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The Effect of Primary Care Visits on Health Care Utilization

Findings from a Randomized Controlled Trial

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Increasing access to good quality and lower-cost health care for the low-income population is a national priority. Low-income adults below age 65 who neither have access to employer-based health insurance nor qualify for Medicaid rely on the safety net system to meet their health care needs. Often, patients seen in the safety net system have preventable health conditions that escalate to a crisis, requiring high-cost emergency department (ED) and inpatient care. These health care settings are associated with expensive utilization, poor coordination and follow-up care, and reduced well-being. In contrast, the primary care setting is viewed as an efficient means to diagnose and treat conditions before they reach such severity that they require expensive procedures and hospitalization. Historically, however, low-income patients have limited access to primary care providers (PCPs) and do not routinely seek preventive care.

In a prior study, we compared the effect of a randomized controlled trial that offered cash incentives to low-income uninsured patients, otherwise treated in a safety net setting, to seek initial primary care visits. All patients were assigned to a community-based PCP and provided free or low-cost health care. The trial found that small cash incentives (i.e., \$25, \$50) encouraged primary care visits and that

subjects were more responsive to higher incentives. Relative to the group receiving no cash incentive, the odds of a PCP visit increased by 36 percent for the \$25 incentive group and 56 percent for the \$50 incentive group.

We expand that analysis to pursue two complementary lines of investigation. First, we examine how the incentives affected health care utilization beyond the initial PCP visit. We research whether the incentives also led to establishing an ongoing PCP relationship, and we estimate whether the incentives influenced other types of utilization (e.g., emergency department, outpatient) and spending within 12 months after study enrollment. Second, we assess whether an initial PCP visit changes utilization and spending, using the random assignment from the experiment to provide exogenous variation in PCP visits. This exogenous source of variation is important, because otherwise correlations between unobserved determinants of health care utilization and costs and whether one visited a PCP could drive the relationship between PCP visits and utilization and spending. We thus provide new evidence on whether a low-cost investment in incentives can encourage desired health care utilization, and on whether primary care alters utilization patterns and reduces high-cost care in a low-income safety net population.

This research is relevant given the financial strain on the safety net system to provide care and a low-income population that has considerable health care needs. By capitalizing on a randomized controlled trial, the analysis provides more convincing evidence than do observational studies.

In the second six-month period following the initial period when PCP visits were incentivized, our incentive program was effective at encouraging initial and subsequent PCP visits and at modestly reducing ED utilization relative to untreated controls. The incentives were also associated with an increase in outpatient and specialty care visits during the initial six-month period. These findings suggest that cash incentives, which can be manipulated by policymakers, encourage the desired behavior of PCP utilization, but they may also have unintended consequences for other types of health care utilization. Total spending increases during the initial six-month incentive period, but the increase generally is not statistically significant among most incentive groups during the second six-month period. The one exception is for the \$25 group, which also had statistically significantly higher outpatient and specialty care utilization in the post-incentive, second six-month period. Our results were not driven by relatively healthy subjects who could more easily avoid the ED than those who were in poor health. Rather, the incentive program had the greatest effect on stimulating a PCP visit among less-healthy subjects.

We estimate the effects of PCP visits, using the random assignment in the experiment to provide exogenous variation, which considerably improves on how the effects of PCP use have been examined in prior studies. In this analysis, we generally do not find that PCP visits induced by the assignment to incentive groups change ED visits, except in one case in which evidence indicates that the initial PCP visit reduced nonemergent ED visits. PCP visits induced by the experiment were associated with increased outpatient utilization in the first six-month period, and, in one case, in the second six-month period. Correspondingly, PCP visits were also associated with higher spending in the first six-month period. We conclude that although an initial PCP visit can be effectively incentivized, and although observation of subsequent visits suggests that a PCP relationship has been established, overall health care utilization may not be reduced and may even increase in the short run.

NOTE:

This research brief is based on Cathy J. Bradley, David Neumark, and Lauryn Saxe Walker, "The Effect of Primary Care Visits on Health Care Utilization: Findings from a Randomized Controlled Trial," NBER Working Paper no. 24100, December 2017, <http://www.nber.org/papers/w24100>.
