**Case Report**

**Federally Qualified Health Centers Minimize the Impact of Loss of Frequency and Independence of Movement in Older Adult Patients through Access to Transportation Services**

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Loss of mobility in older adults (65 and older) is associated with falling, loss of independence, and mortality. This paper, which to the author’s knowledge is the first of its kind, summarizes findings of Federally Qualified Health Center (FQHC) case reports and how FQHCs minimize the impacts of mobility loss in older adult patients (who would not receive primary services without these transportation programs) by providing access to primary care services through transportation programs. This paper features the transportation programs of four FQHCs located in both urban and rural United States areas: LifeLong Medical Care (Oakland, CA); Hudson Headwaters Health Network (Queensbury, NY); North End Community Health Center (Boston, MA); Aaron E. Henry Community Health Services Center, Inc. (Clarksdale, MS). This paper is beneficial to primary care providers and public health officials in outlining how transportation may be used to minimize the effects of mobility loss in older adult patients.

1. **Introduction**

Recent research defines mobility as “where people move or travel, (while) taking into account the frequency of movement and degree of independence during such movement” [1]. Mobility is critical to the physical and mental health, as well as independence, of older adults, 65 and older [2, 3]. Healthy People 2020 recognizes the impact of mobility loss through its inclusion of older adult objectives reducing the proportion of older adults who have moderate to severe functional limitations [4]. Loss of mobility is a predictor of physical disability and is associated with falling, institutionalization, and mortality [5, 6]. A majority (68%) of adults, 50 years of age and over, experience some mobility limitations [7]. This loss of mobility not only affects physical health directly, but also indirectly—older adults experiencing a loss of mobility may be less able to access primary care and other health services [7–9]. Loss of mobility and other forms of impeded access in older adults “can lead to underutilization of primary care and preventive care services, which in turn may result in unnecessary hospitalizations, increased morbidity, and higher costs to the healthcare system than necessary” [10].

As older adults age, they are at greater risk for functional impairments that may hinder their ability to drive to primary care appointments [8, 11]. Poor elderly, who are 50% more likely to experience a loss of mobility, have the added barrier of having more difficulty affording public transportation services in order to get to their primary care providers [7]. Elderly living in rural areas may not have access to public transportation services, or their communities may lack those services altogether [12, 13]. Furthermore, older adults with access to a public transportation system may not possess the physical ability or stamina necessary to endure long bus rides or the mental acuity to follow route directions or learn transfer points [11].

To minimize the impact of mobility loss (i.e., frequency of movement and degree of independence during such movement) in older adults as it relates to access to quality health care, some Federally Qualified Health Centers (FQHCs) have turned to including enhanced transportation services as part of their primary care service delivery to older adult
patients [1]. FQHCs are supported by the Health Resources and Services Administration (HRSA). (While the term “FQHC” is a CMS designation, the term is also used to refer to FQHCs that receive a HRSA-supported grant, which is authorized under Section 330 of the Public Health Service Act.) FQHCs provide community-based and patient-directed primary care services, as well as necessary enabling and support services, to medically underserved communities and vulnerable populations regardless of individuals’ ability to pay for care [14]. There are 1,200 FQHCs delivering care through almost 7,500 service delivery sites nationwide [15]. FQHCs currently serve 20 million patients, and through provisions passed as part of the Affordable Care Act (including $11 billion in dedicated funding for FQHC operation and construction), FQHCs stand to double in capacity to serve 40 million patients by 2015 [16, 17].

FQHCs are required to provide high-quality, cost-effective health care to people of all ages residing within their service areas [14]. Currently only 7% of their current patient population nationwide is aged 65 and over [14]. However the number of older adult patients at FQHCs is expected to grow over the next five years as the total number of patients doubles in size from 20 million to 40 million patients [16, 17]. Over one-third of the 1,200 FQHCs nationwide serves a larger older adult patient population relative to that of the national average; some of these FQHCs provide primary care specifically to older adults. Although FQHCs are statutorily required to provide transportation as a “required primary health service” to all patients regardless of their ability to pay, (Public Health Service Act. Section 330(b)(1)(A)(iv)) this paper explores case reports of four FQHC transportation service models that are tailored specifically for older adults affected by mobility loss and that would not have access to primary care without the FQHCs providing transportation services. These services range from free taxi cab rides, to partnerships with local public transportation authorities, to FQHC-owned-and-operated transportation services. By providing these transportation services to their older adult patients, FQHCs minimize effects of mobility loss on their older adults’ abilities to access high-quality primary care [8].

