Encouraging Generic Use Can Yield Significant Savings

**Introduction**
Rising prescription drug costs continue to be an issue of importance to patients, health insurers, and the federal government. One popular cost containment solution is encouraging the use of generic drugs over brand-name drugs. In general, utilization of generic medication is increasing in the United States. In 2011, 80 percent of the drugs dispensed in the United States were generic, compared to 63 percent in 2006. As more popular prescription drugs come off patent, more generic options will become available. In addition to being lower cost, generic drug utilization is associated with increased medication adherence, which can lead to fewer hospitalizations and emergency department visits. The Congressional Budget Office (CBO) estimated that substituting generic for brand-name drugs was responsible for $33 billion in savings in 2007 for Medicare Part D, the Medicare prescription drug benefit. The CBO also estimated a potential $4 billion in additional savings from increased generic substitution in seven drug classes.

Policymakers and health plans have explored several strategies to encourage beneficiaries to choose generic drugs over brand-name drugs. Some states require pharmacies to dispense generic drugs for the drug prescribed if available, and insurers have instituted higher copayments for brand-name versus generic drugs and employed a number of utilization management tools. These measures include requiring prior authorization for brand-name drugs or “step therapy,” which requires a beneficiary to first try a lower-cost drug before a higher cost alternative. There is considerable variation in benefit design among plans, especially in Medicare Part D.

In 2010, Jack Hoadley, Ph.D., collaborated with colleagues at Georgetown University, Social & Scientific Systems, and NORC at the University of Chicago on a HCFO-funded study that examined the extent of generic drug use in Medicare’s stand-alone drug plans for specific classes of drugs. They analyzed the impact of plan-level benefit design, formulary design, and overall pro-
gram design on use of generics. Their findings on statins used to treat high cholesterol were published in the October 2012 issue of Health Affairs.¹

According to Dr. Hoadley, “The goal of this project was to understand which approaches used by Medicare drug plans encourage consumers to use generic drugs, when appropriate, thus saving money both for themselves and for the Medicare program.”

Sample and Methods

Dr. Hoadley and colleagues used Medicare Part D drug events (insurance claims for prescription drug purchases) for 2008. They excluded beneficiaries with the following characteristics:

- Residing in U.S. territories
- Eligible for Medicare because of end-stage renal disease
- Not enrolled in the same drug plan for 12 months continuously
- Enrolled in plans other than stand-alone drug plans
- Younger than 65 and enrolled based on disability
- Enrolled in the Part D Low-Income Subsidy
- Without at least one prescription for a statin.

Those exclusion criteria created a study sample of 710,632 beneficiaries who took statins. The set of statins analyzed included 15 drugs (12 brand-name and three generic drugs).

Using a primary dependent variable of whether a beneficiary’s last statin prescription of the year was a generic drug, the researchers used logistic regressions to determine the association between various benefit and formulary design approaches and generic drug use. To evaluate the impact of benefit and formulary design, the researchers included variables that measured copayment levels set by the plan for different brand and generic drugs, as well as two imaginary variables to capture plan prior authorization and step-therapy requirements. They also controlled for beneficiary demographics including race, age, sex, original reasons for Medicare enrollment, and plan characteristics including premium, deductible, gap coverage, and use of a standard benefit design of 25 percent coinsurance for all drugs. The researchers also controlled for individual drug use measures and geography.

Results

The average copay for a generic statin in Medicare prescription drug plans in 2008 was $5.15 (ranging from approximately $0 to approximately $10), compared to the average copay of between $33.57 and $46.90 for several brand-name statins (ranging from approximately $20 to approximately $90). In terms of plan design, 62 percent of the sample had a step-therapy requirement for at least one brand statin, 27.3 percent had a prior authorization requirement, 9.8 percent had a standard benefit-design of 25 percent coinsurance for all drugs, and the majority lacked coverage for the doughnut hole. In terms of demographic information, two-thirds of the sample was female, half were urban residents, and almost all were white. In addition to statin drugs, the average beneficiary used approximately five other prescription drugs. The majority (two-thirds) of those other drugs were generics.

