



Council on Aging of Southwestern Ohio

home52 Transportation

Coordinating NEMT for Older Adults in the Cincinnati Region

January 2022



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Council on Aging is designated by the state of Ohio to serve older adults and people with disabilities within a multi-county region. We are experts at helping people with complex medical and long-term care needs, offering a variety of services via publicly funded programs. ***Our mission: Enhance lives by assisting people to remain independent through a range of quality services.***

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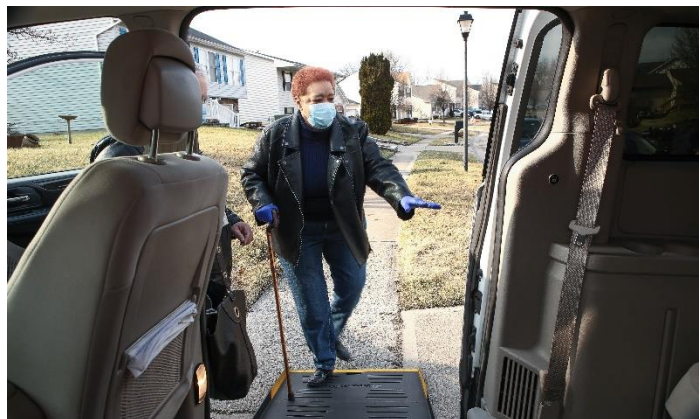


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EXECUTIVE SUMMARY

The purpose of this report is to document the journey of Council on Aging of Southwestern Ohio (COA) to design and implement home52 Transportation, a project funded by an Access and Mobility Partnership Grant for an Innovative and Coordinated Access and Mobility (ICAM) Pilot grant. With this project, COA aimed to address several transportation challenges faced by older adults, including: the lack of accessibility to specialized transportation; issues of poor and varying levels of quality among transportation providers; and lack of efficiency due to multiple transportation providers operating in siloes.

COA set out to design a transportation system to coordinate multiple transportation providers to improve efficiency, demand a high level of service quality, provide on-demand rides, and bring a deep understanding of the needs of clients from the social service lens. To design this unique model, COA actively sought input from medical and behavioral health providers, transportation providers and internal experts with the support of local partners and national consultants.

Core to the design of home52 Transportation's model is the Transportation Management System (TMS), which allows home52 to schedule, dispatch, monitor and communicate with transportation providers in real time. home52 selected TripSpark's NovusMED software and invested in the customization of the system. System configuration took place in tandem with the design of coordination center operations, and these efforts were complimentary. Securing a network of transportation providers required robust communication, training, and coordination. Core to this effort was the design of a common rate structure and a service model utilizing both dedicated and non-dedicated vehicles. A request for proposal was released to engage providers, through which eight providers were awarded contracts.

home52 Transportation began coordinating rides in May 2021, using a ramp-up plan to onboard clients by geographic zone. In its first five months of operations, home52 Transportation provided 8,585 one-way rides to 688 unduplicated clients. In September 2021, the call center averaged 272.5 calls per day. Client satisfaction survey results include 88 percent of rides arrived on time; 82.4 percent of clients rate home52's quality as excellent or above average; 92 percent of clients said scheduling with home52 was easy; and 92 percent would recommend home52 Transportation to a friend or family member.

home52 Transportation was successfully launched and implemented. Existing transportation challenges have not been simple to overcome but home52 Transportation now has real-time data and insight into issues and concerns of clients. The major learnings experienced through the design and implementation of home52 Transportation include:

- High-quality transportation coordination services are resource intensive.
- Coordination and contracts alone do not improve quality but provide the data and information to leverage and influence quality.
- Not all transportation providers are willing to follow requirements.
- To maintain quality standards, more transportation providers are needed.
- Small transportation providers struggle with technology and need a higher level of support.

INTRODUCTION

This is the final report for Council on Aging of Southwestern Ohio's (COA) Access and Mobility Partnership Grant for an Innovative and Coordinated Access and Mobility (ICAM) Pilot grant. COA utilized the grant funding to design and implement home52 Transportation, an effort to improve transportation quality and efficiency for individuals with specialized transportation needs. In this report, we will document the journey to implement home52 Transportation, including project background, implementation results and lessons learned.

COA is the state-designated Area Agency on Aging for Butler, Clermont, Clinton, Hamilton and Warren counties in the Greater Cincinnati, Ohio area. COA's mission is to enhance lives by assisting people to remain independent through a range of quality services. These include home and community-based services; advocacy; caregiver support; a call center for information, advice and referral; transportation; and more.

Thanks to the 2019 receipt of a generous Access and Mobility Partnership Grant for an Innovative and Coordinated Access and Mobility Pilot, COA officially launched home52 Transportation on May 3, 2021, under the operation of its wholly owned subsidiary home52 LLC.

home52 Transportation is a unique transportation coordination model that complements public transportation. home52 Transportation serves clients with needs for hands-on assistance, through-the-door services and specialized vehicles. While there are many private non-emergency transportation companies in our region, none are like home52. home52 coordinates multiple transportation providers to improve efficiency, demand a high level of service quality and provide on-demand rides, and has a deep understanding of the needs of our clients from the social service lens.



home52 Transportation was first launched to serve the Hamilton County Elderly Services Program (HCESP), a county levy-funded program administered by COA. HCESP helps older adults remain safe and independent in their homes by providing senior home care services such as personal care, housekeeping, meals, transportation and more. The HCESP contract is administered by county commissioners and oversight is provided by an Advisory Council of commissioner-appointed citizens.

BACKGROUND

Access to quality transportation is a barrier for older Ohioans. Many older adults cannot safely use public transportation because of physical conditions. Traditional taxicab service is not an option for those who need additional hands-on support to safely enter and exit vehicles. Family and friends may be willing to assist, but other priorities can cause cancelled medical appointments, preventing older adults from receiving timely routine medical care.

Transportation coordination has been a long-standing key priority across state and local jurisdictions. The Ohio Department of Medicaid released a white paper on Medicaid Mobility Transformation, calling regional coordination a strategic priority to improve public and human services transportation. The 2020 Human Services Transportation Coordinated Plan released by the OKI Regional Council of Governments emphasizes the following goals: To improve transportation service to target populations through more coordination among providers; and to better serve people who use wheelchairs or who need physical assistance to travel.

