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Non-Emergent Medical Transportation (NEMT) Needs and Options for Saratoga County Residents with Substance Use Disorder

A report for the Saratoga County Department of Health

Prepared by



December 31, 2023

Non-Emergent Medical Transportation (NEMT) Needs and Options for Saratoga County Residents with Substance Use Disorder

EXECUTIVE SUMMARY

Saratoga County has faced an increasing burden of substance use disorder (SUD) in recent years. The Saratoga County Department of Health (DOH) identified transportation as a key barrier to SUD treatment that could be improved through targeted application of opioid settlement funding. To this end, the Saratoga County DOH engaged the Center for Human Services Research (CHSR) to estimate the need for non-emergent medical transportation (NEMT) for residents with SUD in Saratoga County and determine the non-emergent transportation program options available and investigate the pros and cons of each, including the potential costs of program implementation.

Methods

National data were used to estimate the prevalence of SUD in various demographic groups within ZIP codes in Saratoga County. These estimates were then adjusted through the use of ZIP code-level data on opioid overdoses from Saratoga County DOH and binge drinking from CDC PLACES data to arrive at an estimate of Saratoga County residents with an SUD. National data suggest that 6% of people with an SUD will seek treatment each year, so this figure was used to determine the estimated number of residents seeking SUD treatment annually. Data from the American Community Survey on vehicle access, disability, and Medicaid coverage at the ZIP code-level were used to estimate access to transportation to SUD treatment.

Additionally, information on existing transportation options was gathered through a review of existing literature and through interviews or focus groups with key stakeholders. The costs of each viable program option were estimated to provide a comprehensive overview of program implementation expenses. Building upon the information collected, CHSR developed a set of recommendations for the Saratoga County DOH in selecting and implementing an effective program.

Key Findings

Need for Transportation Services

SUDs are prevalent among the population of Saratoga County.

ZIP code-level SUD prevalence was estimated between 13.9% and 18.0%, with a mean rate of **15.7%**.

There are an estimated **33,400 residents** in the county with an SUD, of whom roughly 2,000 would be expected to seek treatment in a given year.

Treatment locations are limited.

There are **only nine sites within Saratoga County** where people can go to seek treatment, and most of these sites are concentrated within just one ZIP code (12866, Saratoga Springs).

Public transportation is not sufficient to meet all needs.

The availability of public transportation is geographically limited within Saratoga County. Maps of the Capital District Transportation Authority (CDTA) bus routes serving Saratoga County show that **18 of the 25 ZIP codes** are not touched by a CDTA route at all. Only five ZIP codes are well-served by CDTA.

Even within the localities better served by CDTA, not all consumers are physically able to utilize it. Some may have disabilities that prevent them from reaching a bus stop or from traveling independently.

Medicaid-covered transportation is not sufficient to meet all needs.

Roughly **11% of the Saratoga County population** is covered by Medicaid, although this varies dramatically by ZIP code.

Medicaid does not provide transportation for treatment-adjacent services (e.g., support groups such as 12-step programs; pharmacy visits; court dates; childcare).

Approximately 84 residents per year are estimated to need transportation support to SUD treatment.

After accounting for those who are estimated to be eligible for Medicaid NEMT: **33 residents** may be able to take CDTA to such treatment but may require financial assistance to do so; and 51 residents would require NEMT.

An additional **1,912 residents** per year are likely to seek treatment for an SUD that do not require transportation support.

Using County Department of Health data on behavioral health utilization, we estimate that Saratoga County residents with SUD average about **26 visits per person per year** for mental health and addiction treatment.

Fraud is a major concern and should be a top consideration when providing subsidized NEMT.

Fraud is particularly common for our target population. A concern for fraudulent use was expressed emphatically in **all eight informational interviews and focus groups** conducted in this study, at all levels, across the six types of organizations interviewed.

Ride monitoring and rider verification is necessary to prevent fraud; any transportation mechanism that can be bought and sold or transferred easily from one person to another should be completely avoided.

Existing Transportation Options

The three main existing transportation options are public transportation through CDTA, specialized taxis (aka medicabs), and ridesharing services.

CDTA

CDTA, the most affordable option, faces several limitations: Saratoga County has relatively few bus lines and stops, limiting service to those who live close to a line, need to go to a destination close to a line, and are able to use public transportation.

Estimated annual need and cost: \$12,870-\$33,660 for 33 users

Medicabs

Medicabs can be an effective and accommodating transportation option, with clear and consistent costs for individuals seeking treatment. Historically, medicab use has been difficult due to required long lead times, pickup delays and unreliability, and fraud. Medi Cab Corps specifically has a focus on serving the community and full coverage of the region, including remote areas.

Estimated annual need and cost: \$123,981-\$291,720 for 51 users

Rideshares

Rideshares can be reliable within service areas for short distances, easy to use, and have electronic monitoring. Drivers who receive passenger ratings below a certain level are not retained. Rideshares offer lower relative costs when compared to medicabs, except during surge pricing, but are unavailable or unreliable in more remote areas.

Estimated annual need and cost: \$106,080-\$185,640 for 51 users

Because CDTA is clearly the most cost-effective option, it makes fiscal sense to implement a program that combines CDTA passes for the people able to use CDTA with some form of passenger vehicle ride program for those not able to use CDTA (i.e., either CDTA + rideshare or CDTA + medicab). Table 1 provides an estimate of the total annual cost of transporting 84 people to SUD treatment.

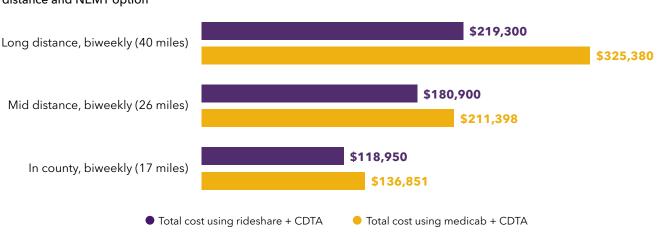


Figure 1. Estimated annual costs of biweekly round trips for 51 people using NEMT and 33 people using CDTA, by distance and NEMT option

Note: Rideshare costs were estimated from Lyft's pricing schema. Medicab costs were estimated from Medi Cab Corp's pricing schema.

