughnut hole. While in the doughnut hole, beneficiaries pay out-of-pocket for their medications until they qualify, through spending, for catastrophic coverage, which in 2006 was \$3,600. Measuring utilization, especially in the doughnut hole, became a key component to understanding how well the drug benefit was performing.

Another sub-population in which concerns were raised with the implementation of Part D was dual eligibles. Prior to Part D, dual eligibles received their prescription coverage through state-run Medicaid programs. The MMA required these dual eligibles to switch from Medicaid to Part D for their prescription coverage. Dual eligibles could either choose their own Part D plan, or be automatically switched into a plan when the program was implemented. While premiums were fully subsidized for dual eligibles and copayments during the doughnut hole were partially subsidized, the Part D policy created much uncertainty among beneficiaries because for many seniors the formularies and drugs covered under Part D differed from those covered under Medicaid. It was unknown what kind of effect this would have on dual eligibles, particularly in terms of their medication utilization. Would there be a great deal of medication switching, and how this would affect out-of-pocket spending?

Methodology²

To study the effect of Part D on previously uninsured seniors, the researchers used pharmacy dispensing data for subjects age 65 and older from three large pharmacy chains operating in multiple states. Since third-party payment information was not available in the pharmacy data, Schneeweiss and colleagues used

an algorithm of patient medication costs and out-of-pocket expenses to classify insurance status as uninsured, prescription coverage under Part D, and Part D coverage gap. The researchers classified individuals as uninsured if they paid more than 60 percent of the costs for 80 percent of the drugs dispensed to them. After the implementation of Part D, many of these individuals were classified into the group of those newly insured. When beneficiaries reached the total spending threshold of \$2,250 they were assigned to the coverage gap group. After reaching the \$3,600 threshold, these patients were classified into the catastrophic coverage group, based on the standard Part D benefit design.

The researchers tracked four main medication classes of cardiovascular drugs representing expensive drugs (clopidogrel), less expensive drugs (warfarin), drugs for symptomatic conditions (clopidogrel, proton-pump inhibitors), and drugs for asymptomatic conditions (statins). In order to estimate the effects of the implementation of the Part D program, the team calculated monthly drug utilization in terms of defined daily doses and monthly out-of-pocket expenses for subjects who were uninsured prior to the implementation of Part D and gained coverage under the new program. In order to test for changes in trends in monthly use and out-of-pocket spending associated with the introduction of Medicare Part D, the researchers used segmented linear regression models. The analysis also looked at the effects of the coverage gap on utilization of and out-of-pocket spending for each study drug among subjects who used that drug prior to reaching the coverage gap.

In order to determine the effect of Part D on dual eligibles, the researchers identified subjects whose drugs were covered primarily by Medicaid in 2005 and evaluated their pharmacy dispensing data for the same four drug classes. They used segmented linear regression models to track the changes in utilization and costs for beneficiaries and examined the rate of medication switching after the implementation of the Part D program.

Key Findings

Based on the pharmacy dispensing data, 55 percent of those identified as not having prior prescription drug coverage received coverage after the implementation of the Part D drug benefit. During the year, 12 percent of beneficiaries did fall into the coverage gap. With the introduction of the Part D benefit, an increase in use of almost all drugs was reported. There was a rapid uptake of newly marketed generics. In terms of beneficiary copayments, there was a reduction for almost all drugs.

For those who reached the coverage gap, there was a decline in utilization of medications that had been used previously. The decreases in utilization corresponded with the increase in out-of-pocket spending that beneficiaries experienced while in the gap.

For the dual eligibles, the study found that the implementation of Part D had little effect on the use of the drugs studied in the project. There were significant changes reported in out-of-pocket spending with statistically significant reductions in expenses for dual eligibles. With the implementation of Part D, many raised concerns that duals would be forced to switch medications due to formularies and other restrictions within the program. Schneeweiss and colleagues found that there were no significant changes in switching rates with the implementation of the program.

Policy Implications

The Medicare Part D benefit was meant to provide prescription support to many seniors who lacked credible prescription coverage. The findings from this study show that the introduction of Part D increased utilization of medication and reduced beneficiary out-of-pocket costs among previously uninsured seniors. Despite the gains made overall, the coverage gap still poses a large hurdle for many beneficiaries. Data show that when faced with the full cost of their medications, beneficiaries reduced their medication use. This type of behavior has been associated with negative health outcomes for seniors.³

For the dual eligible population, this study quiets many fears that beneficiaries would be enrolled in plans that would dramatically alter their medication use. Beneficiaries had reduced out-of-pocket expenditures and did not switch medications at higher rates once enrolled in Part D plans. Schneeweiss and colleagues' find that the transition from state Medicaid programs to Part D went smoothly.

Conclusion

The creation of the Part D program raised fears among beneficiaries that their coverage and costs would be significantly altered. Although the program is not perfect, it has positively affected two sub-populations by increasing utilization and

reducing out-of-pocket costs. It is critical that future policies concerning Part D take into consideration the complexities of the doughnut hole and the difficulties and burdens it places on those who fall into it. Continued innovation and research is necessary as changes to Part D policies are considered, especially those that significantly affect vulnerable populations.

About the Author

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Endnotes

- 1 Safran, D. et al. "Prescription Drug Coverage and Seniors: Findings From a 2003 National Survey." *Health Affairs*, Web Exclusive, April 19, 2005.
- 2 A more detailed methodology for each of the studies can be found in Shrank, W. et al. "The Effects of Transitioning to Medicare Part D Drug Coverage in Seniors Dually Eligible for Medicare and Medicaid." *Journal of the American Geriatrics Society*, Vol. 56 No. 12, December 2008, 2304-2310. and Schneeweiss, S. et al. "The Effect of Medicare Part D Drug Coverage on Drug Use and Cost-Sharing in Seniors Without Prior Drug Benefits." *Health Affairs*, Vol. 28 No.2 March/April 2009,w305-w316.
- 3 Hsu, J. et al. "Unintended Consequences of Caps on Medicare Drug Benefits." *The New England Journal of Medicine*, Vol. 354 No.22, June 2006, 2349-2359.