2. Materials and Methods

These case reports investigate the impact of access to primary health care through FQHC-affiliated transportation programs on older adults living with mobility loss in medically underserved areas. The case reports were drawn from in-depth, one-hour interviews with staff of the four featured FQHCs. The first interview consisted of questions surrounding the history of the FQHC and its transportation program; the program’s structure and organization, costs associated with the program and ways in which the program is financed; affiliations and partnerships with local public and private entities; patient satisfaction with the program. If necessary a follow-up interview was conducted in order to clarify or otherwise fill gaps in the information.

The case report participants were self-selected by responding to an e-mail sent out on behalf of the National Association of Community Health Centers (NACHC) to all FQHCs that were members of NACHC at the time and/or members of NACHC’s Health Policy Committee’s Subcommittee on Elderly. This ensured that all the respondents would serve a relatively large percentage of older adult patients as compared to FQHCs nationwide. Four FQHCs responded to the e-mail alert and were also selected for the interview: LifeLong Medical Care (San Francisco, CA); Hudson Headwaters Health Network (Queensbury, NY); North End Community Health Center (Boston, MA); Aaron E. Henry Community Health Services Center, Inc (Clarkdale, MS). The four FQHC participants represent different geographic regions, both in urban and rural communities, and their patients reflect varying racial/ethnic backgrounds and socioeconomic status.

The following case reports are focused on transportation programs owned, operated, or coordinated by an FQHC and utilized primarily by the FQHC’s older adult patients. These four case reports are not intended to be representative of all FQHCs and their transportation programs; instead, they offer insight to policymakers and researchers about the ground-level experience of running an enhanced transportation program for older adult patients at an FQHC. While this report focuses on transportation programs, FQHCs participate in other kinds of social service programs that reduce the effects of mobility loss in seniors that are not detailed in this paper, including enhanced case management, food delivery, home health programs, and senior public housing.

3. Results and Discussion

3.1. Case Report 1: Lifelong Medical Care (Oakland, CA).

LifeLong Medical Care has provided a healthcare home for seniors since 1976, when community advocates from the Gray Panthers, a senior citizens’ advocacy organization, founded its first clinic: the Over-60 Health Center in Berkeley, CA. In 1996, Over-60 Health Center merged with another clinic borne of citizen activism, Berkeley Primary Care Access Clinic, to become the FQHC now known as LifeLong Medical Care. The FQHC operates out of 6 sites. One of those sites has retained the Over-60 focus, and another focused on adult health is located in East Oakland—a low income, high crime area. LifeLong Medical Care also operates two Adult Day Health Care (ADHC) centers for frail seniors and adults with disabilities in East Oakland and Novato. About 30% of LifeLong Medical Care’s patients are of age 55 and over; about 21% of the patients are of age 65 and over.

When LifeLong founded its ADHC center in Oakland in 2004, it provided transportation to and from the ADHC center by purchasing vouchers from East Bay Paratransit, a public transit service for people unable to use regular city buses due to a disability or a disabling health condition, such as poststroke complications or memory loss. Paratransit provides door-to-door service by specially trained drivers using sedans and wheelchair-accessible vans. However, the service has several significant limitations: there is an application process to qualify, so rides are not available to new clients immediately; rides must be scheduled in advance, precluding
last-minute trips; rides are typically shared by several people (with multiple pick-up locations and destinations), so even traveling short distances can take a long time; strict rules regarding "no shows" can cause particularly frail, disorganized, or otherwise compromised clients to lose access to the service. For these reasons, LifeLong Medical Care also contracted with a private taxi company to bring ADHC participants to and from the center.

In addition to transportation services for ADHC participants, LifeLong Medical Care also provides limited transportation assistance in the form of taxi vouchers to primary care patients who otherwise would not be able to make their medical appointments. The vouchers are available upon request for those who cannot arrange their own transportation to appointments at one of the FQHC sites or who need to visit the emergency room. LifeLong Medical Care also contracts with a community-based social services organization to provide rides for its elderly and disabled patients. Older adults, including those who are experiencing mobility loss, are more likely to utilize high-cost ambulance services [18, 19]. By offering vouchers to older adult patients for emergency room visits, LifeLong Medical Care is able to control costs to the local health delivery system.