Potential Cost Savings

Based on previous literature, it is estimated that **\$90,048-\$192,948 in direct costs to taxpayers** – not accounting for the cost of a transportation program – could be saved by getting 84 additional residents into SUD treatment each year. However, when general benefits to society are considered (e.g., increased employment, increased family stability, decreased crime, decreased use of social services), the value of getting 84 residents into SUD treatment is estimated at approximately \$1,286,544 per year.

Other Potential Models

At least **one nonprofit** has expressed willingness to work with the county to assist SUD patients with urgent rides to treatment and suggested exploring the feasibility of funding a dedicated driver or drivers within nonprofit organizations to provide rides when needed. This approach would involve assuming the costs of one or more driver salaries and benefits, one or more vehicles, and mileage costs, but could still potentially be a cost-effective option which would address issues with rideshare coverage area limitations and rides being cancelled by medicabs or rideshares.

Recommendations

A combined approach utilizing CDTA, medicabs, and rideshares would likely be the most efficient and cost-effective way to serve the most people and reach the most vulnerable populations across Saratoga County.

2

Transportation to additional

locations (e.g., support groups, pharmacy visits, court dates, childcare, and social visits) should be included into a budget to address the needs of SUD patients effectively and help them achieve a successful and longlasting recovery.

3

Collaboration with local agencies

already engaging in this work should be supported in order to better leverage valuable resources. Nonprofits are well-positioned to work with the county to assist SUD patients with urgent rides to treatment with increased financial and structural support from the county.

About the Center for Human Services Research

The Center for Human Services Research (CHSR) is a research department at the University at Albany. CHSR has over 30 years of experience conducting evaluation research, designing information systems, and informing program and policy development for a broad range of agencies serving vulnerable populations. Center for Human Services Research University at Albany State University of New York

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Introduction

Saratoga County, like many communities, has faced an increasing burden of substance use disorders (SUD) in recent years. In the year 2022, 48 residents were lost due to fatal overdoses. Beyond opioid use, the use of other substances (particularly alcohol) also contributes to the overall substance use burden, including: emergency department use, chronic disease management (e.g., liver disease), accidental deaths and injuries, attempted and completed suicides, violent or property crimes, family disruptions, domestic violence, and socioeconomic effects of substance use disorders (e.g., unemployment).

The Saratoga County Department of Health (DOH) has identified transportation as a key barrier to SUD treatment that could be improved through targeted application of opioid settlement funding. To this end, the Saratoga County DOH engaged the Center for Human Services Research (CHSR) to:

1. Estimate the need for non-emergent medical transportation (NEMT) for residents with SUD in Saratoga County.

- 2. Determine the NEMT program options available and the pros and cons of each.
- 3. Estimate the potential cost of program implementation in Saratoga County.
- 4. Develop a set of best practices and recommendations for implementation for Saratoga County DOH to consider in their selection of a potential program.

Methods

The foundation of the analysis was the estimation of the demand for substance use treatment. It should be noted that the relevant metric is "demand" rather than "need" – although arguably every resident with SUD has a need for treatment, the literature shows that only a small percentage of people with substance use disorders will seek treatment services in any given year.

Initial estimates of residents with SUD were derived from rates of SUD found in the 2021 National Survey of Drug Use and Health (NSDUH) Public Use Data File. The greatest demographic predictors of having an SUD in the NSDUH data were age, sex, and employment status. Data on the population of Saratoga County by ZIP code were obtained from the U.S. Census broken out by age, sex, and employment status. The rates of SUD for each group from the NSDUH were applied to the population of each ZIP code.

These population-based estimates were then adjusted using ZIP code-level data on opioid overdose rates from the Saratoga County DOH and the age-adjusted rate of adults who binge drink from CDC PLACES. These rates were then applied to the population to estimate the overall number of residents in each ZIP code who have an SUD. According to published numbers, only about 6% of people with an SUD seek treatment in a 12-month period overall. There are no data to refine this to a local level, so the 6% figure was applied to the estimated number of people with an SUD in each ZIP code to estimate the number of residents seeking SUD treatment annually.

The location of treatment providers was then considered. Treatment provider locations were identified using the National Provider ID (NPI) index to find the practice locations of physicians, counselors, psychologists, social workers, and clinics reporting a specialization in addiction treatment. Active status and practice addresses of treatment providers were confirmed through a combination of web searches and phone calls, although providers were not necessarily treating SUDs exclusively or predominantly.

Transportation access was then investigated through examination of the Capital District Transportation Authority (CDTA) bus route maps and analysis of rates of household vehicle access. The latter was accessed from the U.S. Census based on American Community Survey (ACS) 5-year public use data for 2017-2021. This data is available at the level of ZIP code Tabulation Area (ZCTA), which is a Census geography that largely but not exactly corresponds with the boundaries of ZIP codes.

Additionally, information on existing transportation options was gathered through a review of existing literature and through interviews or focus groups with key stakeholders. Formal and informal inquiries were made with governmental agencies, transportation providers/vendors, Medicaid transportation management, NEMT brokers¹, and non-profit staff and volunteers, including former SUD patients. At least eight informational interviews and informal focus groups were conducted through online video conferencing and phone consultation in the Fall of 2023 with approximately 24 individuals, representing six types of organizations.

Lastly, costs were estimated based on these need estimations separately for each NEMT option, by their pricing schema, and in various combinations. The costs of each viable program option were estimated to provide a comprehensive overview of program implementation expenses. Building upon the information collected, CHSR developed a set of recommendations for the Saratoga County DOH in selecting and implementing an effective program.

