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For Forgetful, Cash Helps the Medicine Go Down

By PAM BELLUCK

It has long been one of the most vexing causes of America's skyrocketing health costs: people not taking their medicine.

One-third to one-half of all patients do not take medication as prescribed, and up to one-quarter never fill prescriptions at all, experts say. Such lapses fuel more than \$100 billion dollars in health costs annually because those patients often get sicker.

Now, a controversial, and seemingly counterintuitive, effort to tackle the problem is gaining ground: paying people money to take medicine or to comply with prescribed treatment. The idea, which is being embraced by doctors, pharmacy companies, insurers and researchers, is that paying modest financial incentives up front can save much larger costs of hospitalization.

"It's better to spend money on medication adherence for patients, rather than having them boomerang in and out of the hospital," said Valerie Fleishman, executive director of the New England Healthcare Institute, a research organization, who said that about one-tenth of hospital admissions and one-quarter of nursing home admissions result from incorrect adherence to medication. "Financial incentives are a critical piece of the solution."

In a Philadelphia program people prescribed warfarin, an anti-blood-clot medication, can win \$10 or \$100 each day they take the drug — a kind of lottery using a computerized pillbox to record if they took the medicine and whether they won that day.

Before the program, Chiquita Parker, a 25-year-old single mother with lupus, too ill to continue her job with special needs children, repeatedly made medication mistakes, although she knows she depends on warfarin to prevent clots than can cause strokes, paralysis, or death.

"I would forget to take it," and feel "like I couldn't breathe," she said. Or she would "take two in a day," and develop bruises from uncontrolled internal bleeding.

But in the six-month lottery program, she pocketed about \$300. "You got something for taking it," Ms. Parker said. Suddenly, she said, "I was taking it regularly, I was doing so good."

Skeptics question if payments can be coercive or harm doctor-patient relationships. "Why should people who don't want to take medication be paid, when prudent people who take medication are not?" said Dr. George Szmukler, a psychiatry professor at King's College London.

Joanne Shaw, who runs a department of Britain's National Health Service, asked: "Will others think, 'If I behave like a potential noncomplier, I'll get money for taking medication?' And once you start paying people to take medication, when do you stop paying them?"

Health experts wonder if people will realize their health has improved and maintain medication without money. Or must payments be continued indefinitely, even increased?

Still, with patients forgetting medication, finding it inconvenient, fearing side effects, or considering it unnecessary if they feel better, important players are turning to financial rewards. Aetna, the insurer, helped pay for part of the Philadelphia experiment, and is considering using that or another method.

"We've made our best efforts to say, 'If you didn't take your beta blocker or asthma medicine, you have a greater chance of ending up with a heart attack or dead or hospitalized,' "said Dr. Lonny Reisman, Aetna's chief medical officer. "It's going to take more. It's going to take incentives."

Aetna has begun paying doctors bonuses for prescribing medication likely to prevent problems: beta blockers to prevent heart attacks, statins for diabetes sufferers. Currently, 93,000 doctors are in Aetna's "pay for performance" program; bonuses average three percent to five percent of a practice's base income.

CVS Caremark began by discounting copayments for employees of some corporations in its drug plans, to encourage prescription filling, and is studying "the 'I'll pay you \$10 a month to be adherent' approach, the lottery approach," and other incentives, said Dr. Troy Brennan, the chief medical officer.

Even the new federal health care overhaul includes incentives, expanding a program paying pharmacists extra for helping some Medicare patients learn to take pills correctly.

Experts say the psychological effect is more important than the dollar amount, which is usually just enough to seem significant.

Expecting failure, the Traumatic Brain Injury Network, a Columbus, Ohio, clinic for brain-injured patients with substance abuse problems, tried paying \$20, in gift cards to grocery stores or restaurants, if patients completed their first treatment phase in 30 days. The one-time payment not only improved initial compliance, but "they actually scheduled more appointments" and stayed enrolled, said Dr. John Corrigan, the clinic's director. "I didn't start as a believer," he said.

The \$20 helped propel Damand, 30, who had quit the program twice, to attend, even walking when he lacked bus fare. "I've been taking my meds like I'm supposed to," said Damand, who took the card "straight to the store," buying soap, tissues, chips. (The clinic insisted that patients' last names be withheld.)

Although "economically irrational," Dr. Corrigan said, small sums might work better than bigger ones because otherwise patients might think, "'I'm only doing this for the money,' and it would undermine treatment."

Even severely mentally ill patients respond to small payments. A British study in which patients are paid about \$22 for regular injections of antipsychotics has kept some of them from being recommitted to psychiatric hospitals.

"We've had a least one patient say, 'Now I see the benefit of medication and take it regularly," said Dr. Stefan Priebe, a psychiatry professor at Queen Mary, University of London. But for most, he said, "you would probably have to keep the incentive going."

The Philadelphia lottery project has worked with patients of varying income.

In his spotless suburban home in Willingboro, N.J., Bernard Davenport, 68, said it made taking warfarin "like a game."

"I didn't miss one time," he said, adding that he "couldn't wait to get to the machine" to see if he had won money for taking warfarin the previous day.

The project's co-leaders, Dr. Kevin G. Volpp and Dr. Stephen E. Kimmel, University of Pennsylvania Medical School professors, chose warfarin because it can be life-saving but also "very dangerous if not taken faithfully," Dr. Volpp said. He added that many people "who should be on warfarin are not even put on it because doctors don't think they'll be adherent."

The lottery was chosen for suspenseful entertainment, said Dr. Volpp, an economist who has studied whether incentives help people quit smoking, diet or do brain-training exercises.

Dr. Kimmel said patients win \$90-a-month on average, reduced from \$150-a-month because less money worked equally well. That \$90 "will pay for itself" if it prevents two emergency clinic visits, he said. "Prevent a cerebral hemorrhage or major clot, we save tens of thousands of dollars," he said.

Results in two initial studies showed that many patients took improved warfarin use and that their blood-clotting levels stayed normal much more frequently.

Still, many said "the incentive had nothing to do with it," Dr. Volpp said. "They want to take credit for having done it on their own, not because somebody paid them," he said. "Most people on some level actually want to do these things. And we want them to feel like they did it on their own" to keep them adhering when payments stop.

But not everyone did.

"I really went backward," Ms. Parker said, after her participation ended. "I'm just forgetting all over again."

Researchers are studying if longer-running lotteries will produce more dedicated medicine-takers. But given potential long-term savings, if payments must continue indefinitely, Dr. Volpp said, "it wouldn't necessarily be a bad thing."