As the Area Agency on Aging in our region, COA has provided care management, including access to transportation, to clients for over a decade. However, the traditional transportation model was not meeting the needs of older adults, which led to the exploration of transportation coordination. Many challenges existed, in COA's own first-hand experience of administering transportation for thousands of older adults and people with disabilities:

Accessibility

Individuals with specialized transportation needs that go beyond public transportation have little to no access to same-day transportation that meets their needs. Traditional non-emergency medical transportation (NEMT) must be scheduled in advance, with little flexibility among fleets to schedule same-day rides. This target population requires a responsive system that can provide on-demand access, hands-on assistance and escort and vehicles that can accommodate wheelchairs, stretchers and other assistive devices. Without this, their backup system of transportation is to go without care, according to COA's own transportation survey conducted in 2009. This leads to missed medical appointments, increased use of the emergency room and likely avoidable hospital admissions.

Quality

In 2015, COA participated in the United States of Aging survey. Key findings state, "Older adults in Cincinnati express low confidence in their community's preparedness, specifically with transportation and long-term care as they age." Older adults in Cincinnati and nationally say better public transportation is the most important thing their community could do to make it easier for them to get around (38 percent and 42 percent respectively). One-third rate transportation in the region as poor (56 percent and 33 percent).

In COA's own experience, quality standards among transportation providers vary greatly. In some instances, it was not uncommon to hear of vehicles not showing up for scheduled transportation and/or leaving the premise of a pickup after only a few moments due to an operational demand to get to the next ride. While COA had service standards in place and

measured transportation quality, the services were not directly coordinated by the organization. Therefore, any quality issues or incidents were not routinely reported directly to COA and/or were not reported in real time, making it difficult to address and manage these challenges.

Siloes

There are a vast number of NEMT providers in the COA region, and many that directly contract with COA, all of which generally operated in siloes. Specific programs and funding sources cover the cost of trips for certain eligible members and ensure the client receives the right type of transportation assistance; but this system is inefficient and lacks flexibility.

Transportation is not coordinated across multiple programs. Each transportation provider uses different mechanisms to optimize routes, some of which are manual. Transportation providers focus only on the customers they are assigned to assist. Many trips are one-way, with “dead head” returns with no passengers on board. Transportation vehicles pass one another in neighborhoods. Because of these siloes, clients may wait for hours for a ride until their assigned provider is available. In short, the system does not meet the clients’ needs for responsive on-demand transportation and the system is inefficient and costly.

PROGRAM DESCRIPTION

COA set out to reinvent the way transportation is managed across multiple providers and payers. We proposed a system redesign that would centralize the coordination of transportation services across multiple providers and funding sources, ensuring clients receive the right type of vehicle, at the right time. Like a taxi, Uber or Lyft, clients would contact COA, and we would dispatch the vehicle in the proximity closest to the client that also meets the needs of the client (i.e., door-to-door assist, bariatric lift, wheelchair accessible, etc.). For rides scheduled in advance, we would optimize routes to eliminate empty vehicles between drop offs and pickups.

The primary components of the proposed new system included:

- Designing a robust transportation coordination system to meet the needs of multiple constituents, including but not limited to: COA-administered programs, medical providers and additional behavioral health and human services providers.
- Implementation of a transportation management system (TMS) to support centralized logistics required to optimize routes, provide real-time tracking of vehicles for on-demand dispatching, and collect data for analysis and reporting.
- Enhancing and/or expanding call center capacity to handle the scheduling and coordination of transportation.
- Securing transportation provider network buy-in, education, training, and contracts.
- Client education, training, and satisfaction data collection.

COA envisioned this program to serve all older adults and individuals with disabilities, across a variety of programs and funders, with an initial focus on Hamilton County. Next, we describe program design and implementation.

PROGRAM DESIGN AND IMPLEMENTATION

Prior to receipt of the ICAM Pilot funding, transportation had long been an area of focus for improvement by COA. The many challenges addressed in the Background section have existed for years for multiple transportation funders that partner with COA. As early as 2015, COA gathered a large group of internal stakeholders in engagement sessions to explore what a redesign of the transportation system would entail. These sessions began to shape our initiative to pursue design and implementation of a transportation coordination system. As we dove into implementation of home52 Transportation, much of the groundwork had already been set.

Designing a Robust Transportation Coordination System

The Learning Collaborative

COA wanted to create a transportation coordination system to meet the needs of a variety of stakeholders. For this purpose, COA partnered with The Health Collaborative (THC). THC is the Greater Cincinnati region's hospital association and health information exchange. It is a unique regional 501(c)(3) organization that combines the regional hospital association, payment reform support, clinical quality analysis, emergency response coordination, cost and utilization metrics and the nation's first clinical Health Information Exchange (HIE), into one organization. THC convenes funders in the health, employer and not-for-profit sectors by identifying and supporting innovative community investments.

THC served as a convener to equip COA with critical input from medical and behavioral health providers. Over the course of nearly a year, COA and THC convened 30 individuals employed by 17 different organizations. Participating organizations included all major health systems in Greater Cincinnati, several of the largest behavioral health service providers and a few managed care organizations. These organizations were convened in a series of learning collaborative meetings designed to obtain input and feedback. The first four sessions focused on input and feedback, while the fifth and final session was COA's presentation of the product to be implemented.

Not surprisingly, and in alignment with local data, the learning collaborative participants expressed that transportation was the greatest barrier to patients' access to care, specifically for those without Medicaid or Medicare insurance coverage. Not only does transportation create a barrier to the individual's access to healthcare, it also creates many operational challenges for these organizations, many of which operate on billable time. In some cases, particularly with non-profit behavioral health providers, agency staff were being sent to personally transport clients so they would not miss critical appointments.