¹ A broker is an independent contractor supporting NEMT businesses in a defined geographic area, acting as an intermediary between service providers and patients; they assign trips based on passenger needs. Medicaid NEMT brokers, e.g., Medical Answering Services (MAS) in NYS, contract with health plans or State Medicaid Agencies to manage patient transportation in specific areas.

Results

Need for NEMT for SUD in Saratoga County

Substance Use Disorders in Saratoga County

Using the methodology described above, the percentage of estimated residents with an SUD was found to vary between 12.9% and 18.4% depending on the ZIP code, with a mean of 15.7%. **Table 2** below shows the adjusted SUD rate, number of residents with an SUD, and number of residents seeking treatment by ZIP code. (*Please note that 12010 falls largely within the city of Amsterdam in Montgomery County, and 12302 falls largely within Schenectady in Schenectady County. It is estimated that only a small number of residents of these two ZIP codes are Saratoga County residents; they are not included in this analysis.)*

It should be noted that the national estimate of 6% of people with an SUD seeking treatment is the actual rate of occurrence given the real-life circumstances of people with an SUD. While the percentage of people who might seek treatment if transportation were available to everyone may be higher, there is no way to estimate this impact. Therefore, this estimate may underestimate the population who would potentially seek treatment in Saratoga County if such services were available.

Table 2. Estimations of residents with SUD who may seek treatment in each
ZIP code in Saratoga County

ZIP		Adjusted	Estimated	Estimated
	Locale	Adjusted		
		SUD Rate	Residents	Seeking
			with SUD	Treatment
12065	Clifton Park/Halfmoon	16.45%	5,876	353
12866	Saratoga Springs (Greenfield Center /Malta			
	/Northumberland/Stillwater/Wilton)	15.99%	5,452	327
12020	Ballston Spa/Malta (Ballston Center/			
	Charlton/Milton/Amsterdam)	16.47%	4,595	276
12831	Gansevoort (Moreau/Northumberland/Wilton)	16.83%	2,414	145
12118	Mechanicville (Stillwater/Malta/Halfmoon)	16.11%	2,218	133
12019	Ballston Lake (Charlton/Clifton Park/Glenville/Malta)	14.80%	1,779	107
12188	Waterford (Halfmoon)	16.14%	1,586	95
12828	Fort Edward (Moreau)	18.35%	1,517	91
12803	South Glens Falls	15.91%	1,079	65
12822	Corinth (Day/Hadley)	15.79%	780	47
12170	Stillwater (Saratoga Springs)	16.84%	730	44

12833	Greenfield Center (Greenfield)	16.20%	700	42
12025	Broadalbin (Galway)	14.68%	670	40
12871	Schuylerville (Northumberland/Saratoga/ Victory			
	Mills)	17.21%	565	34
12134	Edinburg (Northville)	13.69%	551	33
12148	Rexford (Clifton Park)	13.58%	531	32
12027	Burnt Hills (Ballston)	14.37%	507	30
12074	074 Galway (Providence)		366	22
12850	12850 Middle Grove (Greenfield/Providence)		345	21
12835	12835 Hadley (Day)		316	19
12859	Porter Corners (Corinth/Greenfield)	16.84%	261	16
12086	12086 Hagaman		207	12
12863	2863 Rock City Falls (Milton)		168	10
12151	Round Lake (Malta)	14.96%	106	6
12884	Victory Mills (Saratoga)	18.17%	93	6

Treatment Providers and Transportation Availability in Saratoga County

Only three of the 25 ZIP codes fully within the boundaries of Saratoga County were found to contain any active treatment providers who report a specialization in addiction treatment². Most treatment providers are practicing in Saratoga Springs (12866; 7 sites). There is also one provider practicing in Clifton Park (12065) and one in Round Lake (12151), both in private practice. In sum, there are only nine sites within Saratoga County where people can go to seek addiction treatment, and seven of these sites are concentrated within just one ZIP code.

Similarly, the availability of public transportation is geographically limited within Saratoga County. Analysis of maps of the CDTA bus routes serving Saratoga County found that 18 of the 27 ZIP codes are not touched by a CDTA route at all. Another two ZIP codes (12019 [Ballston Lake], and 12118 [Mechanicville]) are minimally served by a CDTA route (i.e., residents in those counties might have access to public transportation if they live near the I-87 corridor). There are only five ZIP codes that are well-served by CDTA, although even within those ZIP codes some residents may live beyond the reach of a bus route. Overall, however, Saratoga Springs (12866), Clifton Park (12065), Round Lake (12151), Ballston Spa (12020), and Burnt Hills (12027) are ZIP codes where a substantial percentage of residents can probably reach a bus route³ (see **Figure 1**).

² One provider also practices in Ballston Spa (12020), but is a supportive housing site that does not serve outpatient clients.

³ The two zip codes that lie largely outside of Saratoga County (12010 and 12302) are not classified here. While public transportation may be available in those zip codes, it does not reach the small portions of each zip code that is within Saratoga County.

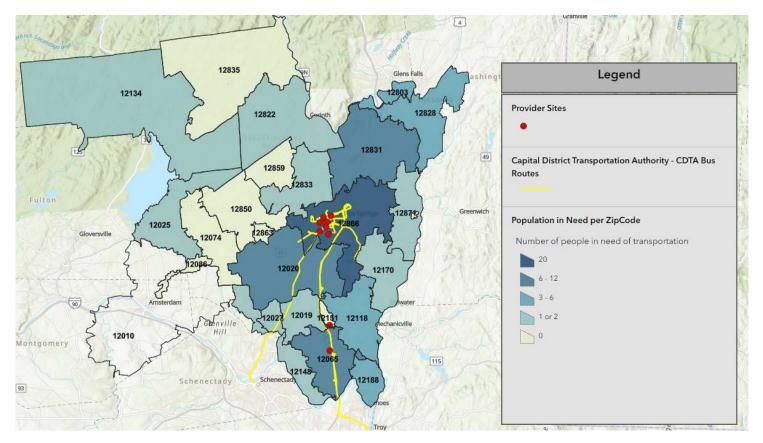


Figure 1. Location of Provider Sites, CDTA Routes, and Estimated Residents in Need of Transportation

And even within the localities better served by CDTA, not all consumers are physically able to take a bus. Some may have disabilities that prevent them from reaching a bus stop or from traveling independently. Furthermore, not everyone can afford to regularly pay for bus fare.

