

An Evidence-Based Approach TO BETTER HEALTH AND VALUE

A Discussion on:

Plan Design Check-Up

April 2010

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What Works, What Doesn't, and Why?

There are numerous trend management programs that plan sponsors can implement to encourage use of lower cost therapy alternatives. The tool most often overlooked is the structure of the pharmacy benefit. This determines how products are positioned on the formulary and subsequently, how member copayments are structured. To help understand the impact of benefit design and determine which structure is optimal in driving toward the lowest net cost, Express Scripts researchers analyzed the plan designs of 1,563 plan sponsors managed by Express Scripts in 2008 to evaluate the relationships between plan design and generic fill rate (GFR) and total utilization. The findings presented are designed as a guide for plan sponsors as they make decisions around the pharmacy benefit.

Step 1: Structuring Benefits

The structure of pharmacy benefits exerts a significant influence in driving the use of lower cost generics. A vast majority of plan sponsors structure benefits in one of two ways: flat dollar copayments and coinsurance. Flat dollar and coinsurance are further structured into tiers: one-tier, two-tier or three-tier. The most common tiered structure is three-tiered flat dollar copayments, with generics placed on the lowest tier, preferred brands the middle tier and non-preferred brands on the highest or third tier. One-tiered coinsurance uses the same coinsurance rate (e.g., 20% or 30%) for all medications and tiered coinsurance uses different rates based upon drug categories – generic, preferred and non-preferred brands, for example.

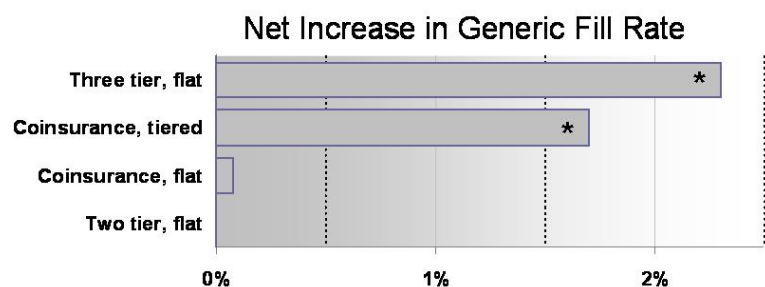
Our research found that plan sponsors with flat three tier plan designs had the highest GFR; on average 2.5 percentage points higher compared to plan sponsors with flat two tier or flat coinsurance.

This gain in GFR can result in significant savings for members and plan sponsors as a 1 percent increase in GFR is estimated to reduce plan sponsors total drug spend by up to 1.7%.ⁱ

While three-tiered plan designs are more effective in encouraging use of generic medications, plan sponsors are attracted to coinsurance because drug price increases (i.e., inflation)

Optimizing Benefit Design

Three-tier optimal choice framework



* p <0.05 compared to flat 2-tier

Source: Express Scripts Internal Research, 2009

Pharmacy benefit options

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that occur during the benefit year are shared between member and plan sponsor, holding down trend for plan sponsors and negating the need to make copayment changes annually or bi-annually to keep up with price increases.

However, inflation is only one component leading to increased per member per year (PMPY) spend, and structuring benefits in a way that encourages greater generic use will have a greater impact on lowering PMPY spend in the long run. The average cost of a generic medication is approximately \$90 less than a branded medication.

As reported at the 2009 Express Scripts Outcomes conference, inflation for brand medications was 7.4% in 2008, while prices for generic medications dropped by 9%. Therefore, shifting to lower cost generic medications can offset brand inflation by shifting to lower cost products and products with lower rates of inflation.

The benefit design that resulted in the lowest GFR was two tier-flat copayments. Plan sponsors that prefer to remain with flat two-tier structures may choose to manage their costs by excluding the non-preferred brands from the second tier (closing the non-preferred brands). This provides an incentive for the member to select a lower cost therapeutic alternative. Although plan sponsors with flat three tiered plans had the highest GFR, those with tiered coinsurance also had significantly higher GFRs over plan sponsors with flat two-tiered or flat coinsurance. Plan sponsors with flat coinsurance rates may consider adding coinsurance tiers to distinguish between lower and higher cost products.