As input was gathered from the learning collaborative over time, the following criteria were highlighted as necessary in an ideal transportation solution to meet the providers' and patients' needs:

- **Timeliness:** Picking up the patient on time and arriving to the appointment on time; reducing the length of the ride by limiting ride sharing, therefore improving timeliness.
- **Same-day and/or limited-notice scheduling:** The need for transportation that may be unplanned and cannot be scheduled far in advance. This may include transportation for last-minute medical or sick visits, urgent behavioral health needs that don't qualify as an emergency and/or getting a ride to a routine visit when prior transportation options (i.e. family/friends) are no longer available.
- **Appropriate transportation to meet specialized needs:** Handicapped accessible transportation with drivers that provide hands-on assistance and ensure patients get directly to their destination.
- **Communication:** Providing closed loop communication whereby all parties are aware of the status of a ride – including the driver, client and provider at the ride destination. Utilizing technology to efficiently send notifications and alerts to multiple parties.



These criteria were embedded throughout the design and implementation of home52 Transportation. As the TMS system was being configured and program designed, COA turned to the learning collaborative members for feedback, including occasional one-on-one meetings. Many have expressed interest in partnering with home52 Transportation if funding can be obtained to pay for the transportation services for clients with no alternative funding source.

Transportation Rate Structure & Coordination Fees

The most challenging, and perhaps most critical element of setting up the transportation coordination system, was determining the rate structure and fees. For assistance with this process, COA contracted with Texas A&M Transportation Institute (TTI) for research and technical assistance. TTI provided robust services, including reviewing current conditions within COA transportation services and influencing factors (focusing on HCESP); providing and evaluating options for a transportation rate structure framework; and assisting in creating an allocation cost model tool for transportation coordination. Not only did TTI engage multiple COA internal stakeholders in the process, but several transportation providers as well.

Transportation Rate Structure

Essential to the design of the transportation coordination system was the fact that COA would contract with multiple transportation providers to provide the actual transportation services,

while COA would provide the transportation coordination services (often referred to as a brokerage). Additionally, because home52 Transportation was to launch within a levy-funded service, a request for proposals (RFP) had to be conducted to contract with transportation providers. For these reasons, establishing a rate structure was critical and timely to the design and implementation process.

Prior to home52 Transportation, COA's HCESP transportation services operated under what is referred to as a "bid rate service." Under this concept, COA contracted with several transportation providers, but the actual cost of transportation varied for each individual client and use case. When a client was authorized to receive transportation for a specific medical or non-medical need, an explanation of the transportation need was put into COA's system. Transportation providers then submitted a bid for a one-way trip, with the same rate applied for the return trip. Generally, COA, via the client's care manager, would accept the lowest bid submitted. The challenges with this system were numerous, including: the lowest bid did not always demonstrate the highest quality provider; the system most benefited providers with the administrative capacity to monitor and bid services; and the bids appeared arbitrary so the ability to understand true transportation costs was limited.

To overcome the past challenges, and align with the home52 Transportation model, TTI recommended both dedicated and non-dedicated rates:

- **Dedicated Vehicles** – TTI recommended the use of dedicated vehicles that were assigned by providers to home52 Transportation for dispatching for full or half days, dependent on the transportation demand and capacity. The use of dedicated vehicles would essentially allow home52 to "control" the vehicle during the time it's dedicated, guarantee the transportation provider payment during the dedicated time, and hopefully decrease the cost of transportation over time as efficiency improves.

Rate options for dedicated vehicles included: an hourly rate, a flat per-trip rate, a zone-based rate (based on geographic zones), a rate per mile and a base rate plus mileage rate. For dedicated vehicle service, an hourly rate – or revenue vehicle hour (defined as first pickup to last drop off) – was recommended. As the most common rate structure for dedicated service, it minimizes risk for transportation providers while, in theory, reducing COA's cost per trip as trip volume and productivity increases.

- **Non-Dedicated Vehicles** – The use of non-dedicated vehicles was recommended to essentially fill gaps for transportation services that cannot be fulfilled by dedicated providers. These providers would be paid only for transportation services delivered as scheduled and might only be scheduled or dispatched for one or more rides on any given day. Under the design of home52 Transportation, non-dedicated vehicles would still be required to actively use home52's TMS while actively transporting home52 clients.

Rate options for non-dedicated vehicles also included: an hourly rate, a flat per-trip rate, a zone-based rate (based on geographic zones), a rate per mile and a base rate plus mileage rate. It was recommended that COA pursue pricing with providers

for both a per-mile rate and a base mile plus mileage rate with multiple base mile options. Pursuing these options would allow home52 to analyze the responses and select the most cost-effective rate structure to be applied to all transportation providers.

As explained in the overview of the Request for Proposal process, home52 Transportation pursued both dedicated and non-dedicated vehicle rates with transportation providers. An hourly rate was pursued for dedicated vehicles, while a base rate plus mile rate was pursued for non-dedicated vehicles.

Transportation Coordination Fees

home52 also sought assistance from TTI to set a transportation coordination rate (i.e., brokerage fee) that 1) was simple to understand and budget for and 2) would allow for calculation of cost prior to the trip taking place. home52 also wished to establish a coordination fee that is comparable to, but competitive with, like service providers to enable future expansion.

The options explored in partnership with TTI included: a per-trip fee, a subscription fee, a per-client fee (i.e., “per-member, per-month”), or a per-funder fee. TTI recommended a per-trip fee based on the actual per-trip costs, as well as a subscription fee for those applicable transportation funders. TTI worked closely with various internal COA staff members to develop a robust cost allocation model that included all costs associated with transportation coordination (administrative costs, accounting processes, call center operations, staffing, etc.).

The process for establishing coordination rates based on cost allocation proved challenging for many reasons. First, home52 Transportation was not yet operational, so there was limited data to determine operational costs. Many cost comparisons can be made, but most are for public transit and/or paratransit services, which are not comparable to the service and customer base of home52. Second, home52 established a ramp up plan in which it would begin with a small customer base, which would make coordination rates based on actual cost unrealistically high. Thirdly, home52 had to take into consideration its non-profit status and the fact that the initial payors for coordination services were limited public funds.

At start-up, home52 established a separate coordination fee arrangement that met the needs of our initial funder, HCESP. As additional funders are obtained, home52 will explore coordination fee structures that best meet the needs of those funders and home52, including a per-trip fee (percentage of the trip cost) and/or subscription rates.

Selection and Implementation of a Transportation Management System (TMS)

As COA’s journey to improve transportation services began long before this project, so did the selection process for a TMS. However, the vision for how the TMS system might be utilized and managed evolved over time.