Using a combination of data from the American Community Survey and the known CDTA routes, the table below shows the estimated number of people with an SUD who will seek treatment annually in each ZIP code by whether they are vehicle-dependent (living in a ZIP code with no/limited CDTA presence or having a disability) or have access to CDTA, and whether they are estimated to have access to a vehicle. Based on the methodology described above, the percentage of households with no vehicle available ranged from 0% to 14% by ZIP code in Saratoga County, with a mean of 4.11%.

Of those estimated to seek treatment, most of those who can use CDTA also have access to a vehicle; those who do not are mostly in 12065 (Clifton Park/Halfmoon) or 12866 (Saratoga Springs). Most of those who are vehicle dependent also have access to a vehicle; those who do not are mostly in 12020 (Ballston Spa/Malta), followed by 12118 (Mechanicville), 12188 (Waterford), and 12831 (Gansevoort).

		Estimated	Vehicle- Dependent		Able to use CDTA	
		# Seeking Treatment	Vehicle	No Vehicle	Vehicle	No Vehicle
12019	Ballston Lake (Charlton/Clifton Park/ Glenville/Malta)	107	1	0	104	2
12020	Ballston Spa/Malta (Ballston Center/ Charlton/Milton/Amsterdam)	276	262	14	0	0
12025	Broadalbin (Galway)	40	39	1	0	0
12027	Burnt Hills (Ballston)	30	0	0	29	1
12065	Clifton Park/Halfmoon	353	3	0	339	10
12074	Galway (Providence)	22	21	1	0	0
12086	Hagaman	12	12	0	0	0
12118	Mechanicville (Stillwater/Malta/Halfmoon)	133	126	7	0	0
12134	Edinburg (Northville)	33	32	1	0	0
12148	Rexford (Clifton Park)	32	30	2	0	0
12151	Round Lake (Malta)	6	0	0	6	0
12170	Stillwater (Saratoga Springs)	44	42	2	0	0
12188	Waterford (Halfmoon)	95	88	7	0	0
12803	South Glens Falls	65	61	4	0	0
12822	Corinth (Day/Hadley)	47	45	1	0	0
12828	Fort Edward (Moreau)	91	86	5	0	0
12831	Gansevoort (Moreau/ Northumberland/Wilton)	145	138	7	0	0
12833	Greenfield Center (Greenfield)	42	40	2	0	0
12835	Hadley (Day)	19	19	0	0	0
12850	Middle Grove (Greenfield/Providence)	21	21	0	0	0
12859	Porter Corners (Corinth/Greenfield)	16	16	0	0	0
12863	Rock City Falls (Milton)	10	10	0	0	0

Table 3. Estimated residents needing NEMT for SUD, by ability to use CDTA

	Total Saratoga County	2,005	1,136	57	776	36
12884	Victory Mills (Saratoga)	6	6	0	0	0
12871	Schuylerville (Northumberland/ Saratoga/ Victory Mills)	34	32	2	0	0
12866	Saratoga Springs (Greenfield Center/Malta /Northumberland/ Stillwater/Wilton)	327	6	0	298	22

Although individual-level data are unavailable, it can be assumed that those who are vehicle dependent but do not have access to a vehicle would benefit from NEMT services to reach treatment. Those who are able to use CDTA may require financial assistance in affording bus fare, such as a monthly bus pass.

Based on these numbers, approximately 1,912 residents per year who are likely to seek SUD treatment have access to transportation to get there. An additional 36 residents may be able to take CDTA to such treatment but may require financial assistance to do so, and 57 residents would require NEMT. Approximately 93 residents may thus be served by transportation support to SUD treatment in some capacity.

Medicaid Eligibility Among Residents with SUD Needing NEMT

Individuals covered by Medicaid are eligible for NEMT services through Medicaid and thus would not need to access NEMT services funded directly by Saratoga County. Data on health care coverage of those seeking SUD treatment services by ZIP code is not available, but data is available from the U.S. Census Bureau on Medicaid coverage among the general population by ZIP code. It is possible that residents with an SUD may be more likely than the overall population to be covered by Medicaid, which may have led to an underestimation of those eligible for Medicaid NEMT services. However, those with an SUD may be less likely than the general population to have access to a vehicle (for reasons such as loss of income or driving privileges as a result of their substance use), which may have led to an underestimation of those needing NEMT to begin with. Thus, the two factors may balance each other.

After applying the estimated percent of residents covered by Medicaid in each ZIP code to the estimated number of residents who are in need of either CDTA passes or a ride service, it is estimated that three of those who could use CDTA and six of those who require a ride service are already covered by Medicaid. These nine people, then, can be subtracted from the number requiring NEMT to access treatment.

Based on these estimated Medicaid numbers, approximately 84 residents (33 potentially able to use CDTA, 51 requiring NEMT) may still need NEMT to access SUD treatment.

It is important to note, however, that Medicaid NEMT services only cover transportation to medical treatment. There are other services that support SUD recovery either directly or indirectly that those seeking SUD treatment may benefit from. Examples of these are 12-step or other peer-led group meetings, court dates, the pharmacy, childcare to allow participation in treatment or treatment-adjacent activities, or other social services. Medicaid NEMT is not sufficient to allow residents in recovery to participate in these activities without another form of transportation.

Frequency of Treatment Needs

Many different types of treatments may be needed in the treatment of SUD; these treatments necessarily vary in frequency and demand. At the high end, some residents may require daily round-trip rides for methadone treatment. These trips would be expensive because there are no methadone clinics in Saratoga County, and so these rides would be to the cities of Albany or Amsterdam.

