

Potential Impact of Pharmaceutical Industry Rebates on Medication Adherence

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Many patients struggle to take their prescription medications as prescribed. Medication nonadherence is a complex, global phenomenon that has been well described in both scholarly literature and the lay press.¹⁻⁶ Multiple interacting factors influence medication nonadherence, including healthcare system factors, health condition factors, patient factors, therapy-related factors, and social and economic factors.⁷ The cost of medications, particularly a patient's out-of-pocket cost, spans several of these domains. When patients have high out-of-pocket costs, there are implications for access to prescription medications. Cost-related medication nonadherence can occur at many different phases of adherence,⁸ including problems with (1) initiation (eg, not filling the first prescription because of high out-of-pocket costs), (2) implementation (eg, delaying a prescription refill or stretching out doses to compensate for high out-of-pocket costs), and (3) discontinuation (eg, stopping a medication early without clinical recommendation to reduce cost). Medication nonadherence can lead to poorly controlled symptoms, disease recurrence, morbidity, and mortality. These negative clinical outcomes drive up healthcare costs.^{9,10}

Various options for reducing patient out-of-pocket costs have been proposed and debated,¹¹ including using fixed co-payments in place of percentage-based coinsurance and implementing annual out-of-pocket maximums to limit exposure to catastrophic costs. Another option involves directly sharing manufacturer rebates with patients to lower their out-of-pocket costs at the pharmacy counter. A rebate is a form of discount or price concession in which part of the purchase price of a medication is returned to the purchaser—in this case, typically the insurer or pharmacy benefits manager (PBM). Rebates are widely used across industries (eg, pharmaceutical manufacturers, tourism taxes, automobile manufacturers) in negotiations between sellers and buyers for a particular product.

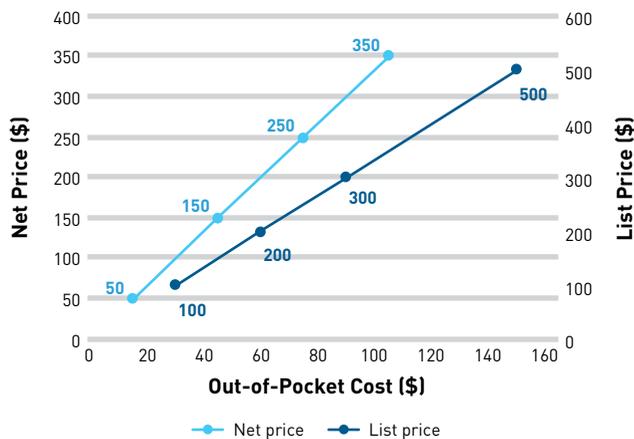
Medication rebates play an important role in the current US pharmaceutical marketplace. For example, among classes of medications with various competing therapies, such as insulins, negotiated rebates can lower the list price of a medicine by up to 70%.¹² Across all brand medications, in 2017, IQVIA reported

ABSTRACT

Many patients struggle to take their prescription medications as prescribed. Multiple interacting factors influence medication nonadherence. The cost of medications, particularly a patient's out-of-pocket cost, spans several of these domains. One proposed option for reducing a patient's out-of-pocket cost involves directly sharing manufacturer rebates with patients to lower their out-of-pocket costs at the pharmacy counter. Rebates are widely used across industries (eg, pharmaceutical manufacturers, tourism taxes, automobile manufacturers) in negotiations between sellers and buyers for a particular product. Medication rebates play an important role in the current US pharmaceutical marketplace. However, rebate contract terms are not publicly reported, so it is difficult for patients to determine if, and how, a rebate is reflected in their out-of-pocket costs. This commentary addresses the role of rebates in the current US healthcare landscape and their relationship with medication adherence.

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FIGURE. Out-of-Pocket Cost of Medication Based on 70% Manufacturer Rebate



that discounts, rebates, and other price concessions reduced list prices by approximately 30%.¹³ However, rebate contract terms are not publicly reported, so it is difficult for patients to determine if, and how, a rebate is reflected in their out-of-pocket costs. In fact, more than half of commercially insured patients' out-of-pocket spending for brand medicines is based on the full list price, which does not reflect the rebates and discounts received by the health insurer. Instead, health insurers most often use rebates to lower premiums for their enrollees and have been slow to directly apply savings from rebates to reduce the out-of-pocket costs for patients whose medicines generate those rebates.^{14,15}

In the current US healthcare system, savings from rebates are typically experienced at 2 levels—first by PBMs and then by plan sponsors or health insurers. An insurer hires a PBM and the PBM oversees the operation of the prescription medication benefit on behalf of the insurer. The PBM is essentially a middleman that works with pharmaceutical companies to develop a formulary of covered medicines, negotiate the price of those medications with the pharmaceutical manufacturer, and process claims for medicines submitted on behalf of the plan's enrollees. PBMs use a number of tools to manage spending on medicines on behalf of the plan, including determining which medicines are covered, the tier placement and cost sharing for covered medicines, and the use of utilization management, such as prior authorization or step therapy, for some medicines. As part of negotiations between a PBM and a pharmaceutical manufacturer, the manufacturer often provides a rebate to the PBM in the form of an agreed-upon percentage of the list price of a product in exchange for favorable coverage for their medicine. A higher rebate can mean that a medicine is placed on a tier with lower cost sharing or is not subject to utilization management. In exchange for managing the pharmacy benefit and negotiating rebates, the PBMs often keep a portion of the rebate and pass the rest on to the insurance plan.

