Insurers Try Incentives to Improve Medication Adherence

Elyas Bakhtiari, for HealthLeaders Media, September 14, 2010

A spoonful of sugar helps the medicine go down," Julie Andrews sang in the Disney classic Mary Poppins. It is an immortal lyric that was meant as a lesson for children, but it contains an implicit truth about healthcare: Taking medicine is often hard, and sometimes an extra incentive makes it a little easier.

For the millions of adults who don't regularly take their medicine as prescribed by their doctors, insurers and others in the healthcare industry are trying to figure out what incentives may improve medication adherence and, in the long run, improve quality and reduce costs.

Estimates put the percentage of those who don't comply with prescription instructions somewhere between one-third and one-half of all patients. Studies have found that nearly one quarter of patients with heart disease discontinue treatment within six months, and compliance for patients taking statin drugs may be below 60% after a few months. Many of those patients end up back in the hospital with a stroke, heart attack, or other severe condition that could have been prevented.

The poor compliance not only affects quality—nonadherent patients have higher hospitalization and mortality rates, according to research—but it also makes healthcare more expensive. The overall cost of poor adherence, measured in otherwise avoidable medical spending, may account for as much as $290 billion per year, or 13% of total healthcare expenditures, according to an estimate from the New England Healthcare Institute.

Insurers have yet to find the right "spoonful of sugar" to cut some of these alarming statistics, but many are experimenting with new incentives and getting creative in their approaches. For instance, Aetna Inc. is funding several pilot projects that test how giving medications to patients for free, rewarding patients for lowering blood pressure, and even giving financial incentives for compliance can improve adherence, says Edmund Pezalla, MD, MPH, national medical director and chief clinical officer for Aetna Pharmacy Management.

The latter approach has been one of the most successful so far. Funded in part by Aetna, a group of researchers from the University of Pennsylvania recently set up a daily lottery with potential financial rewards for patients who had been prescribed warfarin. Each day when patients remembered to take their medicine, they had a one-in-five chance of winning $10, or a one-in-100 chance of winning $100. When they missed their medicine, they could still see what they would have won, but didn't, that day.

The point wasn't to simply pay patients or reward those who were compliant, but to engage patients and increase their motivation, says Stephen Kimmel, MD, lead researcher on the project and associate professor of medicine and epidemiology at the University of Pennsylvania School of Medicine.

"We hoped that it would just be fun to participate in this activity," says Kimmel. "The ultimate goal is to help people help themselves. If it works, it becomes a habit for them."

Although it didn't eliminate noncompliance, patients did start taking their medication more often and said they were more interested in taking it on a daily basis. The researchers chose warfarin in part because patients often have trouble with it. Complications can arise from taking either too much or too little or taking it at the wrong time, so improving compliance can have a significant impact.

As Kimmel had hoped, it wasn't all about the money for patients. Initially researchers paid out an average of about $150 per patient a month, but when they dropped that down to $90 there was no change in compliance. It was the daily engagement that the patients seemed interested in.

That raises questions for insurers that might be interested in rolling out a similar program on a larger scale. One reason that the program is still in the research stage is because some of the cost details have yet to be figured out, says Pezalla. "But the question is, how low an incentive is still an incentive? That's an important thing for the researchers to help us find out. What are the appropriate levels of incentives? What are the appropriate intervals?"

Aetna is testing other strategies because such a large problem takes a variety of solutions and effort from everyone involved in healthcare. Physicians can improve compliance with better communication and patient education, pharmacists can reduce nonadherence with regular counseling, and hospitals can improve discharge processes and utilize case managers.

While an incentive program may engage some patients, Pezalla doesn't expect it to fix the medication adherence problem by itself. Instead of a single, magical spoonful of sugar, the solution instead has to be multifaceted and patient-centered. "The focus really has to be on the particular member, on their willingness to participate and their desire to be healthier," he says.
What role will technology play in your organization’s population health efforts?