A more typical usage would be weekly or biweekly trips for support group meetings, therapy, pharmacy pick-ups, etc., and would likely be local rather than long-distance travel. Using Saratoga County DOH data on behavioral health utilization among those receiving at least one instance of addiction services, we can estimate that Saratoga County residents with SUD average about 26 visits per year for mental health and addiction treatment. This number varies widely by ZIP code, ranging from 10 visits per person per year in 12134 (Edinburg) to 38.7 visits per year in 12074 (Galway). It is likely, however, that lack of reliable transportation and other logistical barriers may be a significant factor for some of these residents in outlying areas, so we assume that 26 visits per year (biweekly) is the standard in the absence of significant barriers. Residents of Saratoga Springs (12866) average about 30 visits per year; as these are the residents who live in closest proximity to treatment and have the most transportation options, this number may be considered an ideal or aspirational number for treatment frequency.

In contrast, a study commissioned by the Medicaid Transportation Access Coalition (MTAC)⁴ found that survey respondents reported attending 16.4 treatments per month on average with NEMT, and would expect to attend only 4.3 treatments per month without it, though this rate may not extend through an entire year. The rate of 16.4 treatments per month is considerably higher than that in the Saratoga County data but may be more likely to reflect either medication assisted treatment such as methadone or early treatment frequencies (people are more likely to be receiving non-medication treatment several times a week in early recovery, and the frequency reduces as they progress in recovery). The Saratoga County data may more accurately reflect usage in the local treatment environment and over an extended period of time.

⁴ THE VALUE OF MEDICAID'S TRANSPORTATION BENEFIT: Results of a Return on Investment Study. 2018. Medical Transportation Access Coalition.

At the lower end of treatment frequency, there are residents who need to travel out of county or even out of state to a residential treatment facility. These trips are likely to be expensive because of the distance involved but will be infrequent – a ride to and then back from the treatment facility perhaps once or twice in the course of a year. (Even so, these individuals will also require frequent treatment – at a shorter distance – when they return from the inpatient facility.)

Addressing Issues of NEMT Fraud

A major challenge of providing transportation support is that fraud is extremely common and complex to avoid. Representatives from Lyft Healthcare, NYS Medical Answering Service (MAS), Medi Cab Corps, Healing Springs Recovery Center, the NYS Medicaid transportation policy team all expressed a concern for fraud when it comes to NEMT for SUD patients. Bribes to and from drivers, selling bus passes to others for cash, using NEMT inappropriately for non-medical transportation, and the sale and purchase of drugs during transportation services are all reported. Fraud can occur on all levels, and creating structural barriers to disincentivize misusing resources will help ensure treatment success. Multiple strategies are in place to combat fraudulent use of NEMT and are listed in the following review of potential NEMT options.

Cost of providing transportation to SUD treatment for a 12-month period

To assess the cost of providing transportation for residents of Saratoga County without independent transportation options to and from SUD treatment for twelve months, CHSR explored various combinations of program options and their associated costs. Three main choices were revealed: public transportation through CDTA, specialized taxis (aka medicabs), and ride-sharing services. These services, their applicability to Saratoga County residents, and costs for biweekly transportation at various distances are reviewed below. Two other programs (Medicaid NEMT and STAR program ambulette transportation through CDTA) that may impact estimates but are likely limited in effective utilization are also noted.

Non-emergent transportation options available

Public Transportation Through CDTA

- **Provider information:** CDTA offers several bus pass options for transportation within Saratoga County and to neighboring cities.⁵
- **Service area:** Bus service within Saratoga County is limited, with only a few bus routes and stops in the county concentrated in five ZIP codes; as such, use would be limited to those who live along a route. Separately, the Northway Xpress

⁵ <u>https://www.cdta.org/navigator-fare-</u> products#:~:text=Pay%20As%20You%20Go%20costs,will%20cost%20the%20same%20%2432.50

allows weekday transportation from Clifton Park or Saratoga Springs to Albany, Amsterdam, and Fulton County, but also has few stops.

- Services: Bus stop to bus stop.
- **Rate:** Costs are presented in the form of monthly passes due to the myriad related transportation needs (e.g., trips to childcare, to the pharmacy, to the store, to court meetings, to 12-step meetings) outside of expected biweekly SUD treatment appointments. Frequent Rider bus passes (within-county transportation) regularly cost \$65.00/month per user, but half-price fares (\$32.50/month) may be available based on whether the county offers their standard 50% off discount for those in need. Northway Xpress fares (from Clifton Park and Saratoga Springs to Albany, Amsterdam and Fulton County) cost \$110 to \$170/month, depending on the route, with half-price fares costing \$55 to \$85/month per user.
- Fraud prevention: None.
- **Limitations:** Saratoga County has relatively few bus lines and stops, limiting service to those who live close to a line, need to go to a destination close to a line, and are able to use public transportation.
- **Cost estimate:** Table 4 provides a sample estimate for monthly and annual costs for a variety of fare types.

Table 4. Sample monthly and annual cost estimations for the 33 users able to use CDTA

			Total	
	# of	Monthly	monthly	Annual
Distance categories (unlimited monthly use)	people	cost pp	cost	cost
Upper distance discounted Northway Xpress fare	33	\$85	\$2,805	\$33,660
Lower distance discounted Northway Xpress fare	33	\$55	\$1,815	\$21,780
Half of each fare type: Xpress and Local	16/17	\$70/\$32.50	\$1,673	\$20,070
Local bus pass	33	\$32.50	\$1,073	\$12,870

Overall, these public transportation options help provide affordable and accessible transportation choices for individuals in the region who have access to appropriate bus routes and bus stops and the ability to use public transportation. However, these options are not able to meet the needs of all residents without vehicle access who seek SUD treatment.

Specialized Taxi Programs (i.e., Medicabs)

• **Provider information:** Outreach was done to multiple medicab companies. Medi Cab Corp, a local taxi service catering to both private pay and Medicaid clients, was one of the few medicab providers that responded; for this reason, this report focuses on the services and costs specific to Medi Cab Corp. The company is subcontracted through the NYS Department of Health with Medical Answering Services (MAS) as a Medicaid provider and is experienced serving the SUD population. Despite Medicaid-related challenges, the company expressed a commitment to SUD-related transportation, ensuring the utmost seriousness and adherence to confidentiality.