3.2. Case Report 2: Hudson Headwaters Health Network (Queensbury, NY). Hudson Headwaters Health Network is a system of 13 FQHC sites in the frontier Adirondack, Lake George, and Glens Falls areas of upstate New York. Founded by a physician in 1974, Hudson Headwaters serves about 60,000 patients each year; over 20% of those patients are low-income older adults at least 65 years of age. As it relates to median age, the Adirondack area is one of the oldest in the United States; by 2020, only the west coast of Florida will exceed the Adirondack area as the oldest region in America [20]. It is also one of the most isolated, characterized by natural geographic boundaries formed by the Adirondack Mountains.

For the thousands of older adults living in the rural Adirondack, accessing primary care requires serious effort. Rugged terrain and long distances are common obstacles, especially for older adults with physical mobility limitations. Therefore in 2002, Hudson Headwaters began providing transportation services free of charge, to its low-income, older adult patients. The program consists of a wheelchair-accessible bus that Hudson Headwaters uses to bring older adult patients to and from their medical and dental appointments at the FQHC's sites. The bus also transports patients to the hospital and to subspecialty services in upstate New York and neighboring Vermont.

The “Bus Program” at Hudson Headwaters is a demand service and does not operate a daily schedule like a public transportation system. Patients call the Bus Program in advance of their need for a ride, and designated staff schedules the rides and dispatches the bus. There is no cost for patients 60 and over to ride the bus. To fund the program, Hudson Headwaters collaborates with Adirondack Rural Health Network, which is a community partnership of public, private, and nonprofit entities in upstate New York that funds rural providers to improve access to care. Hudson Headwaters also collaborates with Inter-Lakes Health, another healthcare provider, to provide older adults with access to the Bus Program. Hudson Headwaters also receives funding from HRSA and private donations to operate the Bus Program, which currently has an annual budget of $47,000.

Although Hudson Headwaters has not completed a formal satisfaction survey of its program, the FQHC believes the numbers speak for themselves. Since 2002, the Bus Program has offered rides to 5,200 patients 60 years of age and over; approximately 2,000 rides have been given to patients that utilize wheelchairs. Since 2002, the bus has travelled 160,456 miles to take patients to and from their health care appointments, with an average round trip of 44 miles. Hudson Headwaters occasionally receives small, private donations from current and former riders who would not have access to primary care without the Bus Program.

3.3. Case Report 3: North End Community Health Center (Boston, MA). North End Community Health Center was founded 40 years ago with a focus on providing outpatient medical care to adults. Over the past 20 years the FQHC has added dental and behavioral services, as well as optometry, ophthalmology, podiatry, neurology, and obstetrics/gynecology to patients of all ages. North End also operates a pediatric department and provides child day care. Even with its expanded services, North End, still retains a focus on older adult patients. Over 20% of its patients are 65 years of age and older, and seniors comprise 40% of the FQHC’s total patient visits. North End also operates an Adult Day Health Care (ADHC) center and provides primary care services to older adult residents of senior public housing.

The North End transportation program was initially developed as part of the ADHC center (transportation is a required service under Medicaid regulations for ADHC) [21]. The ADHC center serves older adults in four urban Boston neighborhoods: East Boston, Charleston, South End and North End (for which the FQHC is named). The transportation program started with one van servicing the four neighborhoods and only taking ADHC patients to and from the center. The transportation program has since expanded to include all older adults who are patients of North End Community Health Center, not only those who utilize ADHC. North End currently has three vans and two drivers, which take patients to and from primary care appointments at the FQHC and the ADHC center, to the hospital, and even to run errands. About 98% of the patients who utilize the transportation program are older adults.

In an urban area like Boston, public transportation is readily available. However, older adults experiencing mobility loss may not possess the stamina necessary to map out a route on public transit, walk to and from bus stops, stand for long periods of time waiting for connections, and so forth. Because public transit operates on a schedule, direct routes both to and from locations is uncommon and increases total travel time. In addition, public transportation options for those with disabilities and other mobility losses are difficult to access. These are a few of the reasons why North
End opted to not only expand its transportation program to all older adult patients in the area, but also operate the transportation program as an “on-demand” service. North End’s vans respond to requests made at least 24 hours in advance (with same-day requests acknowledged if the schedule is permitting) and transport older adult patients door to door. Because the neighborhood of North End is so small, many patients end up needing to go to the same places. For more common destinations, North End Community Health Center does coordinate scheduled rides. For example, North End Community Health Center worked with Massachusetts General Hospital to provide three scheduled trips to the hospital each day through the hospital’s shuttle service. North End’s van also makes one morning trip to Massachusetts General Hospital each day; the van stops at all the FQHC’s senior housing sites and takes older adult patients to their hospital visits. The FQHC also provides one weekly trip to the local grocery store and scheduled service from the FQHC to the ADHC center.

