TRANSPORTATION & HEALTH ACCESS
WHERE ARE WE NOW AND WHERE CAN WE GO?
ACKNOWLEDGEMENTS

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**INTRODUCTION**

**WHY TRANSPORTATION**

Since 2000, Health Outreach Partners (HOP) has conducted bi-annual national needs assessments of community health centers serving underserved populations. The needs assessment findings have consistently demonstrated that transportation is a top barrier to health care access. Accordingly, Health Outreach Partners has developed and delivered numerous resources and learning opportunities around transportation and health care access, including peer-to-peer webinars, roundtable discussions, conference workshops, and articles that feature innovative practices from health centers and other safety-net organizations who are directly addressing transportation challenges in their communities.

**TRANSPORTATION INITIATIVE**

In 2011, HOP received funding from the Kresge Foundation to implement the project “Overcoming Obstacles to Health Care: Transportation Models that Work.” This project identified and shared successful patient-centered transportation models at CHCs and CBOs around the country, offered guidance for addressing transportation barriers at the individual and community level, and provided recommendations and strategies for how to impact relevant state and federal transportation policies.

In order to further build support for investment in patient-centered transportation solutions, HOP launched its Transportation Initiative in March 2016, which seeks to document the impact of transportation barriers on healthcare costs and to strengthen patient-centered transportation solutions through data gathering tools (national survey and a quality improvement toolkit), learning collaboratives, and transportation resource maps. The initiative consists of two key projects: Rides to Wellness Community Scan and Not Just a Ride. The projects are funded by the Federal Transit Administration (U.S. Department of Transportation) and the Health Resources and Services Administration (U.S. Department of Health and Human Services), respectively. To learn more about HOP’s Transportation Initiatives, visit our website at www.outreach-partners.org.

**ABOUT THIS RESOURCE**

This resource provides a general introduction to the topic of transportation as a barrier to health care access in the United States. The material presented is drawn from interviews, case studies, and reviews of existing literature. Although geared towards community health centers, it is relevant to all health care providers.

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1. Health Center Program grantees are organizations that receive grants under the Health Center Program as authorized under section 330 of the Public Health Service Act, as amended. They are also sometimes referred to as “federally-funded health centers” or “HRSA-funded health centers.”

**ABOUT HEALTH OUTREACH PARTNERS**

Since 1970, HOP has been at the forefront of promoting the delivery and enhancement of health outreach and enabling services to underserved populations. The mission of Health Outreach Partners is to build strong, effective, and sustainable grassroots health models by partnering with local community-based organizations across the country in order to improve the quality of life of low-income, vulnerable, and underserved populations. HOP leverages over 45 years of experience in the field of outreach and offers support to organizations interested in exploring a more customized application for their program, including how to start a new program or strengthen existing efforts. HOP’s vision is a country in which all people are valued and in which equal access to quality health care is available to everyone, thus enriching our collective well-being.
KEY TERMS & DEFINITIONS

Non-Emergency Medical Transportation (NEMT)
Medically necessary but non-emergency transportation service for Medicaid beneficiaries. HRSA-supported Health Center Program grantees are required to provide NEMT.

Citation: Centers for Medicare and Medicaid Services, 2016; Simon & Co., 2013

Patient-Centered Transportation
Transportation services provided by non-government affiliated organizations outside of Medicaid and Medicare programs, such as taxicabs, public transit, other shared-ride services, or airplanes.

Citation: Health Outreach Partners, 2014

Modes of Transportation
According to peer-reviewed literature that examined the relationship between transportation and access to health care, modes of transportation consist of:

- Walking
- Bicycling
- Automobile [personal]
- Other Automobile [provided by family or friends]
- Demand-Response [provided by community provider]
- Public Transport [fixed bus, shuttle, metro lines]

Citations: Arcury et al., 2005; Battista, Lee, Kolodinsky, & Heiss, 2015; Buza et al., 2011; Children’s Health Fund, 2012; Mattson, 2011; Syed, 2013; Transportation for Healthy Communities Collaborative, 2002; Wallace, Hughes-Cromwick, & Mull, 2005

Measuring Transportation as a Barrier to Health Care
No standard method has been used to assess transportation as a barrier to accessing health care. Nevertheless, there are similarities among the processes used, including measuring the following factors:

- Time spent traveling to a health care provider
- Distance between patients and available health care facilities
- Existing transportation infrastructure
- Cost of transportation services
- Knowledge, perception, and use of available transportation services

