

# Pharmaceutical Reference Pricing: Does It Have a Future in the U.S.?

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### ABSTRACT

**ISSUE:** Reference pricing is an emerging health insurance benefit design aimed at reducing health costs. In this model, an insurer establishes a maximum payment that it will contribute toward covering the price of a product or service in situations where there is wide price variation for therapeutically similar drugs, diagnostics, or procedures. Experiences to date indicate that reference pricing can influence patients and physicians to switch to less costly options within each therapeutic class, reducing overall drug prices.

**GOAL:** Describe how reference pricing can be and has been applied to drugs in the United States and compare it to more conventional pharmaceutical benefit designs such as tiered formularies and coinsurance.

**METHODS:** Assessment of peer-reviewed research and the experiences of employers that have used reference pricing.

**FINDINGS AND CONCLUSIONS:** To appropriately motivate price-conscious consumer choice, reference pricing must include up-to-date information. Consumers and physicians must have access to the prices charged at different distribution sites and for different drugs within each therapeutic class. Reference pricing also must include information on quality. Several modifications to the reference pricing model should be made before it can be adapted to specialty drugs, and those changes should be informed by comparative effectiveness research.

### TOPLINES

- ▶ Reference pricing, implemented in Germany and now being piloted in the U.S., can reduce spending on prescription drugs and medical procedures.
- ▶ To work as intended, reference pricing requires that insurers, physicians, and consumers have up-to-date information on pharmaceutical prices and on the comparative effectiveness of similar drugs.

## INTRODUCTION

In the U.S. health care system, the prices charged for similar goods and services typically are high and vary widely. Such price variation reflects weak cost-consciousness on the part of purchasers and weak competition on the part of producers. Reference pricing is an emerging structure of benefit design under which the insurer or employer establishes a maximum contribution it will make toward the price of a drug or procedure, and the patient pays the remainder. It is typically used where there is wide price variation among therapeutically similar drugs, diagnostics, or procedures. The insurer sets a payment limit at the minimum, median, or other point along the range of prices within a market or therapeutic class. For a product priced at or below the reference limit, patients pay only a modest copayment; for more expensive options, patients pay the full difference between the reference limit and the price of their chosen product.

Reference pricing has been used for drugs in Germany and several other European nations.<sup>1</sup> It also has been piloted in the United States for surgical and diagnostic procedures, including joint replacement, colonoscopy, and advanced imaging.<sup>2</sup> Some self-insured employers and labor union trusts have now applied it to drug pricing. This issue brief describes how reference pricing is being applied to drugs in the United States and compares it to more conventional pharmaceutical benefit designs, such as tiered formularies and coinsurance.

## IMPLEMENTATION OF REFERENCE PRICING BY A PRIVATE EMPLOYER COALITION

In July 2013, the RETA Trust, a national association of 55 Catholic organizations that purchases health insurance for their employees, implemented reference pricing for outpatient drugs as a part of an effort to sensitize enrollees to the cost of care.<sup>3</sup> RETA previously used a tiered formulary that required a \$10 copayment for generics and a range of copayments and coinsurance levels for branded drugs.

## REFERENCE PRICING COMPARED TO TIERED FORMULARIES

Pharmaceutical reference pricing is an alternative to *tiered drug formularies*, the dominant model used by payers in the United States. In the tiered model, purchasers and their agents, principally pharmacy benefit managers (PBMs), negotiate price rebates from drug manufacturers in exchange for favorable formulary placement within three tiers:

- *tier 1*: generic drugs, with consumer copayments of \$10 to \$20 per prescription.
- *tier 2*: branded drugs that have a substantial rebate, with consumer copayments of \$25 to \$50 per prescription.
- *tier 3*: branded drugs with no rebate; consumers are liable for high copayments (\$50–\$100) or coinsurance percentages (e.g., 20%–35%).

Tiered formularies have helped moderate drug spending but now may be losing their effectiveness. Although consumers' cost-sharing within a tier is uniform, the drug prices paid by PBMs may vary widely because of several recent trends. Some generic drug makers have exploited supply bottlenecks and dramatically raised prices for tier 1 drugs. As well, some branded drugs in tier 2 have scant rebates because they face few rivals within their therapeutic class.