Prior to the ICAM Pilot funding, COA released its first RFP related to transportation coordination in August 2017. This RFP for a “Transportation & Appointment Scheduling System” envisioned utilization of a centralized scheduling system for all Elderly Services Program providers. However, the management of this system had not yet evolved to include a transportation coordination center. Rather, the vision at that time was for COA care managers, who authorize and coordinate various services for clients, to utilize the system to directly schedule transportation with various providers. COA received no responses to this initial RFP, so the RFP was revised and released again in September 2017. COA did receive two RFP responses from two transportation companies and neither met the needs of COA.

Utilizing learnings from the first RFP process, COA released a request for information (RFI) in October 2017, again for a “Transportation & Appointment Scheduling System.” Unlike the previous RFP process, in the RFI, COA sought input from software and system providers to obtain knowledge of the services available to help shape future business applications. This process encouraged open conversation and feedback from providers to help COA shape its future business plan for improving transportation services. In this process, COA received responses from and spoke with three companies, one of which was TripSpark, which would later become home52 Transportation’s software vendor. While COA did not move forward with a contract at that time, the process, and subsequent conversations with TripSpark, shaped our vision to one of developing a transportation coordination center.

TMS Selection

Once COA secured the ICAM Grant funding, we were well equipped to move quickly into the TMS selection process. A large internal team with representatives from multiple departments provided input to develop our TMS system specifications as we sought an actual provider contract. The priority specifications included:

- GPS vehicle tracking that enables the system to provide real-time feedback or alerts on transportation issues (i.e., timeliness) and location.
- Route optimization for both advance-scheduled and on-demand scheduled rides.
- Three-way communication enabled between COA, transportation provider and client.
- Access to data, including the ability to store and export data.
- HIPAA compliance.
- Ability to handle multiple transportation providers.
- Real-time alerts for issues such as client no-shows, delayed rides and unaccepted ride requests.
- Tracking for billing purposes.
- Ability to handle multiple vehicle types to meet client assistance needs (ambulatory and non-ambulatory).

As these specifications were developed, COA reassessed the TMS system landscape and was led back to TripSpark. TripSpark submitted a full proposal, including price assumptions, for their NEMT software package, NovusMED. COA’s internal team participated in a presentation and dialogue with the TripSpark team. The internal team rated TripSpark’s ability to meet both

required and preferred service specifications. After rating, consensus and further discussion, COA decided to contract with TripSpark for home52 Transportation's TMS.

TMS Configuration and Implementation

COA's Technology and Innovation Services (TIS) team was actively involved in selecting, contracting and configuring the TMS. Team members included both the Director of TIS and the System Administrator. While NovusMED is a system built for NEMT service provision, there is a great amount of customization involved. The home52 Transportation Manager, who was onboarded early in the project, and the System Administrator likely spent 50 percent of their time on the project focused on system configuration. The benefit, however, was that configuration design was taking place in tandem with overall transportation coordination center design. Needs and questions that arose around TMS configuration prompted exploration and decisions about critical aspects of coordination center operations.

As COA embarked on system configuration and coordination center operations, we learned that an adjustment was needed in the initial selection of the NEMT software solution. Initially, COA had worked with TripSpark to secure an NEMT solution called Provider Mobile. Provider Mobile is the software that would typically be the solution for a traditional transportation brokerage. In short, the system enables trip scheduling with multiple providers, the sharing of trip data, and supports the provider billing process. However, COA's vision was not one of a traditional transportation brokerage. COA envisioned access to real-time trip data, communication with drivers and the ability to track drivers to enable on-demand ride scheduling.

This realization led COA to revisit with TripSpark the software solutions available, and to emphasize long-term goals and how home52 Transportation would differ from a traditional brokerage service. Through additional conversation, COA and TripSpark realized that DriverMate was the best application to meet its requirements. DriverMate is an application typically utilized by transportation providers to directly manage their own fleet and drivers. DriverMate enables real-time tracking and communication, with the capability for drivers to message the coordination center directly. While differing from many models, this is the solution that COA needed to meet its needs for hands-on transportation coordination that would ultimately improve quality and efficiency.

While the transition in software applications took place midway during configuration, it fortunately did not impact the configuration timeline. Most of the early system configuration was for the NovusMED software system, which is built to support the backend of both Provider Mobile and DriverMate. Prior to the application change and ongoing, the system configuration process included a multitude of areas, including:

- Layouts for all associated screens and menus
- Scheduling parameters and trip administration
- Locations, including prepopulating all potential trip destinations for ease of scheduling (doctors' offices, major hospitals, pharmacies, etc.)
- Bookings

- Vehicles and drivers
- Clients
- Funders

Configuration to get the system ready to use, including User Acceptance Testing, took over 18 months. This may not be comparable to others who already manage transportation services, but much of the model for home52 was being designed as the system was configured.

While home52 Transportation has gone live, there are still improvements being implemented and parts of the application that are not yet being utilized. Over the coming months, we plan to implement the following:

- *Time-banded contracts* – This will enable home52 to utilize dedicated vehicle contracts, paid by revenue per vehicle hour. However, some additional reporting and/or development may need to take place to calculate actual trip costs for funders.
- *Passenger Portal* – Passenger Portal is a user interface that allows clients/customers to schedule their own trips online. Passenger Portal also allows clients to place money in an account to purchase trips, which may be utilized for future private pay clients and/or medical providers who wish to purchase trips on behalf of clients.

Securing a Transportation Provider Network

Request for Proposal (RFP) Design

To procure a network of transportation providers, home52 had to follow a competitive bidding process. The home52 Transportation project team worked in partnership with COA's Provider Services team to develop and implement an RFP process. A competitive process was required because home52 Transportation's first service population was the levy-funded HCESP.

This RFP process was different from any ever initiated by COA for two reasons: 1) It was the first to operate under COA's subsidiary home52 and 2) home52's transportation coordination system differed vastly from the transportation model to which existing HCESP providers were accustomed.

The RFP and supporting documents were robust to clearly explain to providers the elements of home52 Transportation and the service and quality requirements providers would be expected to meet. Supporting documentation included the home52 Transportation Service Specifications, which had previously been approved by the HCESP Advisory Council, as well as Conditions of Participation.