The researchers found that a variety of factors are related to rates of generic statin use. Charging any copay for a generic drug was associated with a 13 percent decreased probability of using a generic drug compared with no copay. In addition, charging a high copay for a brand-name drug had a modest, statistically significant impact on the probability of using a generic drug. The largest effect was seen with the brand-name drug Lipitor, which is the most used brand-name statin. Prior authorization and step-therapy requirements applied to brand-name statins were both associated with an increased probability of using a generic statin.

Finally, the research team created five sample drug plans, based loosely on actual Medicare prescription drug plans, which included different combinations of copayments and plan design characteristics. In general, the highest predicted rate of generic use was found in the plan with no copay for generic drugs and utilization management requirements. Conversely, the lowest predicted rate of generic use was found in the plan with generic copays, relatively low brand-name copays, and no utilization management requirements.

Limitations

There are several potential limitations to the study findings. These analyses only looked at the impact on statins, and may not be generalizable to other drug classes. Findings in the study were based on beneficiaries whose incomes were high enough that they did not qualify for the program’s Low-Income Subsidy. Different factors may influence use of statins for Low-Income Subsidy beneficiaries.

Additionally, Part D prescription drug plans do not include drugs purchased outside the health plan, including off-formulary drugs without a plan exception or generics purchased at a discount without using their plan benefit. Depending on the individual plan’s treatment of brand-name off-formulary drugs or discounted generics, the use of generics could be either overstated or understated in the results.

Additionally, some beneficiaries may have selected a drug plan specifically because of its coverage for a brand-name drug they are currently prescribed. This could result in endogeneity in the model or diluted results. Alternatively, beneficiaries could be using Medicare’s online Plan Finder, selecting a plan based on all medications prescribed, not just statins.

Health plans may use incentives (i.e., free samples or financial incentives) and information (i.e., patient or physician mailings) to encourage physicians or pharmacists to prescribe and dispense generic drugs.
Information on these factors was not available to the researchers, and therefore, their impact was not measured. Similarly, the researchers were unable to measure the impact of a beneficiary’s clinical history, financial resources, or level of education.

Finally, therapeutic substitution (switching from an on-patent drug to a similar off-patent drug with a generic option) requires a new prescription. If some patients fail to discuss options with their physician before receiving a prescription, it may limit the impact of cost sharing and other plan measures.

Discussion and Policy Implications
The results demonstrate that health plan benefit design has a strong impact on the use of generic drugs, especially low copays for generic drugs (the largest effect seen with no copay), copays for popular brand-name drugs Lipitor and Crestor, and the use of prior authorization and step therapy. The more aggressive the plan measures, the greater the impact on generic drug use.

Increasing generic drug use may result in significant cost savings for the Medicare program. The researchers estimated that a 10 percent increase in generic statin use (in place of brand-name use) would result in $1 billion in savings (shared by patients, plans, and the federal government). Potential savings will continue to grow as more popular statins go off patent.

While these predicted savings cannot be extrapolated to all classes of drugs (particularly mental health drugs where generic substitution is not as common), generic substitution in similar drug classes (e.g., drugs for hypertension, gastrointestinal conditions, and osteoporosis) could produce similar savings. Congressional Budget Office analysis is consistent with the study’s findings and underscores the importance of targeted plan design.

Part D health plans enjoy an autonomy that allows them the flexibility to structure effective formulary and benefit designs. These results provide a compelling case for health plans to consider zero copayments for generic drugs. For example, plans could target certain drug classes for increased generic use by implementing a system that includes two generic tiers and offering lower copayments. On the other hand, Medicare might consider creating incentives for health plans with performance measures or payment bonuses for increased generic rates.

Many health plans receive discounts in the form of rebates from manufacturers in exchange for directing plan enrollees to a particular brand-name drug. However, the researchers suggest that the potential savings to health plans may be greater for encouraging generic use.

Finally, the researchers reiterate the importance of considering the differences between drug classes when creating policies to encourage generic use. For some patients, brand-name drugs are the best clinical option, even when a generic option is available. Policies should not limit access for those individuals.

Conclusion
The use of generic drugs creates significant potential savings for Medicare, health plans, and individual beneficiaries. Using a combination of low copayments for generic drugs and utilization management tools, health plans could increase utilization and experience billions in savings for statins. Further research into this impact in other drug classes could uncover even more potential savings.

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Endnotes