Overall, tiered formulary designs do not reward consumer sensitivity to drug price variations within a tier. They also attenuate consumer price sensitivity across tiers, because patients never pay more than tier 3's higher copayments or coinsurance. But actual drug prices may vary by hundreds or even thousands of dollars per prescription.

Under *reference pricing*, at least one drug in each therapeutic class is set as the reference product. The reference price can be set for the cheapest in the therapeutic category, or, it can be set at an intermediate point on the distribution of prices (in Germany, for example, it is set at the 30th percentile). For that drug, patients are charged a standard copayment (e.g., \$10).

Patients who choose a higher-priced drug have higher cost-sharing; they pay the standard copayment as well as the difference between the drug's price and the reference price. These drugs may be more expensive than the same drug under the tiered formulary model. In reference pricing, one or more drugs qualify for the low standard copayment. In comparison, in tiered formularies some therapeutic classes require percentage coinsurance or deductibles for all drugs.

For patients who need a nonreference drug because of special clinical circumstances, physicians can fill out a form that exempts patients from the extra cost-sharing.

The Trust was paying dramatically different prices for drugs within the same therapeutic class, as a result of aggressive price increases by both branded and generic manufacturers. The median monthly price varied by \$222 between the least and most costly drug within the 30 therapeutic classes that had the highest prescription rates.<sup>4</sup> Prescriptions for the lowest-priced drug ranged from less than 1 percent to 61 percent of prescription volume in those classes, data that illustrate the limited ability of RETA's traditional tiered formulary to motivate price-conscious choice.

Following implementation of reference pricing, the average price paid by RETA decreased by 14 percent. The model generated \$1.3 million in RETA employer savings, and there was a 5.2 percent increase in enrollees' cost-sharing.

## LIMITATIONS AND EXTENSIONS OF REFERENCE PRICING

The RETA study suggests that reference pricing potentially offers meaningful savings for purchasers in the United States. Those savings, however, burdened patients with higher cost-sharing. It should be emphasized that reference pricing has several key limitations and is no panacea for the challenges of drug purchasing.

To appropriately motivate price-conscious consumer choice, reference pricing requires up-to-date information on the prices charged at different distribution sites (e.g., retail pharmacies, supermarkets, or mail order channels) and for different drugs within each therapeutic class. Ideally, drug price information should be available to physicians through their electronic information systems at the time of prescribing, so that they can select the low-priced alternative or request an exemption from reference pricing if it is clinically indicated.

When applied to heterogeneous procedures or heterogeneous classes of drugs, reference pricing requires information on quality as well as price. Such information typically is incomplete at best and sometimes completely absent. It should be noted, though, that the scarcity of up-to-date quality information is a challenge for every

effort to improve decision-making in health care. The availability and usefulness of quality information will improve over time, giving consumers an incentive to use it.

Reference pricing targets the price of the drug, not its appropriateness for the patient's condition. Unfortunately, the U.S. health care system is characterized by both overprescription and underprescription, because of excessive drug marketing, distorted incentives, and lack of affordability. Reference pricing should be embedded in a larger system of consumer-directed information and incentives.<sup>5</sup>

The current structure of reference pricing targets individual components of care, such as drugs, tests, and procedures. Price-conscious choice, however, is best directed at the patient's entire course of care rather than at individual components. In cases where physicians and facilities accept financial and clinical accountability for entire episodes of care, reference pricing could be designed to create incentives for patients to choose among organizations providing that care.

In general, consumer incentives such as reference pricing should be coordinated with provider incentives such as bundled payments. Incentives that encourage patients to choose the low-priced drug within a therapeutic class should not conflict with physician incentives to prescribe expensive drugs. Some insurers are experimenting with alternative payment models that balance fee-for-service incentives, which increase costs, with incentives that lower the total cost of care, such as shared savings.