In addition to standard health and safety requirements for transportation providers, home52 Transportation service and quality requirements included the following:

- **Through the Door Services:** home52 aims to provide client-centered services for populations with specialized needs. Unless otherwise directed, transportation providers will provide “through the door services” to clients. Through the door is defined as: escorting or assisting the client directly to the location of the appointment, which may be a specific office or floor within a larger building; or into the client’s home or other location.
- **Hands on Assistance** – Drivers will be expected to provide hands on assistance to all clients, which may include escorting in compliance with training as well as assistance with client equipment and/or belongings.
- **Timeliness and Wait Times** – Transportation providers are expected to arrive at the pick-up location within an acceptable window of time (+/- 10 minutes) and are required to wait a minimum of 15 minutes for the client.
- **Ride Sharing** – Provision of rides to multiple individuals – either multiple home52 clients or home52 clients and other clients of the transportation provider – are only permitted at the discretion of home52 Transportation. Prior approval must be obtained before ride sharing takes place.
- **TMS Software** – All vehicles, whether dedicated or non-dedicated at the time of service, are expected to actively use the home52 TMS system’s driver interface while transporting home52 clients. The TMS software will foster two-way communications between the driver and coordination center, assist in mitigation of ride issues or delays and capture information needed to process provider payment.

While home52 was requesting a high level of service quality and engagement from providers, it was also eliminating much of the administrative burden from previous services. The process of monitoring authorizations, bidding and invoicing for transportation services was no longer required of providers. Additionally, home52 Transportation set up systems and processes to ensure providers were paid on a weekly basis, to encourage small family- and minority-owned businesses to apply.

A critical element of the RFP was setting up the rate structure. Providers were asked to provide bid rates on dedicated and/or non-dedicated vehicles for ambulatory and/or non-ambulatory vehicle options. Dedicated rates included a rate per revenue vehicle hour (RVH) for time increments of 4-7.5 hours and/or 8-plus hours. Non-dedicated rates requested included a base rate plus per-mile charge for base mileage of one, five and 10 miles as well as a flat per-mile rate. Non-dedicated rates included a 15-minute extended wait time fee for any time the provider is required to wait for a client longer than the initial 15 minutes required. A stretcher option was also included in the non-dedicated rates option. See Figure 1, the Bid Rate Sheet for home52 Transportation that was included in the RFP process.

Figure 1: Bid Rate Sheet for home52 Transportation

Agency Name:					
Table 1: Dedicated Transportation Rate					
County	Type of Vehicle	Rate per Revenue Vehicle Hour (4-7.5 hours)	Rate per Revenue Vehicle Hour (8 plus hours)		
		Operating hours 6 a.m. - 6 p.m. M-Sat	Operating hours 6 a.m. - 6 p.m. M-Sat		
HAMILTON COUNTY	Sedan/Minivan				
	Wheelchair Van				
Table 2a: Non-Dedicated Transportation Base plus Mileage Rate					
County	Type of Trip	Base Rate (per one way trip)	Includes # of Base Miles	Per Mile Charge	Extended Wait Time Rate (fee per each 15 minutes after the first 15 minutes) One unit = 15 minutes
HAMILTON COUNTY	Ambulatory		1		
	Ambulatory		5		
	Ambulatory		10		
HAMILTON COUNTY	Non-Ambulatory		1		
	Non-Ambulatory		5		
	Non-Ambulatory		10		
HAMILTON COUNTY	Stretcher		1		
	Stretcher		5		
	Stretcher		10		
Table 2b: Non-Dedicated Transportation Per Mile Rate					
County	Type of Trip	Assuming no base rate, provide a rate per mile			Extended Wait Time Rate (fee per each 15 minutes after the first 15 minutes) One unit = 15 minutes
HAMILTON COUNTY	Ambulatory				
	Non-Ambulatory				
	Stretcher				

RFP Implementation

The RFP was released in January 2021. A notice of release was sent to all COA transportation providers (across all COA programs, not just those serving HCESP) as well as posted in several newspapers across Greater Cincinnati. A virtual bidder's conference was hosted shortly after the RFP release, which included an introduction to home52 as a subsidiary of COA, an overview of home52 Transportation and how the coordination model differs from prior services, and an overview of the RFP process.

The bidder's conference included live questions and answers, with the option to submit additional questions for one week following the conference. Over 60 questions were submitted, and most pertained to: how the transportation rates, specific dedicated rates, would be applied; the use of home52's TMS system in tandem to other system(s) already utilized by the provider; and the transition of HCESP clients to home52 as it pertained to current providers.

Providers had nearly a month and a half from the RFP release to submit a proposal. The contract start date was set at April 2021, with the intent to begin program ramp-up in May 2021.

Transportation Provider Selection

Eleven potential providers submitted RFPs that were assessed by several reviewers. A first-level evaluation, which included financial stability and licensing, was conducted by COA's controller. The second-level evaluation included a review of the organization and its capabilities, including: experience and commitment to aging, driver and staff training and availability, continual quality improvement process and county presence. The second-level evaluation was conducted by a committee of representatives from various functional areas within COA.

In addition to the first- and second-level evaluations, a third-level evaluation included a pricing review. COA's Finance Manager conducted analysis of the pricing, including the bid rate structures. In the case of non-dedicated rates, the cost efficiency of each rate structure, based on the rates provided, was assessed. For ease, COA compared the cost of a five-mile ride, having some data and anecdotal evidence that the average HCESP ride was within five miles. The analysis demonstrated that the five-mile rate plus per-mile charge would be most cost-effective. home52 proceeded with this non-dedicated rate structure, plus the dedicated RVH rate, in contracting.

Eight providers were awarded contracts with home52 Transportation. Three were eliminated due to incomplete proposals and apparent lack of readiness to participate. These providers included the existing COA providers that served HCESP, in addition to several providers new to HCESP.

One challenge that became evident as home52 rolled out the RFP and began contracting with providers was insurance requirements. COA consulted with its insurance company regarding provider insurance limits, and the recommended insurance coverage for the new coordination center was much higher than what COA has required under its previous model. Understanding that this would be a challenge to some providers, COA did not require proof of the insurance standard at the time of proposal but messaged in the RFP that it would be required at the time of contracting.