Step 2: Structuring Member Copayments

There are many factors that should be considered when determining actual member cost share, and we have discussed these in the “General Rules of Benefit Design” white paper. The goal of benefit design should be to set copayments in such a way as to influence behavior toward the most cost-effective drug product. Our research has found that copayment differentials are a key driver in influencing the use of lower cost agents. In a three tier copayment design, there are two copayment differentials to consider – the differential between generic and preferred brand, and the differential between preferred and non-preferred brands.

Not surprisingly, as the copayment differential between generic and preferred brand increases, a greater incentive for the member to utilize a generic medication is created. Our research found that compared to plan sponsors that provided little incentive for members to choose generics (differentials under \$5), plan sponsors with generic/preferred brand differentials from \$15 to \$20, saw a GFR almost 4 percentage points higher.

Differentials greater than \$20 resulted in even higher increases in GFR, however this increase was driven more by a greater overall drop in brand use than an increase in generic usage. This decrease in brand usage at higher differentials (i.e., higher brand copayments) was seen for both discretionary and non-discretionary therapy

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classes. Setting copayments beyond members' ability to pay tends to reduce compliance. Therefore, to optimize compliance rates, we caution plan sponsors from implementing differentials higher than \$20.

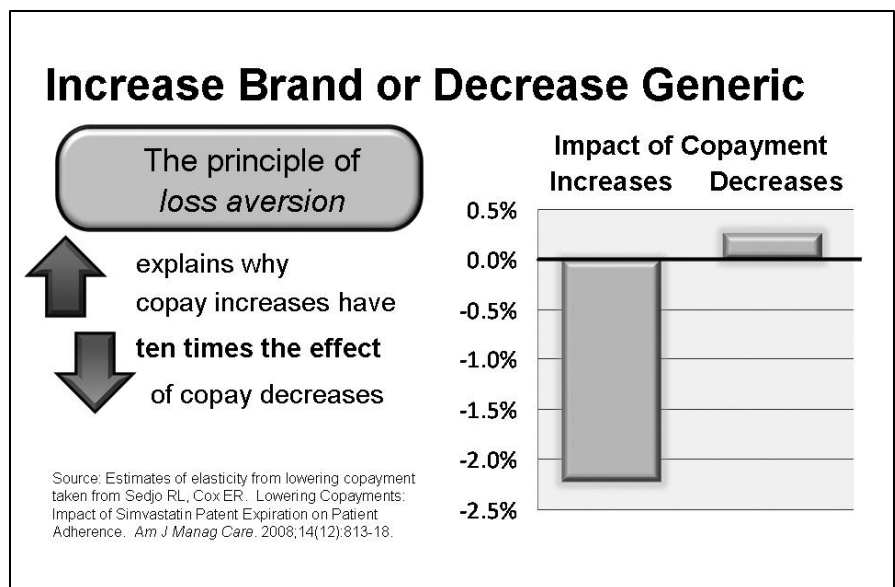
Similarly, the optimal preferred/non-preferred brand differential was found to be at least \$15 and no more than \$20. Therefore, for plan sponsors with a flat three-tier benefit design, Express Scripts recommends a copayment differential between \$15, and \$20, for both generic/preferred brand and preferred/non-preferred brand. Plan sponsors with a flat two tier benefit should also set the copayment differential for generics and preferred brands between \$15 and \$20.

While the focus of our recommendations is on the differential, we also recommend that plan sponsors keep the generic copayments low – ranging from \$7 to no more than \$10. This helps to assure that a low cost alternative is available for members. These ranges would set preferred brand copayments within the range of \$22 to \$30, and non-preferred copayments would be from \$37 to \$50. Clients may choose to set the generic copayment at a rate lower than \$7 (where it is financially feasible).

