Pay for performance encouraged physicians to follow blood pressure guidelines

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When health care pundits began to suggest that pay-for-performance would solve some of health care's woes, Dr. Laura Petersen, professor of medicine at Baylor College of Medicine and director of the Houston VA Health Services Research and Development Center of Excellence, had questions.

How do we know that it will solve those problems? she asked. How do we know whether or not it will create new problems? And how will we structure these payments? As a recognized expert in the area of health care services and quality, she set out to find the answers in a multi-year study involving 83 physicians and 42 other health care personnel in 12 different Veterans Affairs hospital-based outpatient clinics.

She and her colleagues found that modest monetary incentives to individual physicians resulted in a significant 8.36 percent increase in patients whose blood pressure was brought down to desired levels or who received an appropriate medical response when it was found that their blood pressure was uncontrolled. However, incentives to a whole health care team or to the physician plus health care team did not have a significant effect. There was virtually no change at all in the control group that received no incentives. A report on their work appears in the *Journal of the American Medical Association*.

"This is not a panacea for everything that is wrong in health care, but it can have a significant effect in improving care," said Petersen, who is also associate chief of staff for research at the Michael E. DeBakey VA

Medical Center. "Pay for performance is attractive because it would be a system-wide plan that could be implemented on a wide scale. With this, we have demonstrated that you can implement this kind of program at 12 sites at one time. And we were able to show a significant effect in the VA health care system where high blood pressure is already well controlled overall." Studies show that the baseline blood pressure control rates in the VA system are already at 75 percent.

The incentives had an important effect on physicians, she said. If the average primary care provider has 1,000 patients, then, with incentives, an 84 additional patients would meet hypertension goals after a year.

"To me, that's an important effect," she said.

However, in the year after the incentive program ended, the effects also diminished, which Petersen found disappointing.

"I thought the change would continue," she said. "It was a long intervention and I thought people's practices would change over time. However, it shows that the incentives were working. If their performance had not fallen off, then we might question whether the incentives caused the effect in the first place."

In the study, the clinics were assigned to one of four incentive groups: Physician-level incentives alone; practice-level incentives; combined incentives that included both physician incentives and practice incentives; and a control or no incentive group. The incentives were paid every four months for five periods. Those who took part also received feedback reports that detailed their performance in controlling their patients' blood pressure.

There was no change in the use of guideline-recommended medications among the groups.

Change was documented in detailed reviews of individual charts of patients chosen at random.

Total payments were modest: $2,672 for individual physicians, $4,270 for the combined group and $1,648 for the practice level groups. The main outcomes measured included patients who achieved guideline-recommended blood pressure thresholds or received an appropriate response to uncontrolled blood pressure or had been prescribed medications recommended in national guidelines (Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure). Directors of the participating hospital regions contributed $250,000 for the incentives.

While there were changes in the measurements of physician plus health care team and the practice level groups, none were statistically significant, which Petersen found surprising.

"I really thought that if you incentivize a whole team of care – physicians, nurses, clerks, pharmacists – the effect would be powerful. You would get everyone's incentives on the team aligned and all working better together," she said.

On the other side of the coin, some had been concerned that providing incentives might result in patients being over treated. However, the study found no difference in low blood pressure (hypotension) between the incentive groups and the controls.

She hopes that it might be possible to simplify the methods of reviewing patient records using a database. If so, it might be possible to roll out a similar plan more cheaply and widely, she said.

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