As COA began the provider contracting process, many companies communicated that it would cost tens of thousands of dollars for them to expand their insurance limits to meet the new requirements. Many of these providers were small businesses that simply could not afford the additional cost and would have to decline the contract otherwise. Instead, in consultation with the insurance company, home52 decided to move forward with a one-year contract with these providers, with a waiver for the required levels of insurance (with a lower level of defined coverage accepted). The intent was to provide the companies the time to trial service to home52 and see if the benefit to the organization made the insurance cost worthwhile.

Provider Onboarding and Training

home52 initially had the awarded providers sign an Intent to Contract to expedite the onboarding process while formal contracts were being signed. Onboarding included:

- Completion of a precertification process for all providers new to serving HCESP clients (existing HCESP transportation providers were already certified)
- Collection of provider information, including details needed for the set-up of the TMS (i.e. vehicle and driver information)
- Participation in a virtual Provider Onboarding Session, which included:
 - Introduction to the home52 Transportation team
 - Overview of the focus on quality
 - Overview of training and onboarding requirements
 - Overview of how home52 Transportation will operate
 - Review of the proposed ramp-up plan
 - Information about how clients will transition from current HCESP transportation to home52 Transportation
- Participation in virtual trainings, which included:
 - *Meet the home52 Client*
 - Topic: Overview of client customer service needs and home52 expectations
 - Audience: Provider administration and drivers
 - *TripSpark DriverMate*
 - Topic: Instruction on how to use TripSpark DriverMate, as required for coordination and communications with home52
 - Audience: Provider administration and drivers
 - *TripSpark Scheduling and Billing*
 - Topic: Instruction on the scheduling and billing processes, including the TripSpark interface (NovusMED Core System)
 - Audience: Provider administration, schedulers/dispatchers

Implementation Plan

While the vision of home52 Transportation is to expand across Greater Cincinnati with multiple funders and payers – it was always the intent to launch the program with HCESP. The HCESP census at any given time is 5,500 individuals who receive care coordination and provision of services such as home-delivered meals, home care and transportation services. At any given time, approximately 10 percent of the HCESP population is authorized to receive non-emergency medical and/or non-medical transportation.

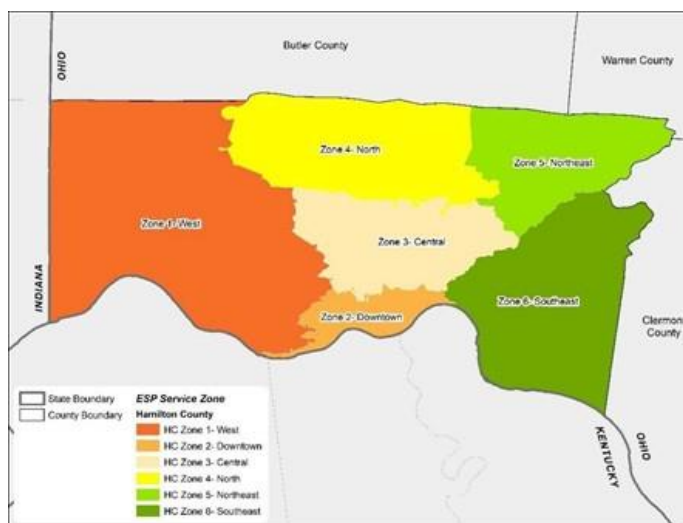
Since home52 Transportation was a new program model to home52 and COA, it was decided that a slow ramp-up was needed. However, the ramp-up had to be timed appropriately given the nature of existing contracts. home52 Transportation was set to launch in May of 2021, while transportation provider contracts under COA's old transportation service model were set to

expire September 31, 2021. Therefore, it was necessary to transition all HCESP clients authorized to receive transportation services to home52 Transportation.

HCESP is split into six geographic zones that make up Hamilton County. Each client is categorized to a zone base on their home address. To determine the ramp-up plan, the home52 team assessed the number of clients authorized to receive transportation, as well as the estimated number of trips per day based on previous data. Then a ramp-up plan was developed to bring on the smallest zone first, and add one to two zones each month, until all zones were transitioned to home52 by September 2021.

The zone transition process was somewhat complex in that many of the transportation providers that were already contracting with COA under the new model had to operate under both contracts and models at the same time. Under the old COA model, transportation companies scheduled and coordinated all the transportation for the clients contracted to them and were therefore guaranteed those trips. Under the home52 model, all scheduling and coordination was to be handled by home52 and home52 determines which company receives a client's ride based on the vehicle location, provider cost and quality.

home52 had to clearly communicate with and remind the existing providers that they could no longer schedule trips for clients, and that any trips not scheduled by home52 and tracked through NovusMED would not be paid. However, home52 also recognized that some clients who received routine transportation for medical services, such as weekly dialysis, may already have future scheduled rides with their current providers. To overcome these challenges, prior to each zone transition, COA provided the transportation providers with a list of clients currently assigned to them that would be transitioning to home52 Transportation. Providers were required to provide any prescheduled trips to home52 Transportation to input into NovusMED, and prescheduled trips for no later than two months from the client transition date were honored.



In addition to provider communication, HCESP client communication was important as well. Prior to each zone transition, any HCESP client authorized to receive transportation services received a call from their care manager or a care coordination specialist regarding the transition to home52 Transportation. Additionally, the clients were mailed a letter, home52 Transportation FAQ, and a home52 Transportation magnet with the call center number. While the communication with clients was time intensive for the HCESP team, it was critical in maintaining communication and quality services with COA clients.

Enhancing and Expanding Call Center Capacity

While COA had previously operated a call center that provides aging and disability resource information and referrals, the nature of operating a transportation call center was much different. At the onset of the program, it was unclear the call center capacity needed, so learnings throughout the ramp-up have shaped home52's staffing plan.

First, it was important for home52 to have an easy and memorable phone number for clients and caregivers to call to schedule transportation. The number 1-855-5HOME52 was established.

Second, staffing to not only operate the call center, but to schedule and dispatch rides, was critical. Under the management of the Transportation Manager, the role of Transportation Coordination Specialist was designed. In many transportation companies, individuals play specific roles, and that of scheduler and dispatcher is often separate. home52 designed a model where all staff were cross trained so any role could be filled at any given time. The hope was that the individual who scheduled rides one day would dispatch those rides the following day.

home52 drafted a staffing model based on assumptions about call center and ride volume, as well as anecdotal data relayed from other like services. At initial implementation, home52 hired one full-time and one part-time Transportation Coordination Specialist. Additionally, the Transportation Manager was a working manager, with the vision that at least a portion of his time would be committed to ride scheduling and coordination.