- **Service area:** Medi Cab Corp serves Albany, Rensselaer, Saratoga, and Washington counties, with potential expansion for private pay services; this service area includes rural areas not covered rideshare services. Medi Cab Corp provided their MAS scorecard which showed only two incomplete ride requests in indicating minimal no-shows and a commitment to reliability. Specifically, the owner shared the scorecard from Medical Answering Services (MAS), indicating an excellent record with minimal cancellations over the last few months. In over two thousand recent rides.
- **Services:** Door-to-door (e.g., assistance getting into and out of car), curb-tocurb
- **Rate:** \$2.75 per mile. Cost estimates are provided prior to booking confirmation. Multiple potential payment structures, including weekly invoicing, allowing for real-time monitoring of costs and use.
- **Fraud prevention:** Eligible riders are limited to those submitted by the County.
- Limitations:
 - Medi Cab Corp does not currently have a wheelchair-accessible vehicle, though Medicaid wheelchair certification is in the works. However, they can currently provide a van with room in the back/trunk to store a wheelchair and can assist a patient from the door to the cab if they can ride in the seat of the van.
 - Cars are often marked as medicabs, limiting user privacy.
 - Rides must be requested at least 48 hours in advance, though exceptions may be made for emergencies.
- **Customer service experience:** The owner demonstrated transparency, responsiveness, and flexibility throughout the discussion. His commitment to addressing the specific needs of the population, tracking fraud, and ensuring confidentiality was evident.

Cost estimation: Table 5 provides a sample estimate for monthly and annual costs for a variety of trip distances.

Frequency, Distance	# of people	# of roundtrip rides per year	Cost per round trip	Annual cost pp	Total annual cost
Biweekly, long-distance [40 miles]	51	26	\$220	\$5,720	\$291,720
Biweekly, mid-distance [26 miles]	51	26	\$143	\$3,718	\$189,618
Biweekly, in county [17 miles]	51	26	\$93.50	\$2,431	\$123,981

Table 5. Sample monthly and annual cost estimations for the 51 users of Medi Cab Corp

Note: Medicab costs calculated based on \$2.75/mile.

Overall, Medi Cab Corp is a reliable, somewhat cost-effective, and compassionate transportation option for individuals seeking treatment, with a clear focus on serving the community.

Ride-Sharing Services (Lyft, UberHealth)

CHSR explored various rideshare options for NEMT in Saratoga County. This report focuses on Lyft because they were especially responsive and were able to provide full pricing information. UberHealth is understood to have similar cost levels and options available, has a larger and more well-known platform, and is known to share drivers with its competitors. It also may be able to provide the door-to-door options that Lyft currently does not offer. However, their response was not as comprehensive as needed for this report.

- **Provider information:** Lyft is a popular rideshare app that claims to have pioneered the focus on healthcare by rideshare services. Lyft offers a range of services designed to meet the transportation needs of healthcare and NEMT providers.
- **Service area:** Lyft does not pick up in areas with less frequent ridership (e.g., Corinth, NY; Amsterdam, NY) but will drop off.
- Services: Curb-to-curb; potential to expand to door-to-door
- **Rate:** Lyft currently offers three service levels: the Business Travel Platform, the Concierge Platform, and the Lyft Pass Program. Lyft does allow for combination use subscriptions and can provide both Concierge and Pass-based services within the same program. A combination approach ensures that healthcare providers and substance use support services can tailor their transportation solutions to the specific needs and preferences of their patients.
 - The *Business Travel Platform* connects with users' phones and offers a solution for organizations seeking to provide reliable transportation to their staff or patrons. However, it is more suited to corporate travel plans,

generally for staff members, and may be less optimal for subsidized use for SUD patients.

- The *Concierge Platform* reaches a broader demographic and is more widely used in the healthcare sector. It is the program option most recommended by Lyft options for the purposes of this proposal. Users or designated ride managers can request transportation for patients using a computer, eliminating the need for a Lyft app or smartphone. This difference is a clear benefit when servicing lower-income patients who may not have access to smartphone technology. A simple text message with a passenger's first and last name and cell phone number is sufficient to arrange transportation for a rider.
- The *Lyft Pass Program* provides codes that can be distributed to individuals, offering a specific number of rides or ride credits. Organizations can customize and restrict the use of these codes, such as specifying ride types or setting budget limits. The Pass Program is an efficient way to manage transportation expenses and ensure that costs remain within the allocated budget. However, those who work directly with this population were concerned about the high risk of fraudulent use with this program. Though there are measures to account for pick-up and drop-off locations, times of day, and types of ride requests allowed, the Lyft passes could be sold to others who need similar transportation to neighboring stores and other localities, or utilized by the users themselves to obtain rides to stores instead of clinics.
- **Fraud prevention:** Limitations on use (based on pick-up/drop-off locations, times of day, types of rides requested) can be implemented in both the Lyft Concierge and Lyft Pass models, but the Concierge model has rides ordered by a central agent who controls the locations to which rides are approved to go. In contrast, passes in the Lyft Pass model can be sold to others.

• Limitations:

- Former patients have reported that rideshares have refused to pick up patients who are either in rural areas or who have requested rides of longer distances. Some patients have found that drivers on rideshare apps have picked up the ride request only to cancel it just before providing the trip. This type of frustrating failure to follow through for SUD patients is not only not conducive to treatment, but may miss an important window of opportunity in which a person is willing to accept treatment.
- Lyft does not currently pick up in certain zones, such as in the rural outskirts of Saratoga County, making this option impossible for residents in hard-to-reach areas.
- Surge pricing is still in effect even under these contracts, meaning that the cost per ride can increase during peak demand times.