This system has given rise to 2 major concerns. First, there is growing recognition that PBMs' ability to retain rebates that are calculated as a percentage of a product's list price may incentivize PBMs to favor medications that have a high list price and accordingly high rebates. Some have questioned whether formulary and co-payment decisions are often made based on medication list prices and profits from rebates, rather than on clinical appropriateness or patient-centered, holistic assessments of the costs and benefits of drugs.¹⁶

Second, rebate savings are typically not extended to the end user, the patient, in the form of lower out-of-pocket costs at the pharmacy counter (Figure). As the policy debate over medication rebates persists,^{17,18} the opportunity to reduce patient cost sharing by sharing rebates and the potential opportunity to improve adherence should be considered. To our knowledge, little attention has been paid to the impact that sharing rebates with patients at the point of sale could have on patients' medication adherence.

A long-standing body of literature suggests that out-of-pocket cost is a key driver of patients' medication nonadherence and is linked to poor health outcomes and greater healthcare costs.¹⁹⁻²¹ Thus, if rebate savings are passed on to patients at the point of sale, potential improvements in cost-related nonadherence could result, thereby reducing instances of costly hospitalizations and other medical care. This opportunity does not exist in today's system. Today, incentives from rebates are realized by PBMs and insurers, who use the savings to lower premiums for all enrollees, rather than reduce high out-of-pocket costs for the patients whose prescriptions are generating the rebates. Spreading the rebate to all enrollees essentially creates a system of "reverse insurance" in which rebate incentives lower premiums for all patients in the insurance pool, most of whom are healthy. Rebate incentives are not targeted toward patients with chronic diseases, yet it is often patients with chronic diseases who purchase the medications that carry negotiated rebates. This reverse insurance creates a dynamic in which the sick, particularly those with comorbid chronic conditions, subsidize the healthy. To make rebates beneficial to individual patients, the value of rebates needs to be transparent at the point of care when purchasing the medication.

To illustrate the effect of sharing rebates with patients, let's consider Mr Doe, a 47-year-old man with type 2 insulin-dependent diabetes and hypertension enrolled in a high-deductible plan. When reviewing insurance plan brochures, he might make a simple comparison across insurance providers and compare plans based on premiums. However, premiums are only a fraction of his ongoing healthcare costs. Mr Doe might not fully consider the cost-sharing component for his diabetes medications. The list price for insulin can be as high as \$500 per fill. If Mr Doe has not yet hit his annual deductible, he must pay the full \$500 list price, even though his health plan may be receiving a rebate of, say, 60%. If Mr Doe's out-of-pocket costs were established as a function of the price net of the rebate instead of the list price, that same drug could cost him \$200 in the deductible, a difference of \$300. This reduction

in out-of-pocket costs has important implications for medication adherence. Patients are sensitive to changes in out-of-pocket costs.²²⁻²⁴ Among patients with type 2 diabetes, an out-of-pocket cost threshold of \$51 to \$75 has been identified as the amount at which adherence is significantly reduced.²² For many patients, such as those with multiple medication co-payments or those on a fixed income, this threshold may be much lower.

Additionally, if negotiations between the PBM and the pharmaceutical manufacturer result in a lower negotiated rebate for a particular medicine for the next plan year, the health plan may decide not to cover that medication or may move it to a higher cost-sharing tier. This change in coverage may affect both access and cost of medications for Mr Doe, who may be unaware of coverage changes until he experiences a problem during the prescription refill process, potentially leading to delays in taking medication, switches in medication, or discontinuation. Using rebate savings to lower patient out-of-pocket costs has benefits for Mr Doe. As a result of the change in out-of-pocket expenses, he may be more likely to adhere to his prescriptions, which in turn may lead to fewer costly acute healthcare events.

Many actions could improve the current system of manufacturer rebates, with an eye toward improving patients' out-of-pocket cost-related nonadherence. Our recommendations include increasing awareness of the current system with the goal of also increasing transparency about prescription medication costs, the amount of price reduction available through rebates, and who realizes these price reductions. Second, health services research is needed to better evaluate how much financial benefit individual patients receive from manufacturer rebates and how this affects their medication-taking behaviors, including adherence and timing of prescription refills. Third, these data should be used to inform evidence-based healthcare policies that are patient-centered and adapted to support enhanced price transparency. The ultimate goal would be that patients have access to rebate-driven savings and that information is known at the point of care. ■

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