As home52 operated for the first few months and staff learned the system and modified practices to increase efficiency, it became apparent that the initial staffing model was not adequate. Anecdotal data from other like services relayed that a standard call time was approximately three minutes. However, given the unique needs of clients and home52's intent to provide person-centered customer service, the actual call time for home52 Transportation ranged from six to seven minutes per call.

To provide the high-quality services we aim to provide, home52 has expanded coordination center staffing. As of December 2021, home52 has one full-time Transportation Manager and one full-time and six part-time Transportation Coordination Specialists. This staffing model will enable home52 to meet the needs of the current HCESP clients, with flexibility to bring new service populations into home52 Transportation.

Because of the nature of new program implementation, home52 coordination center hours are currently 8 a.m.-4:30 p.m., Monday-Friday. Ride scheduling and on-demand rides can only occur during these hours. However, home52 can pre-schedule rides to providers anytime between 6 a.m. and 6 p.m., seven days a week. We hope to expand future capacity to provide real-time scheduling and dispatching from 6 a.m.- 6 p.m., Monday-Friday, with the possibility of expanding to the weekends with adequate funding and customer demand.

RESULTS

At the onset of the project, COA set out to achieve the targets in Table 1 through the implementation of home52 Transportation, all of which were achieved.

Table 1: home52 Transportation Performance Measurement Results

Performance Measure	Target	Actual to Date	Percent of Target
Purchase Transportation Management System Software	1	1	100%
Staff the home52 Transportation coordination center	4	8	200%
Create operating policies and procedures	23	23	100%
Implement Software (including design, build, and test)	3	3	100%
Engage healthcare providers to create workflows and communication processes	17	17	100%
Engage transportation providers to provide input on transportation coordination planning and rate structure(s).	5	5	100%
Procure transportation providers	8	8	100%
Software System Go Live	1	1	100%
Create data analysis and reports. Gather baseline data for outcome measures.	3	3	100%

From initial launch to September 31, 2021, home52 Transportation has served a total of 688 unduplicated clients. Table 2 below provides some additional operational metrics from September 2021, after all HCESP clients were onboarded to home52 Transportation.

Table 2: Operations Metrics

home52 Transportation Operations Metrics <i>Averages from September 2021</i>	
The approximate average number of calls per day	272.5
Average number of one-way trips per day	153.7
Average number of one-way trips on Saturdays	54.5
Average number of one-way trips on Sundays	7

From May 3-September 31, 2021, home52 Transportation coordinated a total of 8,585 one-way trips. Table 3 provides a breakdown of trips by type, as recorded in the TMS. Most trips were for pre-scheduled, non-emergency medical transportation. Approximately 3.7 percent of trips were on-demand, or same-day, much lower than home52's initial estimation of 20 percent.

In addition to trip type, a trip purpose is recorded at the time of scheduling. For pre-scheduled, non-emergency medical transportation, the top two trip purposes were dialysis (29 percent) and primary care physician (12 percent). The top two trip types for pre-scheduled general transportation were grocery shopping (48 percent) and social activities (29 percent).

Table 3: home52 Transportation Trip Types

home52 Transportation Trip Types May 3 – September 31, 2021		
Trip Type	One-Way Trip Count	Percent of Trips
Prescheduled Non-Emergency Medical Transportation	6,686	77.9%
Prescheduled General Transportation	940	10.9%
Will Call (Return Trips)	490	5.7%
Same Day Non-Emergency Medical Transportation	211	2.5%
Pharmacy	155	1.8%
Same Day General Transportation	103	1.2%
Total	8,585	100.0%

Outcomes

home52 set out to achieve high-quality transportation, measured by on-time rides and customer satisfaction. Data sources were to include both the TMS system that provides real-time trip data and customer satisfaction surveys. Satisfaction surveys are completed by phone for a sampling of clients within three days of their trip.

While the TMS should be the most accurate source of operations metrics, such as on-time rides, provider utilization has made it challenging. To track on-time arrivals, drivers must be using the in-vehicle DriverMate system consistently and accurately. home52 Transportation has had challenges with a few transportation providers not utilizing DriverMate consistently, and in some cases, they are unwilling to do so. Unfortunately, these providers also have the greatest capacity and cover a large portion of scheduled rides. home52 Transportation is recruiting and onboarding additional providers that will utilize the system as designed to eliminate the need to assign trips to providers that are not following home52 requirements.

In lieu of TMS data, home52 has utilized satisfaction surveys to measure outcomes. From May 3-September 31, a total of 285 satisfaction surveys were completed. These surveys are used to measure the quality of home52 Transportation coordination, as well as the quality of the provider that transported the client.

Table 4 includes the targets initially set along with actual results. Actual results for on-time rides were below target. home52 is hoping to improve this result by expanding the provider network willing to utilize the DriverMate application consistently. This will enable home52 to ensure efficient scheduling and real-time tracking of rides to ensure any issues or concerns related to timeliness are addressed.

Actual results for clients rating home52 Transportation excellent or above average were below target. Much of the client feedback related to this measure seems to be focused on call center capacity and wait times. home52 had many challenges with call center capacity and long wait

times for callers in the phone queue. This challenge was in part due to initial staffing, where only one to two individuals could cover the phones at any given time. However, wait time issues were also the result of drivers calling the queue with questions, to report that a client was not available at the time of pick-up, etc. This type of communication with the coordination center should not take place over the phone, rather the driver is to message the coordination center through DriverMate. We believe that increased use of DriverMate will improve call center wait times, and therefore overall customer satisfaction.

home52 initially targeted for 20 percent of all rides to be same-day rides, which was a service previously unavailable to HCESP clients. However, based on information in NovusMED, only 3.7 percent of rides were categorized as same-day/on-demand. This percentage matched client self-reported data from the satisfaction survey. It is unclear if there is less need for same-day rides than previously anticipated, or if perhaps we need to increase awareness among clients that this service is available when needed.

