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Financial Incentives and Drug Spending in Managed Care

Editor's note: Pharmaceutical costs have been rising dramatically since 1995, growing 16.6% in 1998 alone. This rate of increase is more than four times that of all health care spending. Employers, managed care organizations and consumers are looking anew for ways to stem these rising costs, without denying patients effective care. Therefore, this Issue Brief is especially timely because it investigates how patient copayments and financial incentives for physicians affect drug spending in managed care.

Managed care plans use different mechanisms to control prescription drug costs

As prescription drug expenses take up more of premium revenues (up from 5.4% in 1990 to 11.4% in 1997), health insurers and managed care plans have tried various methods of controlling these costs. Some mechanisms focus on the physician, while others target the patient. They include:

- administrative controls, such as formularies (lists of approved drugs), and drug utilization review (review of expensive prescriptions or prescribing patterns, with feedback to physicians about appropriateness).
- patient cost-sharing, in the form of flat fee copayments, annual deductibles that must be met before coverage begins, or annual dollar caps (maximums) on the amount of prescription drugs covered per person. Some plans encourage generic substitution by having higher copayments for brand-name drugs when a generic is available.
- physician financial incentives that put physicians at financial risk for the drugs they prescribe. This can be accomplished by including prescription drug costs in capitated payments to physicians, or by using drug costs in calculations of bonuses or withheld amounts for physician payments.

New study helps to understand how patient and physician financial incentives affect drug use

Patient cost-sharing and physician financial incentives are widely used by managed care plans. But do these mechanisms control drug spending? Previous studies have focused on Medicaid or Medicare recipients, and have not answered this question in middle-class populations. Hillman and colleagues conducted a study to look at both mechanisms, and the interaction between them.

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- The study used claims data from nine health plans in six states, managed by United HealthCare Corporation. Study subjects were enrollees in employer-sponsored group plans.
 - Five plans were independent-practice association (IPA) models, in which physicians were paid fee-for-service. The IPA-plan physicians had no financial incentive to control drug spending.
 - Four plans were network models, in which primary care physicians were paid on a capitated basis. The capitated amount covered the cost of all ambulatory services, including drugs. Therefore, network plan physicians had a financial incentive to control drug costs.
 - Each plan had differing levels of patient cost sharing for drugs. Patients paid a flat fee (ranging from \$2 to \$10) at the time of filling or refilling a prescription at a retail pharmacy. These copayments did not differ for generic vs. brand-name drugs.

Higher drug copayments led to lower drug spending in IPA plans, but had no effect in network plans

In IPA plans, where physicians had no financial incentive to control drug spending, higher copayments for drugs were associated with lower drug spending. In network plans, however, where physicians had incentives to control drug spending, patient copayments had no significant effect.

- Even a modest increase in copayment levels had an effect in IPA plans. For example, increasing the copayment from \$5 to \$7.50 led to a 12.3% reduction in drug spending.
- At all levels of drug copayments, IPA plans spent more on drugs per member than network plans. For example, annual drug spending per member with a \$2 copayment was \$229 in IPA plans, vs. \$145 in network plans; at a \$10 copayment, IPA plans spent \$139, vs. \$125 in network plans. Drug spending decreased more rapidly in IPA plans in response to higher copayments.
- A \$10 copayment in an IPA plan is almost as effective at controlling drug spending as switching physicians from fee-for-service to capitated payment, since annual drug spending per member at a \$10 copayment is close to what network plans spent at any level of copayment.

Copayments in IPA plans worked by reducing quantity of prescriptions filled, not price

Financial incentives can affect drug spending by reducing the number of prescriptions filled, or by reducing the price per prescription filled.

- IPA plan members had a higher prescription quantity than network members, but there was no difference in the average price of the prescription.
 - In both plan types, higher drug copayments were associated with fewer prescriptions, and with an increased average price of a prescription.
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Copayments in IPA plans reduce the likelihood of having any drug claims, as well as the average amount spent per person with some drug spending

The study investigated whether copayments primarily affect members with high drug utilization, or reduce the likelihood of members receiving any prescriptions at all.

- In IPA plans, members with higher copayments were less likely to have any drug claims. Members with a \$2 copayment had a 60% likelihood of any drug claim in one year. This dropped to 46% for members with a \$10 copayment.
- In IPA plans, members with at least one drug claim had lower annual drug spending at higher copayment levels. Members with a \$2 copayment and at least one claim had average annual drug spending of \$385. This dropped to \$303 for members with a \$10 copayment.
- Copayments in network plans had no significant effect on the likelihood of having a claim, nor on the average amount spent per member with at least one claim.

Higher copayments for office visits led to lower drug spending in both IPA and network plans

The study also investigated how member cost-sharing for office visits affected drug spending. Do patients and physicians substitute drugs for office visits when copayments are high? Or do higher physician-visit copayments discourage office visits and consequently, the prescriptions that often accompany visits?

- For office visits, patients paid a flat fee (up to \$22) at the time of the office visit. At all levels of physician-visit copayment, drug spending was higher in IPA plans.
- The effects of physician-visit copayments on drug spending is considerably smaller than the effects of drug copayments. For example, increasing the copayment from \$5 to \$7.50 led to a 2.8% reduction in drug spending in IPA plans, and a 1.8% reduction in network plans.
- These results suggest that prescription drugs are complements to, rather than substitutes for, office visits.

INTERPRETATION: Both patient cost sharing and physician financial incentives can control drug spending

Financial incentives directed at patients and those directed at physicians have independent effects, but also interact with one another.

- These findings suggest that one way to reduce drug spending is to make physicians bear risk for the cost of drugs they prescribe. Another way of achieving this goal without putting physicians at risk is to require modest levels of patient cost sharing.
 - If physicians' motivation to curb drug spending is low, as in the IPA plans, their willingness to write prescriptions is high. In that case, patient copayments may have an important impact, as patients request fewer prescriptions or decide not to fill prescriptions they regard as discretionary.
 - If physicians' motivation to curb drug spending is high, as in the network plans, they may be limiting prescriptions to clearly indicated drugs only. In that case, patient copayments would have little or no impact, since the level of discretionary or elective drugs is already low.
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POLICY IMPLICATIONS

This study helps to fill in the still incomplete picture of how financial incentives for both patients and doctors affect prescription drug use.

- Managed care organizations should consider the context in which patient copayments are used to control drug expenditures. Increasing patient copayments, for example, is not likely to be effective when primary care physicians are at risk for the drugs they prescribe.
- On the other hand, an exclusive focus on physician financial incentives will not address the consumer demand for drugs, which may be increased through heavy marketing practices. In 1998, pharmaceutical firms spent an estimated \$1.3 billion on consumer advertising in the U.S.
- The critical challenge is to determine the effects of these financial incentives on outcomes of care, a question not addressed by the study. Further research is needed to determine whether drugs with small effects on health, large effects on health, or both, are sensitive to such incentives.

This Issue Brief is based upon the following article: A.L. Hillman, M.V. Pauly, J.J. Escarce, K. Ripley, M. Gaynor, J. Clouse, R. Ross. Financial Incentives and Drug Spending in Managed Care. Health Affairs, March/April 1999.

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