Citations: Arcury et al., 2005; Battista, Lee, Kolodinsky, & Heiss, 2015; Buza et al., 2011; Children’s Health Fund, 2012; Mattson, 2011; Syed, 2013; Transportation for Healthy Communities Collaborative, 2002; Wallace, Hughes-Cromwick, & Mull, 2005
HIGH-RISK POPULATIONS

Finding transportation to health care services that is safe, timely, and affordable is an issue that impacts everyone; however, certain populations are more severely impacted. Populations that are at greater risk for facing transportation as a barrier to accessing health care include, but are not necessarily limited to, the following:

**RURAL COMMUNITIES** have 20% of the national population, but less than 11% of its physicians. (Arcury, et al., 2005)

10% to 20% more members of **COMMUNITIES OF COLOR** are transportation disadvantaged compared with members of the white population. (Wallace, et al., 2005)

**CHRONICALLY ILL** populations report that their medical conditions limit their travel. This population makes fewer trips per day than those without a medical condition (2.8 versus 4.4 trips per day). (Wallace, et al., 2005)

**ELDERLY ADULTS** are disproportionately disadvantaged by transportation barriers, in part, because driving frequency declines with age. Growth of the aging population will increase transportation service demands. (MacLead, et al., 2015)

Families living in rural areas were less likely to report finding a usual source of pediatric care for their **CHILDREN** (18%) than families living in urban areas (9%). (Children’s Health Fund, 2012)

Approximately 29% of **VETERANS** delay seeking medical attention due to concerns about transportation to care and difficulty scheduling appointments. (Doohee & Begley, 2016)

Many **LOW-INCOME INDIVIDUALS AND FAMILIES** do not have access to safe, reliable, and affordable transportation, particularly those who do not qualify for Medicaid. Insurance plans offered through the Marketplace do not cover NEMT transportation benefits. (Simon & Co., 2013)
TRANSPORTATION AS A BARRIER TO CARE

3.6 MILLION AMERICANS MISS AT A MINIMUM ONE MEDICAL APPOINTMENT EACH YEAR DUE TO A LACK OF TRANSPORTATION.

Citation: Wallace et al., 2005

Transportation is frequently cited in peer-reviewed literature as a significant barrier to health care, affecting between three percent (3%) and as much as sixty-seven percent (67%) of a sample population. Yet few studies have examined the direct correlation between limited or unavailable transportation options and missed or delayed medical appointments.

Citations: Ahmed, Lemkau, Nealeigh, & Mann, 2002; Children’s Health Fund, 2012; Davies et al., 2016; Mattson, 2011; Syed et al., 2013; Transportation for Healthy Communities Collaborative, 2002; MacLeod et al., 2015

THE IMPACT OF TRANSPORTATION ON PATIENT HEALTH

Delayed or missed medical appointments

Interrupted delivery of care

Inability to comply with prescribed health management plans

Difficulty making and keeping follow-up appointments

Poor health outcomes

Increased use of emergency department care

Missed medical appointments are widely considered to be a significant financial burden for health care providers, health facilities, and the overall U.S. health care system. Yet there is still limited data available that demonstrates the cost of missed appointments. The following measures have been employed to quantify the cost of missed or delayed medical care for health centers.

Citations: Halim, et al., 2016; Hixon & Nuovo, 1999; Sands, et al., 2010

THE BURDEN OF MISSED MEDICAL APPOINTMENTS FOR HEALTH CENTERS

Reduction in clinical efficiency

▲ Cost of unused provider time

▲ Cost of time spent by clinical staff to contact patients and schedule follow-up appointments

▲ Cost of increased wait times for other patients

▲ Cost of interruption of care plan on patient health outcomes

Reduction in revenue

▲ Cost of maintaining unused clinical rooms

▲ Loss of anticipated earned income
STRATEGIES

NO ONE-SIZE-FITS-ALL SOLUTION

While it is impossible to come up with a one-size-fits-all solution to transportation challenges, HOP sought to document successful transportation models in health care in our 2014 resource, Overcoming Obstacles to Health Care: Transportation Models that Work and in additional interviews with organizations providing transportation services to health care in 2015. This section includes the many ways that the organizations interviewed are successfully addressing transportation in their communities.

CONSIDERATIONS FOR IMPLEMENTATION

Providing transportation often requires addressing liability issues, dealing with the high cost of gas and vehicles, securing adequate funding, ensuring such services are linguistically and culturally competent, and integrating transportation into health and social services programs. The following are recommendations that enable the overall success of transportation models.

Diverse Strategies
Multiple transportation strategies must be used together to effectively increase access to health and social services.