Table 4: home52 Transportation Results

home52 Transportation Results			
	Target	Actual Result	Measurement Tool
Rides arrive on time as scheduled.	95%	87.8%	Client satisfaction survey
Clients rate the quality of home52 Transportation excellent or above average.	95%	82.4%	Client satisfaction survey
Rides are provided on-demand, a service previously unavailable to clients.	20%	3.7%	NovusMED data

In addition to the original outcomes and targets, the following results were measured in the client satisfaction survey:

- 92 percent said scheduling their ride with home52 Transportation was easy.
- 98 percent said the home52 scheduler was kind and courteous.
- 93 percent believe that access to home52 Transportation helped improve their health.
- 92 percent would recommend home52 Transportation to a family member or a friend.

LESSONS LEARNED

There were multiple lessons learned throughout the implementation of home52 Transportation. COA sought to improve the quality and efficiency of transportation services for its clients and beyond. We took a great risk in launching this program as a non-profit organization with limited experience in actual transportation coordination. While there were many challenges, we have and will continue to learn, improve and overcome the barriers to quality transportation. Our learnings, as addressed throughout this report, include:

High-quality transportation coordination services are resource intensive. home52 has learned that providing coordination to our older adult population takes much more time and staffing than traditional transportation call center operations. Initial challenges with call center capacity and long call wait times have led us to expand our capacity. We have increased capacity from one manager with one full-time and one part-time staff, to one manager with one full-time and six part-time staff. This staffing is to cover the needs of our first population, HCESP, and may have to expand further as our customer base grows.



Coordination and contracts alone do not improve quality but provide the data and information to leverage and influence quality. As addressed herein, some of the quality challenges that home52 was designed to address persist under this new model. However, in the past, COA was detached from transportation services being received by providers. Feedback and data about provider issues and challenges were received after the fact and were difficult to address in real time. Now home52 Transportation has direct insight into challenges and issues, talks to clients in real time, and collects customer satisfaction information within one to three days of rides. home52 Transportation now has much more detailed and timely information needed to address and influence quality. This information can be used to leverage home52 and COA's influence on the transportation provider network and its constituents.

Not all transportation providers are willing to follow requirements. The requirements of home52 Transportation, particularly the active use of our in-vehicle TMS application, have been clearly documented and communicated since the RFP process. While many providers signed contracts and agreed to follow those requirements, not all have complied. Utilizing home52's in-vehicle application requires transportation providers to give up some of their own control and incorporate new practices in their day-to-day operations. home52 has specifically had challenges with larger, more established providers that already have their own TMS system and/or their own brokerage service. While we understand the challenges, home52 is also able to bring enough business to these providers to dedicate drivers to its service, so utilization of another application should not be resource intensive.

To maintain quality standards, more transportation providers are needed. The unwillingness of transportation providers to follow operational requirements has made it difficult for home52 to maintain quality standards. Unfortunately, these providers have the largest capacity and cover over 50 percent of the share of home52 rides. The other providers are smaller and have limited capacity to cover that share. Therefore, it has been difficult for home52 to take corrective action on providers not following requirements because their rides cannot be reassigned. More providers are needed to maintain high quality standards and to hold providers accountable. That is why home52 is actively recruiting and onboarding additional transportation providers.

Small transportation providers struggle with technology and need a higher level of support. As the home52 Transportation model was developed, it was always our intent to recruit small family-owned and minority businesses. But many of these businesses did not have the capacity to respond to the time-intensive request for proposal process. However, to bring on additional providers, home52 has received an exception to the RFP process due to capacity needs. As we begin to bring on these providers, they need much more assistance and training to complete the necessary paperwork and learn how to use the associated technology. home52 plans to seek outside support to expand our capacity to onboard additional small businesses.

MOVING FORWARD

home52 Transportation was effectively implemented and is actively serving the transportation needs of HCESP clients. Additionally, grant funding was received from the City of Cincinnati Human Service Fund in late 2021. Through this funding source, home52 is actively recruiting residents of low-income senior housing in Cincinnati that have no alternative funding source for non-emergency medical transportation.

Providing high-quality coordination and transportation services is resource intensive. home52 has had to expand staff capacity beyond what was originally intended. We are actively seeking federal and local grants to fund current operations, including ongoing software and staffing costs. We are also seeking opportunities to partner with other public and non-profit organizations that need quality transportation for their clients. Additionally, we are building the infrastructure and processes to accept private pay customers. Through these additional avenues, home52 Transportation can not only build its customer base, but also bring in financial resources to sustain transportation coordination services.

CONCLUSION

Through the design and implementation of home52 Transportation, COA aimed to address several transportation challenges faced by older adults. These challenges included: the lack of accessibility to specialized transportation; issues of poor and varying levels of quality among transportation providers; and lack of efficiency due to multiple transportation providers operating in siloes. COA set out to overcome these challenges by designing a transportation system to coordinate multiple transportation providers to improve efficiency, demand a high level of service quality, provide on-demand rides and bring a deep understanding of the needs of clients from the social service lens.

To design this unique model, COA actively sought input from medical and behavioral health providers, transportation providers and internal experts with the support of local partners and national consultants. We selected and customized a TMS to schedule, dispatch, monitor and communicate with transportation providers in real time. We secured a network of transportation providers through a robust and well-coordinated RFP process through which eight providers were awarded contracts.

home52 Transportation began coordinating rides in May 2021. In its first five months of operations, home52 Transportation provided 8,585 one-way rides to 688 unduplicated clients. In September 2021, the call center averaged 272.5 calls per day. Client satisfaction survey results include: 88 percent of rides arrived on time; 82.4 percent of clients rate home52's quality as excellent or above average; 92 percent of clients said scheduling with home52 was easy; and 92 percent would recommend home52 Transportation to a friend or family member.

home52 Transportation was successfully launched and implemented. Existing transportation challenges have not been simple to overcome, but home52 Transportation now has real-time data and insight into issues and concerns of clients. We continue to improve our program model, build our transportation provider network, expand our customer base and partner with funders and payers to support program sustainability. We would like to thank the Federal Transit Administration, Ohio Department of Transportation and the National Association of Area Agencies on Aging for your support and generous provision of the ICAM Pilot funding that made this project a reality.