

# TRANSPORTATION AND HEALTH ACCESS

## WHERE ARE WE NOW AND WHERE WE CAN GO?

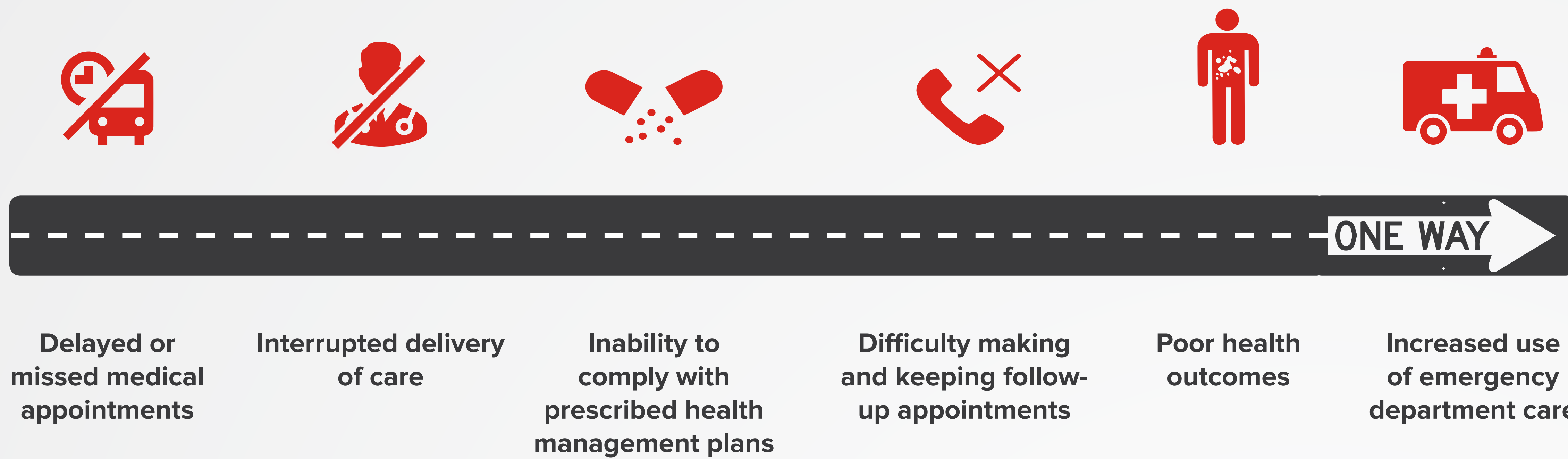
### TRANSPORTATION AS A BARRIER TO HEALTH CARE

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

Transportation is frequently cited in peer-reviewed literature as a significant barrier to health care, ranging from three percent (3%) to 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: Wallace et al., 2005; Ahmed Lemkau, Neeligh, & Mann, 2002; Children's Health Fund, 2012; Davies et al., 2016; Mattson, 2011; Syed et al., 2013; Transportation for Healthy Communities Collaborative, 2002; McClure et al., 2015

#### THE IMPACT OF TRANSPORTATION ON PATIENT HEALTH



### STRATEGIES & IMPLEMENTATION

#### NO ONE-SIZE-FITS-ALL SOLUTION

While it is impossible to come up with a one-size-fits-all solution to transportation, 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.

**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 delivery of health care products and services to patients at the time of care. Point of care where the community lives, works, or spends time helps alleviate the need for some patients to travel to services.

**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.

#### 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.

#### THE BURDEN OF MISSED MEDICAL APPOINTMENTS FOR HEALTH CENTERS

Missed medical appointments are widely considered to be a significant financial burden for health 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.

**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

Citations: Holm, et al., 2016; Hwan & Nuova, 1999; Sands, et al., 2010

“WITHOUT THE TRANSPORTATION PROGRAM, I WOULDN'T BE ALIVE TODAY.”

- HELPING OUR WOMEN 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

“I’VE BEEN ABLE TO COME WHEN I NEED TO. IT’S KEPT 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 Unit

### TRANSPORTATION BASICS

#### 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.

Citations: 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 or non-profit)**

**Public Transport (fixed bus, shuttle, metro lines)**

Citations: Arcury et al., 2005; Battista, Lee, Kolodinsky, & Heiss, 2016; Buzo et al., 2010; Children's Health Fund, 2012; Mattson, 2011; Syed, Gerber, & Sharp, 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** (monetary and time)

**Knowledge, perception, and use** of available transportation services

Citations: Arcury et al., 2005; Battista, Lee, Kolodinsky, & Heiss, 2016; Buzo et al., 2010; Children's Health Fund, 2012; Mattson, 2011; Syed, Gerber, & Sharp, 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, and 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. (McClure, 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. (Doohse & 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/Medical NEMT and live in states that do not add Medicaid. Insurance plans offered through the Marketplace do not cover NEMT transportation benefits. (Simon & Co., 2013)

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The information presented on this poster 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](http://www.outreach-partners.org/about-hop/transportation-initiative) to learn more!

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