## THE REFERENCE PRICING ROADBLOCK

Despite its limitations, reference pricing is effective in reducing spending across a range of products and procedures.<sup>6</sup> But if reference pricing is so effective, why has it not been more broadly adopted by employers and pharmacy benefit managers (PBMs), the principal purchasers of drugs in the United States?

For the past decade, most employers have relied on tiered formularies, with rising levels of copayments and coinsurance, to moderate drug spending. This strategy

has been relatively successful in shifting utilization from brand to generic drugs, thereby taking advantage of the expiring patent protection of several blockbuster drugs. But tiered formularies may be reaching the limits of their effectiveness, as pharmaceutical firms both dilute their tiered incentive structure through such consumer support programs as copayment coupons, and raise drug prices within tiers. Some employers are revamping insurance designs to extend deductibles to pharmaceutical as well as medical services, thereby exposing patients to the full cost of the drugs they use. This strategy shifts financial risk onto patients, since they pay the nondiscounted list price of drugs at the pharmacy and usually do not benefit from any rebates negotiated by insurers and PBMs. These cost-sharing strategies increase patient noncompliance and nonadherence and put financial strain on patients and their families. In contrast, reference pricing always provides a low-priced option (the reference drug) within each therapeutic category while encouraging cost-conscious consumer choice for other options.

PBMs have developed a successful business model that centers on negotiating drug price rebates rather than discounts. In some cases, PBMs retain part of the rebate. They also can pass the full rebate to the employer, but then charge an administrative fee that is linked to the savings (measured as the sum of those rebates) they generate. PBMs thus benefit when patients choose high-priced drugs that offer high rebates rather than when they choose low-priced drugs that offer smaller rebates. Reference pricing, in contrast, creates incentives for patients to select low-priced drugs. For reference pricing to be adopted widely, PBMs must find a way to incorporate the strategy into their business model, document and take credit for the associated savings, and be paid for their services accordingly.

### **THE HORIZON FOR REFERENCE PRICING: SPECIALTY DRUGS**

Pharmaceutical reference pricing to date has been applied only to well-established treatments for common medical conditions, and not to specialty drugs. Traditional medications still account for most drug spending in the

United States but are rapidly being displaced in economic terms by specialty medications. Specialty drugs treat severe but less common conditions such as cancer, immunological and neurological disorders, and rare “orphan” illnesses. They are much more expensive than traditional drugs. Competing specialty drugs may have different mechanisms of action, modes of administration, or other features that make it difficult for physicians and patients to switch among them based on price.

To be adapted to specialty drugs, reference pricing should incorporate evidence from comparative effectiveness research on the incremental benefits and risks of each new drug. The employer or insurer would then translate these clinical differences into structured payments under the reference pricing model. Consumers would pay more for a more expensive drug — but only to the extent the higher price was not justified by a commensurate clinical benefit. Patients should have low-cost access to low-priced products within each therapeutic class. As well, they should have low-cost access to high-priced products whose superior clinical performance justifies the higher price. If the patient’s preference for a more expensive drug is not based on clinical performance or a special need, however, the patient should pay the difference in price. The patient retains the right to choose, but a right that is tempered by responsibility.

### **CONCLUSION**

For reference pricing to work as intended, it must meet several conditions. First, insurers must have access to up-to-date information on drug prices. Second, consumers and physicians must have access to the prices charged at different distribution sites, as well as the prices for different drugs within each therapeutic class. Third, information on quality as well as price is needed. In addition, when adapting reference pricing to specialty drugs, some modifications will most likely be necessary. Although higher prices for specialty drugs may be justified when they demonstrate clinical superiority over traditional drugs, more comparative effectiveness research is needed to determine if and when higher price points are appropriate.

## HOW THIS STUDY WAS CONDUCTED

This issue brief is based on interviews with a wide range of participants in pharmaceutical and medical reference pricing, including employers, labor unions, insurers, and drug firms. It builds on a meeting for self-insured employers and labor unions held at the Harvard Club in New York in October 2017, sponsored by the Northeast Business Group on Health and the Commonwealth Fund. The econometric research focused on the RETA Trust experience was conducted at the Berkeley Center for Health Technology and published in the *New England Journal of Medicine*, August 17, 2017.

## NOTES

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