How to optimize the differential? Increase brands, decrease generics or both?

There are several ways to optimize the differential: increase the brand copayment, decrease generics or both. Does choosing one strategy over another make a difference? Yes, it does for a couple of reasons. First, if you want to encourage members to switch to generics, the best strategy will be to target the brand product by increasing its copayment if the copayment has not been set to the maximum of its price range.

The other reason to focus on increasing the brand rather than decreasing the generic is related to the behavioral principle of loss aversion. Let's examine this in more detail. The metric used to represent the relationship between price and demand is called price elasticity of demand, and is expressed as the relative change in quantity demanded over relative change in price. Numerous studies have found that the price elasticity



Increasing brand pricing leads to greater impact than decreasing generic pricing

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of demand for prescription drugs is inelastic, ranging from -0.18 to -0.60. This means that the relative change in quantity demanded is always less than the relative change in price. For example, a 10% increase in price or copayments leads to a 1.8% to 6.0% decrease in utilization, all else equal.

So what happens when copayments are decreased? Classical economics would predict that copayment reductions would lead to comparable increases in compliance. However, recent research has found only modest gains in utilization from copayment decreases with elasticities ranging from 0.02 and -0.02 for copayment reductions of \$0 to \$5 and >\$15, respectively.ⁱⁱ These price elasticity estimates from lowering copayment are significantly smaller than the estimates obtained from studies examining price increases.

So why did we find much less price sensitivity when prices decrease than when prices increase? Greater response to copayment increases than to decreases is supported by one of the most well documented principles of behavioral economics: aversion to losses.ⁱⁱⁱ This theory indicates that patients will have a more pronounced demand response when required to increase their contribution than when they pay less than their usual cost.

And when it comes to monetary gains, it is estimated that a loss can be valued twice as great as a similar gain. So our recommendation to optimizing the differential is first consider increasing the brand. If generic copayments are set too high, plan sponsors may also want to consider adjusting both the generic and brand copayments to drive toward optimal use

Some Final Thoughts

While financial incentives are important, they are not the only factor influencing member behavior. Most people understand that generics are less expensive.^{iv} With proven safety and efficacy, they are clearly a smart choice. But if these decisions were based on rational choice alone, there wouldn't be \$42 billion in potential savings left untapped. Because the choice of a prescription drug is not a purely rational decision for the doctor or the patient, it's important to provide additional programs like Step Therapy to direct patients to the most cost-effective medication. Our research found that plan sponsors who implemented 10 or more step therapy programs saw an added 4 percentage point increase in GFR.

It is equally important to engage and educate members as changes are made to their benefit. Express Scripts has shown that targeted member education helps to direct members to optimal lower cost therapies when their plan design changes.^v

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What to do next?

We recognize that setting copayments and plan design is a complex decision. We also recognize the important role that getting it right plays in driving to optimal drug use. That's why we have account teams and benefit consultants to guide you through the process.

For more information or to receive your own plan design 'check up,' please contact your account team.

ⁱ Express Scripts internal data and research.

ⁱⁱ Sedjo RL, Cox ER. Lowering Copayments: Impact of Simvastatin Patent Expiration on Patient Adherence. *Am J of Managed Care*. 2008;14(12):813-81.

ⁱⁱⁱ Tversky A and Kahneman D. Loss Aversion in Riskless Choice: A Reference-Dependent Model. *Quart J Econ*. 1991;106(4):1039-61.

^{iv} Shrank WH, Cox ER, Fischer MA, Mehta J, Choudhry NK. Patients' Perceptions of Generic Medications. *Health Affairs* 28, no. 2 (2009): 546-556.

^v Delate T, Henderson RR. Effect of patient notification of formulary change on formulary adherence. *J Manag Care Pharm*. 2005 Jul-Aug;11(6):493-8.