Funding for the transportation program comes from North End’s budget and also from patient revenues; North End does charge its patients a nominal fee to ride the vans, but will still provide the service even if the patient is unable to pay. North End does not require payment at time of service; the patients are billed, and if they are unable to pay, North End does not refuse them the transportation services. Generally the fee to ride the bus to a health care appointment at the FQHC is $7 round trip. To get to Massachusetts General Hospital or another health care provider, the fee is $15. Social workers and case managers work with North End to coordinate the rides to the ADHC center on behalf of patients who may live outside of North End’s immediate service area; Medicaid reimburses North End for rides to the ADHC center.

North End’s transportation program has many consistent riders. According to North End, older adult patients feel safe and comfortable on the vans, which is in contrast to how they feel when utilizing other public transportation. The patients know the drivers by first name, and the drivers maintain good relationships both with the patients and with their family member and caregivers. This comfort level has been especially important for frail elders.

When Aaron E. Henry became aware of their older adult patients’ abilities to pay their neighbors for rides, the FQHC applied for a grant from the Health Resources and Services Administration (HRSA) to purchase two 15-passenger vans to transport older adult patients to and from their specialty appointments. Soon the FQHC was permitting patients of other primary care providers in the area to access the vans. In 1993, Aaron E. Henry received a grant from the Mississippi Department of Transportation (MDOT) to expand the FQHC’s transportation services and assist with costs; many of the riders were low-income individuals and could not afford to pay what it costs to ride the vans. However the MDOT grant came with the following condition: rides would need to be opened up to the general public.

Aaron E. Henry seized the opportunity to provide transportation services not only to its own older adult primary care patients with the need to access specialty care providers, but also to nonpatient members of its large, rural service area who needed transportation to and from work, shopping centers, and even schools. Although some riders are not primary care patients at Aaron E. Henry, the FQHC chooses to provide rides to whoever may need one, regardless of that person’s ability to pay. However, almost all of the riders are able to pay the full cost of a local trip, which is between $2 and $5. Trips to Memphis (Tennessee) are more expensive—about $25 round trip—and occur less often.

Now known as the Delta Area Rural Transit System (DARTS), the transportation program at Aaron E. Henry serves individuals of all ages and mobility levels. The FQHC is the largest transportation provider in the area with 28 multipassenger vehicles booking over 99,000 one-way trips in 2009; over 58% of those trips were for low-mobility riders. DARTS currently operates an annual budget of $1.5 million and recently received funding through the American Reinvestment and Recovery Act of 2009 (ARRA, also known as the “Stimulus”) to cover the costs of purchasing and operating new vehicles.

4. Conclusions

This paper explored transportation programs in four FQHCs that are reducing the effects of mobility loss in their older adult populations and summarized results of these case reports. It is the author’s understanding, after a review of the literature, that this report is also the first of its kind. This paper concludes that by providing elderly patients access to primary care services, these FQHCs are increasing their patients’ access to affordable primary care services, increasing their patients’ independence and affording their older adult patients’ the opportunity to remain in the community rather than be institutionalized. Only 7% of the 20 million patients FQHCs currently serve are over the age of 65. However as the population ages and FQHCs double their current capacity to serve 40 million patients by 2015, the number of older adults receiving primary care services at FQHCs will increase, and there will be a greater need for strategies to increase primary care access for older adults through transportation programs.
These case reports are also examples of how FQHCs continue to be responsive to the specific needs of their communities while potentially bending the cost curve in primary care service delivery. Other studies have found that by providing access to primary care services to their older adult patients, FQHCs reduce the need for unnecessary hospitalizations and emergency department utilization in this population, which greatly decreases costs to the health care system [22–24].

A limitation to this report is that these four FQHCs are not representative of FQHCs nationwide. While all FQHCs are required by law to provide transportation to the patients within their service areas, the FQHCs featured in this report provide transportation services both to their own patients and to patients of other providers. These FQHCs have also tailored their transportation programs to meet the specific needs of older adults experiencing mobility loss, which is not reflective of FQHCs nationwide. However, these case reports shed new light on how FQHCs with transportation programs can reduce the effects of mobility loss in older adults by providing access to primary care services. Also the case reports featured in this paper are only examples of how FQHCs are able to use their resources and build collaborations with external partners in an effort to reduce the effects of mobility loss in the older adults that utilize their services; FQHCs interested in establishing their own enhanced transportation programs, whether by replicating the case reports featured in this paper or by developing their own innovative models, should obtain legal advice and other expert assistance prior to establishing and implementing their own programs.

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References


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