• Customer service experience:

- Lyft demonstrated excellent customer service during our inquiries. The availability of representatives from the Lyft healthcare team for administration training and email consultation has been superior, particularly in terms of providing continued one-on-one support for business users. This is in contrast to UberHealth, who never responded to our inquiries.
- Lyft is committed to providing riders with some anonymity by not indicating that the ride is for a SUD-related purpose to the driver. The driver would pick up the SUD patient using the same technology that they would any other rider, so it would not be distinguished as a ride for medical purposes to the driver or anyone witnessing the pickup. Though the destination, such as a healthcare facility, may be obvious to a driver, it may not be obvious that a rider is a patient at a clinic or receiving SUDrelated treatment service specifically.
- **Cost Estimation:** To provide a rough estimate of potential costs, we explored various one-way trip expenses via Lyft during business hours. A local prescheduled ride, for instance, from Saratoga Springs to Clifton Park, was estimated to be about \$35-\$40, with a cost as low as \$25 estimated when requested for immediate pickup during non-surge pricing. Return trip requests resulted in similar estimates.

A sample cost of a pre-scheduled one-way rideshare trip for a mid-distance route from Saratoga Springs to Amsterdam was approximately \$53-\$60. Rides for immediate pickup were available at a lower cost of \$43, with the opposite effect during surge pricing and return trips. A pre-scheduled return trip was *not* available if starting from Amsterdam. However, one-way rides for immediate pickup in Amsterdam to Saratoga Springs were showing up as low as \$53 if you were willing to wait for 45-60 minutes but are estimated to cost as high as \$131 for a short 12-minute wait. For a longer distance trip to or from Albany, the prescheduled cost of one-way transportation to or from Wilton was estimated to be around \$50-\$70, while a return trip for immediate pickup was estimated to be up to \$90 or more.

Notably, rural areas like Allentown and Corinth face challenges in accessing rideshare services due to their remote locations, where rideshare programs do not offer services. Lyft does not allow scheduled pick-up in certain remote areas but will allow for a scheduled drop-off. According to our nonprofit SUD focus group, rideshare services are known for canceling rides after accepting them due to their remote location and/or long distance of the trip requested. A request for immediate pickup in Corinth for a trip to Albany can cost as high as \$190 for a

one-way trip, or as low as \$84 if you are willing to schedule the ride and wait for an hour for pick-up. Furthermore, we reviewed the cost considerations for specific routes to Albany, starting from areas such as Clifton Park, Saratoga Springs, and Ballston Lake. The cost per one-way trip varied, with figures like \$42, \$62, and \$50, respectively.

Given our sample estimates, roughly estimating a general midpoint cost for transportation placed us at approximately \$60 for a mid-distance one-way trip. Based on this, the average estimated cost for one person for one roundtrip every other week, for 26 weeks a year, is calculated to be around \$3,120. For bi-weekly long-distance treatment at a cost of \$140 per round trip, the higher estimated cost for 51 individuals would total \$3,640 per person, equivalent to \$185,640 annually for this group of patients.

Table 6. Sample monthly and annual cost estimations for the 51 users of Lyft

Frequency, Distance	# of people	# of round-trip rides pp per year	Cost per round-trip ride	Annual cost pp	Total annual cost
Biweekly, long-distance [40 miles]	51	26	\$140	\$3,640	\$185,640
Biweekly, mid-distance [26 miles]	51	26	\$120	\$3,120	\$159,120
Biweekly, in county [17 miles]	51	26	\$80	\$2,080	\$106,080

Note: Lyft costs rise dramatically during surge pricing.

Overall, Lyft's reliability as a platform for short distances within the service areas, ease of use, lower relative costs when compared to medicabs, and a driver-rating system that ensures passenger safety make it an attractive choice for NEMT providers in the region.

Estimated Costs of Combined Program Options

Combinations of these programs are reviewed below (**Table 7**). These data underscore the complexity of estimating and managing the cost of providing NEMT for SUD treatment, especially when considering the potential benefits and limitations of medicab and rideshare options. These insights are crucial in developing a comprehensive understanding of the cost of providing transportation to SUD treatment for a 12-month period.

Table 7. Combined annual cost of public transportation +rideshare/medicabs

Annual Cost Estimates	A. CDTA (Monthly Pass for Subset of 33 People with CDTA access)	B. Rideshar e Options ⁶ (Subset of 51 People without CDTA access)	C. Medicab (Subset of 51 People without CDTA) at \$2.75/mil e	Total Cost using rideshare + CDTA (All 84 people in need of NEMT)	Total Cost using medicab + CDTA (All 84 People in need of NEMT)
Biweekly, long- distance [40 <i>miles</i>]	\$33,660 (Discounted Higher Xpress Fare)	\$185,640	\$291,720	\$219,300	\$325,380
Biweekly, mid- distance [26 miles]	\$21,780 (Discounted Lower Xpress Fare)	\$159,120	\$189,618	\$180,900	\$211,398
Biweekly, in county [17 miles]	\$12,870 (Discounted Frequent Rider pass)	\$106,080	\$123,981	\$118,950	\$136,851

Medicaid NEMT and CDTA STAR Ambulette Transportation

Two additional programs exist that would not require additional County funding but are limited in scope and need: Medicaid NEMT and STAR program ambulette transportation through CDTA.

Medicaid covers certain aspects of NEMT for enrolled patients, such as transportation to a medical clinic by taxi or bus; it would thus cover the most expensive types of trips (e.g., out of county trips to a clinic for methadone treatment). However, it does not include transportation to important health-related or adjacent locations, such as pharmacies, AA/NA meetings, childcare providers, and similar destinations necessary for the health and well-being of SUD patients. As a result, even if patients are already covered by Medicaid, there is an additional need for supplemental support for individuals seeking access to these specific services in holistic support of the overall success of SUD treatment.

⁶ Does not include surge pricing.

Ambulette transportation serves customers with mobility restrictions and includes doorthrough-door coverage. The CDTA STAR program⁷ already provides complimentary ambulette transportation services for those who qualify, with up to a 21-day waiting period for approval. This level of service is likely unnecessary for the majority of this population, but in a small number of cases may be appropriate.

