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Coordinating Community Planning for Transportation and Health

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In ways often underappreciated, accessible transportation is fundamental to societal health. For example, although some patients have reliable access to private or public transportation for health-related visits, many others regularly encounter mobility barriers that lead to missed appointments, slowed discharge processes, and other inefficiencies that disrupt or discourage care. In addressing these issues and more, coordinated community planning can integrate considerations for health, safety, mobility, and the environment to advance patient-centered care as well as population well-being.

Challenges

By one 2005 estimate, 3.6 million people annually miss or delay medical care due to a complex web of barriers to nonemergency medical transportation (NEMT). Many populations, including those of minority, low-income, older, rural, and less-educated backgrounds, along with women, children, veterans, and people with disabilities, face particular burdens. Elderly individuals, for example, not only need frequent clinician visits, they also often have underlying comorbidities that compromise basic mobility. In many rural counties, declining obstetric (and other essential) services, together with suboptimal public transportation options, complicate care access.

Transportation disadvantage varies across the country. For example, only 3 of 10 counties in the greater Atlanta region, home to 4.5 million people, have major train or bus systems. In West Virginia, a primarily rural state with high opioid and obesity rates and severe income inequality, transportation challenges exacerbate obstacles to care for many already lacking health insurance and food security. All these themes play out within a broader national context that includes millions of vehicles generating carbon emissions into the environment, as well as about 40 000 deaths a year that the National Safety Council estimates are traffic-related fatalities.

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National coordination challenges are substantial. A 2012 report from the US Government Accountability Office (GAO) noted that 8 different federal agencies provide approximately 80 federal programs of specialized services to transportation-disadvantaged people. However, total federal spending levels were unknown because transportation was not the primary mission for most of these programs and related costs were not separately identified. The GAO urged that the US Department of Transportation Secretary (or the Secretary's designee), as chair of the federal interagency Coordinating Council on Access and Mobility, integrate planning to address issues such as efficiency, funding flexibility, and the growing unmet need. Although federal regulations mandate that state Medicaid programs provide NEMT for qualifying beneficiaries, some states are considering scaling them back as part of the national debate on work requirements. Demand for Americans with Disabilities Act (ADA)–related paratransit (transportation that does not follow established fixed routes) has increased with population aging; moreover, the highly variable quality of the programs can leave persons with disabilities isolated or stranded.

Strengthening Federal and Community Initiatives

A 2016 National Academy of Medicine workshop urged collaboration between health and transportation leaders, starting with prioritizing needs assessment and data about transportation barriers to health care. State Medicaid programs, along with the National Association of Community Health Centers, are heeding these calls. Accountable care organizations and the accountable health communities model piloted by the Centers for Medicare & Medicaid Services have begun addressing transportation as part of health-related social needs. The Children's Health Fund has developed a Health Transportation Shortage Index, while the newly established AARP Public Policy Institute Livability Index reflects transportation-related data. Further planning and evaluation can determine how best to optimize these assessments and services.

Both the public and private sectors can spur innovation and efficiency by linking the worlds of health and transportation. For example, in efforts to address fragmentation, the Coordinating Council on Access and Mobility established Mobility Services for All Americans to fund and foster community-wide resources (physical or virtual), including a Travel Management Coordination Center, in selected national sites. The National Center for Mobility Management, a consortium funded by the Department of Transportation's Federal Transit Administration (FTA), provides community assistance for strategic planning, coordination and training. In 2016, the FTA also started a health-specific Rides to Wellness Program (now called the Transit & Health Access Initiative). Evaluation, including those related to cost of interventions, is pending.

Hospitals and clinics are exploring using mobility managers to coordinate patient travel and medical care. Mobile health units can bring services into communities; one evaluation notes a modest return on investment. Rideshare companies (such as Uber and Lyft) not only have partnered with public and commercial insurers, as well as specific organizations (such as Denver Health), but also have launched services that allow health professionals to order rides for patients; however, because such smartphone applications require the

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use of credit card or bank account information, they may not be viable options for the 20% of the US population lacking credit cards or bank accounts.

Other programs attempt to bring services directly to patients. Home health care delivery allows for some transport of medical test kits and medications. Telemedicine, which requires access to reliable broadband services, offers alternative ways to connect people to care; Medicare's 2019 Physician Fee Schedule includes reimbursement codes for remote monitoring and image or video review. NEMT brokers contracting with a health plan or Medicaid agency use call centers and other venues to link patients to care through transportation providers.

At the community level, the goal of safer, affordable, and greener travel can align transportation and health planning. The automobile industry is exploring a future for electric and autonomous vehicles with hopes that they can lead to improved fuel efficiency while lowering carbon emissions and deaths. Regulators are exploring urban air mobility that could reduce surface congestion. Private sector companies are closer to launching long-range electric-powered aircraft. The Federal Aviation Administration is now moving toward establishing regulatory frameworks needed for beyond-line-of-sight drone operations that could, for example, enable prescription drug delivery in remote areas.

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Research suggesting that "active traveling" may help reduce obesity fuels the push for safer, walkable cities that encourage pedestrian and bike activity. Smart Growth America promotes a "complete streets" model calling for a range of transportation options accessible for entire communities. CityHealth ranks the top 40 US cities using these policies, with pilot efforts in states including New Jersey, Missouri, and Indiana. Tailoring such efforts requires explicit consideration for each community's specific challenges regarding access to health care visits, costs and affordability, aging, disability, safety, walkability, and vehicular pollution.

Health and transportation, 2 worlds with limited interaction to date, can jointly address transportation disadvantage. Better alignment will require collection and evaluation of quality data to inform strategy and assess efficacy, efficiency, and effectiveness; coordination of funding streams and evaluation of costs; leadership and support for innovation in the public and private sectors; and commitment to collaboration that could shape the future well-being of communities everywhere. ■

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