


# Non-emergency transportation services

## ► Intervention in brief

<b>System wide:</b>	<b>Non-emergency transportation services</b> includes the provider-led service of coordinating or offering transportation to and from medical appointments. There are different types of transportation services, including the use of ride-sharing applications, community transportation providers, and taxi vouchers. The goal is to increase access for those without means of transportation.
<b>Strength of evidence</b>	 <p>Research on intervention is rare and shows inconsistent rates of success.</p> <p>Low</p>
<b>Impact</b>	<ul style="list-style-type: none"> <li>• <b>Decreased cost:</b> 32% decrease in per-ride costs; \$11 ROI</li> <li>• <b>Decreased utilization:</b> No significant change in ED use</li> <li>• <b>Improved quality, clinical outcomes:</b> 30% decrease in wait time</li> <li>• <b>Increased access:</b> Improved show rate (from 54% to 68%); increased odds of showing up to an appointment (2.57x)</li> <li>• <b>Improved stakeholder satisfaction:</b> Not demonstrated</li> </ul>
<b>How to succeed</b>	<p>To build a non-emergency transportation program:</p> <ul style="list-style-type: none"> <li>• Incorporate transportation services into broader care management services to meet other underlying needs precluding access to care</li> <li>• Simplify the usability of these non-emergency transportation services (e.g., phone line patients call to schedule service, placards on car with provider name rather than Lyft or Uber, training patients on how and when to use service)</li> <li>• Offer drivers in-person sensitivity training and educate them about target population's preferences (e.g., slower ride, helping hand out of the car)</li> <li>• Monitor patient experience and share results with transportation companies</li> <li>• In rural regions, due to a lack of penetration, partner with non-emergency medical transportation services rather than ride-sharing companies (e.g., Lyft, Uber)</li> </ul> <p>To learn more about an example of addressing transportation barriers, visit page 23 of our Address Patients' Non-clinical Risk Factors in Ongoing Management webconference <a href="#">here</a>.</p>

## ► Demonstrated impact

### Literature review summary

**Title:** Association of Rideshare-Based Transportation Services and Missed Primary Care Appointments  
**Publication:** Journal of the American Medical Association  
**Date:** 2018  
**Type:** Randomized controlled trial  
**Study population:** 786 Medicaid patients enrolled in two primary care practices in West Philadelphia  
**Key findings:** There was no significant difference in the missed appointment rate (36.5% among those who received complimentary ridesharing services and 36.7% among the control group who did not). There was also no significant difference in 7-day ED visits (2% among intervention group vs. 1% among control group) or 30-day rates of ED visits (7% among intervention group vs. 4% among control group).  
**Source:** Full article [here](#).

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**Title:** Nonemergency Medical Transportation: Delivering Care in the Era of Lyft and Uber

**Publication:** Journal of the American Medical Association

**Date:** 2016

**Type:** Case study

**Study population:** Medicare Advantage beneficiaries with CareMore health plans in California who need transportation for preventive and chronic care services

**Major findings:** CareMore partnered with on-demand transportation services company Lyft and compared results from patients in the program to those using taxi vouchers. In the pilot, 479 rides yielded a lower average wait time (decreased by 30%, 12 minutes to 9 minutes) and average per-ride costs (decreased by 32%, \$32 to \$21). CareMore measured patient satisfaction at 80%.

**Source:** Full article [here](#).

**Title:** Florida Transportation Disadvantaged Services: Return on Investment Study

**Publication:** The Marketing Institute—Florida State University College of Business

**Date:** 2008

**Type:** Case study

**Study population:** Florida residents who do not have access to conventional public transportation options due to age, disability, or income restraints

**Major findings:** For every dollar invested in providing rides to medical services, the state of Florida saves an estimated \$11.08. This estimation is based on the assumption that one percent of the trips will avoid a hospitalization.

**Source:** Full article [here](#).

**Title:** Rideshare-Based Medical Transportation for Medicaid Patients and Primary Care Show Rates: A Difference-in-Difference Analysis of a Pilot Program

**Publication:** Journal of General Internal Medicine

**Date:** 2018

**Type:** Case study

**Study population:** 506 patients (on average, 47 year old black females) from two academic general internal medicine practices in West Philadelphia insured by Medicaid

**Major findings:** Study leads offered patients rideshare-based transportation services during their reminder call two days before their appointment and scheduled a return trip on the day of their appointment. Compared with a control group, the offers resulted in:

- Improved show rate (from 54% to 68%)
- Increased odds of showing up to an appointment (2.57x)

**Source:** Full article [here](#).

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## Appendix

- Wennberg DE, et al., “A Randomized Trial of a Telephone Care-Management Strategy,” *The New England Journal of Medicine*, 13, no. 363 (2010): 1245-1255, <https://www.nejm.org/doi/full/10.1056/NEJMsa0902321>
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- Tried PM, et al., “Health and Psychosocial Outcomes of a Telephonic Couples Behavior Change Intervention in Patients with Poorly Controlled Type 2 Diabetes: A Randomized Clinical Trial,” *Diabetes Care*, 39, no. 12 (2012): 2165-2173, <https://www.ncbi.nlm.nih.gov/pubmed/27456837>.
- Williams ED, et al., “Randomised Controlled Trial of an Automated, Interactive Telephone Intervention (TLC Diabetes) to Improve Type 2 Diabetes Management: Baseline Findings and Six-Month Outcomes,” *BMC Public Health*, 12, no. 602 (2012): 1471-2458, <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-602>.
- Walters J, et al., “Effects of Telephone Health Mentoring in Community-Recruited Chronic Obstructive Pulmonary Disease on Self-Management Capacity, Quality of Life and Psychological Morbidity: A Randomised Controlled Trial,” *Respiratory Medicine*, 3, no. 9 (2013), <https://bmjopen.bmj.com/content/3/9/e003097>
- Bluml BM, et al., “Evaluating the Impact of Year-Long, Augmented Diabetes Self-Management Support” *Population Health Management*, (2019), <https://www.ncbi.nlm.nih.gov/pubmed/30668228>.
- Chaiyachati K., et al., “Rideshare-Based Medical Transportation for Medicaid Patients and Primary Care Show Rates: A Difference-in-Difference Analysis of a Pilot Program,” *Journal of General Internal Medicine*, 33, no. 6 (2018), <https://link.springer.com/article/10.1007/s11606-018-4306-0/>.