Study proves the co-pay connection in chronic disease

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As 2008 begins, millions of Americans are having to dig deeper into their own pockets every time they refill a prescription or see a doctor. The reason? Higher co-payments that took effect January 1, as employers try to deal with the rising cost of health insurance by making employees and retirees pay more.

But a new study finds that instead of going up, co-pays should go down – at least for some people taking some drugs.

Just by cutting a few dollars off the co-pay, the study suggests, employers could increase the chances that employees with chronic illnesses will take certain preventive medicines. And that could pay off in the long run, in the form of fewer hospitalizations or emergency room visits for employees with diabetes, high blood pressure, asthma and other conditions.

Specifically, the study showed that a major private employer significantly increased the use of important preventive medicines among its employees by automatically making some medications free, and slashing co-pays for other drugs by 50 percent. Meanwhile, another employer that kept its co-pays the same didn't experience the same increase in use of preventive medicines.

The difference in medication use between chronically ill employees at the two companies was sizable -- even though all the employees in the study were also enrolled in special programs designed to help them take

control of their diseases.

The study is published in the January/February issue of the journal *Health Affairs* by a team led by University of Michigan and Harvard University researchers. It is the first rigorous, controlled trial of a concept called “value based insurance design.”

That concept, introduced in the late 1990s by members of the research team, is based on the idea that there should be few barriers standing between a chronically ill person and the medications that can keep them well enough to work and to avoid health crises and complications related to their disease. Even a barrier of a few dollars is enough to keep people from using the medicines they need the most.

“All research to this point has shown that individuals will not buy important medical services even if there’s a small financial barrier: $5 or even $2,” says senior author Mark Fendrick, M.D., of the U-M Medical School and School of Public Health. “This study showed that when you remove those barriers, people started using these high-value services significantly more. These results bolster the idea that health insurance benefits should be designed in ways that produce the most health per dollar spent.”

Fendrick and first author Michael Chernew, Ph.D., of the Harvard Medical School, co-founded the Center for Value-Based Insurance Design, based at U-M. They conducted the study with co-authors from ActiveHealth Management, which had been retained by both companies in the study to provide voluntary disease-management programs for employees and dependents with 32 medical conditions.

Members of GlaxoSmithKline’s Health Management Innovations division also took part in the study, which was supported by unrestricted funds from both GSK and Pfizer, Inc. The employers involved in the

study have asked to remain anonymous. During the study period, ActiveHealth Management was acquired by Aetna, a major insurer, but there was no impact on the study.

The study involved more than 35,000 employees and dependents at the company where co-pays were reduced (Company A), and more than 70,000 employees and dependents at the other (Company B). All had regular phone contact with nurses in their disease management programs, who offered help based on each person's test results, medication use, doctor visits and other health information.

The researchers looked at use of five classes of drugs: heart-protecting ACE inhibitors and angiotensin-receptor blockers; blood-pressure-reducing beta blockers; diabetes medicines including blood sugar-reducing drugs and insulin; cholesterol-reducing statins; and asthma-calming inhaled steroids.

In the study period, co-pays at Company A went from $5 to $0 for generic drugs, from $25 to $12.50 for name-brand drugs on the company's preferred drug list, and from $45 to $22.50 for non-preferred name-brand drugs. Co-pays at Company B stayed around $29 for brand-name drugs and $16 for generics.

As part of the disease management program at both companies, people who weren't already taking preventive medications related to their conditions were contacted automatically to let them know about the importance of those specific medications. At Company A, they were also informed of the reduced co-pays. For all Company A employees, the co-pay reductions were made automatically at the pharmacy.

In just one year, the appropriate use of the preventive medicines at Company A increased significantly in four of the five drug classes, with inhaled steroids for asthma being the exception. The increase in use of

statins was more modest than the increases in use of ACEs/ARBs, beta blockers and diabetes drugs.

And, the results show that "nonadherence" – a term used to describe a situation when someone should be taking a medicine but isn't – decreased between 7 percent and 14 percent, depending on drug class.

Chernew notes that the study was not designed to assess whether increased adherence to preventive drugs had a measurable impact on employees' and dependents' health, or their use of costly services such as hospitalization and emergency care.

"While future studies need to be done to actually quantify this specifically, there is considerable evidence that use of the classes of medication in this study will reduce the frequency of adverse clinical events and associated hospitalizations and ER visits," he says. "We believe that tailoring co-pays to the individual patient can improve the efficiency of health care spending when applied to this type of high-value health service."

The new data provide the first rigorous, controlled analysis of the impact of a "clinically sensitive" health benefit design. Previously, employers such as office-equipment maker Pitney Bowes and the city of Asheville, NC have reported increased adherence and decreased use of health services among chronically ill employees who had their co-pays reduced.

Meanwhile, other employers have launched their own such programs without waiting for a controlled study to convince them of the potential benefits. In fact, the University of Michigan is currently offering free or reduced-price medications and tests to more than 2,000 of its employees and their dependents who have diabetes.

That project, called MHealthy: Focus on Diabetes, is being managed by

the Center for Healthcare Quality and Transformation and may produce its first data this year.

“When I told my mother about this study, she turned to me and said ‘I can’t believe you had to spend all that money to show that if you make people pay more for something they’ll buy less of it,’” says Fendrick. “But we needed to show with a carefully done study that if we did lower barriers that people would utilize these essential medical services more. And as always, my mother was right.”

Source: University of Michigan