Customized Approaches
Do not take a “one-size-fits-all” approach. Strategies that work well in one location and for one population may not work well elsewhere.

Organizational Commitment
Make a substantial financial and personal commitment to building, executing, and growing transportation services.

Dedicated, Competent Staff
Building trust and offering services in a respectful, culturally competent manner is key to the success of the models.

Expansive Partnerships
Develop partnership networks that include a combination of government agencies, health and social services, transportation authorities, transportation providers, volunteers, and educational institutions.

Diversified Funding Streams
Financial support needs to come from a diverse funding stream of grants, foundations, donations, contracted services income, or general operating funds.

TRANSPORTATION SPOTLIGHT

“I’VE BEEN ABLE TO COME WHEN I NEED TO. IT KEEPS ME OUT OF THE HOSPITAL.” - EL RIO PATIENT

El Rio Community Health Center (El Rio) is a health center located in urban Tucson, Arizona. El Rio established a community collaboration to operate the “Van of Hope,” a mobile medical unit that serves people experiencing homelessness, and a free door-to-door van service to the health center for low-income individuals.

Transportation Services:
▲ Door-to-Door Van Service
▲ Van of Hope Mobile Clinic

“WITHOUT THE TRANSPORTATION PROGRAM, I WOULDN’T BE ALIVE TODAY.” - HOW CLIENT

Helping Our Women (HOW) is a nonprofit organization located in rural Provincetown, Massachusetts. HOW collaborates with the local airline and regional transit authority for longer trips (normally to Boston) and operates a volunteer program for local rides for clients living with life-threatening and chronic illnesses.

Transportation Services:
▲ Volunteer-Driver Program
▲ Collaboration with the Cape Cod Regional Transit Authority for Specialized Treatment Transportation
▲ Collaboration with Cape Air for Air Transportation
TRANSPORTATION SERVICES

Directly providing transportation services based on the needs of the community, geography, and funding. Most transportation services are round-trip and provide transportation to the health center or social services from a patient’s home or work site.

COMMUNITY-BASED POINT OF CARE

Point of care is the timely delivery of health care products and services to patients where they are located or receiving other services. Delivering care where the community lives, works, or spends time helps alleviate the need for some patients to travel to services.

DOOR-TO-DOOR TRANSPORTATION SERVICES

Provide rides from a patient’s home or work site to an appointment at the health center, with a specialist, or to see a social service provider.

MOBILE CLINICS

Operate mobile clinics that go where patients live or work through a vehicle, such as a van or bus, or through “backpack medicine,” where providers bring supplies into service areas by foot.

VOUCHERS & REIMBURSEMENTS

Give vouchers that allow patients to access public transportation or taxis for free or at a reduced cost and mileage reimbursements to support patients that are able to find friends or family to take them to a medical appointment.

CLINICS AT SOCIAL SERVICE SITES

Arrange health services through partnerships with community and social service organizations that patients frequent. These services can prevent patients from having to make an additional trip to the health center to receive medical care.

FIXED-ROUTE SHUTTLE SERVICE

Run shuttle services on an established route that is convenient for many patients and include stops at various health and social service locations.

ONE-STOP-SHOP

Provide a variety of health and social services in one location to ensure patients get the most out of one visit and to prevent the need for multiple trips to other providers.

HEALTH CENTER INFRASTRUCTURE

Changing the infrastructure in which health services are provided at a fixed health care site can alleviate some transportation barriers to care. Infrastructure changes alone do not address the full range of transportation barriers and are often combined with other strategies.

HOURS OF OPERATION

Change the hours of operation to accommodate the needs of the community, such as extending hours to include weekends or evenings when friends or family are more available to provide rides.

TELEHEALTH

Use telecommunication and information technology to provide clinical care at a distance. Guidance is transmitted to a direct service provider from an off-site clinician that has more expertise or resources. Telehealth often involves support from an outreach worker.

Citation: Health Resources and Services Administration, 2015
BIBLIOGRAPHY

The information presented in this resource is restricted to readily accessible research as of July 2016 and does not present a comprehensive summary of existing data related to the number of missed medical appointments due to lack of transportation and associated costs for patients and health providers. Health Outreach Partners is currently engaged in an initiative to determine the impact of transportation barriers on healthcare costs in order to strengthen patient-centered transportation solutions. Our 2016-2017 initiative will more aptly address the depth and scope of the problem of transportation as a barrier to care and recommended community-level solutions. Visit our website at www.outreach-partners.org/about-hop/transportation-initiative to learn more!


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