Ridesharing may not reduce number of missed medical appointments, study finds

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The high number of low-income patients missing medical appointments because of unreliable transportation has led to partnerships between health care systems and ridesharing companies, such as Uber and Lyft,

in an effort to ease travel and boost attendance. However, a new study from Penn Medicine researchers published in *JAMA Internal Medicine* found that offering a free Lyft ride to Medicaid patients for an upcoming medical appointment did not reduce the rate of missed appointments.

The study, which included nearly 800 West Philadelphians who were [patients](#) with Medicaid at one of two Penn Medicine primary care practices, found that the missed appointment rate for those offered a free Lyft ride and those not offered a ride was virtually the same: 36.5 percent vs. 36.7 percent.

The findings suggest that ridesharing - a relatively simple, inexpensive approach to address transportation barriers - may not be the easy fix some believe it to be.

"Transportation is often a barrier to care for many patients, but solutions that don't address other barriers may not be enough to help patients get to doctor appointments, said Krisda H. Chaiyachati, MD, MPH, a VA advanced fellow at Penn Medicine, and lead author on the study.

"While it may be a negative finding, it's an important one," he added, "because it can inform future efforts to help improve attendance rates and highlights the complexity of social barriers when caring for poor patients."

Every year, around 3.6 million people miss their medical appointments because of transportation issues, many of whom are low income, according to one study from 2006. Because of this, they often shift their care to more costly, acute-care settings out of preference and convenience. What's more, missed appointments have a negative effect on clinical productivity, and unused clinical space and staff time equate to loss of revenue.

Nonemergency medical transportation, or NEMT, is a Medicaid benefit designed to decrease transportation barriers; however, despite its availability, many patients still end up missing their appointments. The design of NEMT may be contributing to the problems. It requires advanced scheduling, often days in advance, and pick-up wait times can be long. NEMT, which typically hires taxi cabs, also doesn't have the technology to track drivers to make sure they are picking up patients in a timely manner and taking them to the correct location.

In recent years, rideshare services have been proposed as an alternative to NEMT because they can be scheduled as needed and tracked, use direct routes, are readily available in most urban areas, and cost less. Last year, the NEMT company Circulation signed an agreement with Uber to offer its services in 25 states, while American Medical Response reached an agreement with Lyft to provide rides in 42 states. Some hospitals have also formed partnerships with these companies.

Here, the researchers used a web-based rideshare dispatch platform provided by Lyft Inc., which mirrored the consumer version of the Lyft app, but was instead initiated and operated by research assistants, not the patients. Texts with information on scheduling and pick-up times were sent directly to the patient. After their appointment, the patient called a research assistant, who then initiated the ride home.

The control arm had 392 patients and the intervention arm (patients were offered the ride via phone prior to appointment) had 394. All patients were on Medicaid; 72 percent were women; and the median age was 46.

The uptake of ridesharing was low and did not decrease missed primary care appointments. Within the intervention arm, 85 among 288 patients who answered the phone call used Lyft. Overall, 144 of 394 patients in the intervention arm missed their appointment, while 144 out of 392 from the control missed theirs.

"One of the takeaways here is that we need to be thoughtful about how we design and test new programs that address [social barriers](link) to health care," said senior author David Grande, MD, MPA, an assistant professor of Medicine at Penn's Perelman School of Medicine and a senior fellow and director of policy at the Leonard Davis Institute of Health Economics. "While we want hospitals and health systems to address patients' social challenges that impact health - we need to rigorously evaluate new programs to make them successful. In this case, addressing transportation alongside other barriers could make a difference or doing a better job identifying who needs the services."

Despite this trial's lack of success, the authors concluded, more clinical trials examining the effect of interventions designed to address transportation barriers are needed, as well as broad studies looking at interventions that address multiple social determinants which may be having an additive effect.

Co-authors of the study include Rebecca Hubbard, PhD, Alyssa Yeager, MD, Brian Mugo, MD, Stephanie Lopez, MS, Elizabeth Asch, BA, Catherine Shi, BSN, Judy A. Shea, PhD, and Roy Rosin, MBA.

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