Cost Savings of Improved Treatment Participation

The cost savings of improved treatment participation is an extremely difficult number to estimate, because much depends on the type and duration of treatment, cost of treatment, and success rate of treatment, as well as whose money is being saved.

A study commissioned by the Medicaid Transportation Access Coalition (MTAC)⁸ found that the NEMT system improved the likelihood of successful substance use disorder treatments. Respondents who reported attending at least the average number of with-NEMT treatment sessions per month incurred, on average, \$123 less per month in health care costs than those who attended the average number of treatments without NEMT per month. Annualized and estimated across the number of residents to potentially serve, this amount could represent a savings of \$137,268 in health care costs.

However, another widely cited study from 2005⁹ looked at costs more broadly (i.e., mental health services, criminal activity, earnings, and transfer program payments, in addition to direct medical care costs). This study estimated that, on average, admission into substance abuse treatment (inpatient, outpatient, or methadone maintenance) saved \$11,487 in costs over a 9-month period (or \$1,276.33 per month, which, annualized, equals \$15,316 per year). If 84 people receive treatment who otherwise would not have, an annualized costs savings of \$1,286,544 might be realized.

But a 2017 study¹⁰ found that only 7-15% of the dollars saved by treatment (depending upon the treatment program) accrue directly to state and local taxpayers – the remainder is classified as more general "benefits to society."

Thus, it is more likely that between \$90,048 and \$192,948 in savings to Saratoga County and New York State taxpayers would be realized by getting these 84 people into treatment. This amount works out to \$1,072-\$2,297 in savings per person per year, or \$89-\$191 per person per month (above the cost of the treatment itself, but exclusive of the cost of providing transportation).

⁷ https://www.cdta.org/star-program

⁸ THE VALUE OF MEDICAID'S TRANSPORTATION BENEFIT: Results of a Return on Investment Study. 2018. Medical Transportation Access Coalition.

⁹ Ettner, et. al, 2005. "Benefit–Cost in the California Treatment Outcome Project: Does Substance Abuse Treatment "Pay for Itself"?" Health Services Research, 41(1).

¹⁰ Weston Merrick, Tesia Elder, and Pete Bernardy. 2017. "Adult and Youth Substance Use: Benefit-Cost Analysis". *Results First Initiative*, Minnesota Management and Budget.

Feedback from the Field

An informal focus group of staff from a local nonprofit organization serving the needs of SUD patients on the topic of enhancing transportation solutions highlighted the challenges faced by those in recovery and the significance of reliable transportation, especially in rural areas. The discussion also emphasized the importance of ensuring access to treatment and support services, as well as the potential creation of a dedicated transportation program to serve this vital need.

The nonprofit client population in need of transportation services includes patients in recovery and those seeking referrals for initial or ongoing treatment. Patients in recovery often frequent SUD support centers for regular meetings, group sessions, and other recovery support, and many require weekly transportation for these activities. "Showing up" at support centers and attending activities is a fundamental part of the support network for SUD patients and can have a major impact on recovery support; providing transportation would allow more people to access these activities. Additionally, many individuals are referred for in-patient care, often located outside of Saratoga County; the nonprofit estimates 20 one-way trips are made per month to inpatient care.

The group discussion revealed a high demand for transportation among this population and a desperate need for reliable drivers. According to nonprofit staff and volunteers, 50% to 75% of individuals working with this nonprofit would benefit from improved transportation options.

Challenges faced by the nonprofit include service availability, frequency, timing, accountability, and reliability. Patients in rural areas face challenges in accessing public transportation. For those in more well-connected areas, bus passes will only be effective if multiple stops per day are scheduled in their specific residential area. Patients must be to be able to make it to and from treatment at the specific times appointments are needed, not only during the typical commuter workday when bus generally run. Participants expressed a concern with fraud by disreputable medicab companies. They expect that the option of Lyft passes will likely lead to fraud. Bus passes also present opportunities for misuse, such as selling passes to non-SUD patients, given that bus passes are not location-specific and cannot be monitored as well as medicabs and rideshare.

Patients utilizing medicabs faced different challenges. For example, long lead times for scheduling transportation may be detrimental to recovery, and delays in securing rides miss an important window of opportunity when individuals are willing to accept treatment. Additionally, misuse of the service by patients for purposes other than approved medical care by patients and abuse of the system by drivers (including drivers selling drugs, accepting kickbacks and cash payments from patients, or charging for rides not taken) are major concerns.

Reliability is also a critical factor with both medicab and rideshare transportation, especially for those traveling further distances. Staff cited clients being left at a site and not being returned home and having drivers cancel rides altogether. In this nonprofit's experience, Medicaid NEMT specifically does not effectively serve their needs. Medicaid is known to contract with many different providers, some of whom may be less reliable. (It should be noted that a service contract with one specific vendor, like Medi Cab Corp, may be more reliable due to more direct oversight and accountability.)

The focus group suggested exploring the feasibility of a new model of transportation: a dedicated driver within non-profit organizations to provide rides when needed. This approach would address rideshare service area limitations and ride cancellations associated with medicabs and rideshares. Focus group members estimated a dedicated driver and this option might be particularly effective for those in rural areas and/or those with limited access to other options. This option would involve assuming the costs of one or more driver salaries and benefits, one or more vehicles, and mileage costs, but could still potentially be a cost-effective option to explore, and would eliminate many of the challenges posed by other methods of NEMT.

Conclusions

Ultimately, Saratoga County stakeholders will need to decide the parameters of which transportation to include in any NEMT initiative targeted to SUD treatment, including whether to cover transportation to treatment out of county (or even out of state) and whether to cover transportation to treatment-adjacent services. This report estimates that roughly 84 residents per year could benefit from transportation support to access treatment, and roughly another 10 who may have transportation to treatment-adjacent services. Support to treatment provided by Medicaid could further benefit from transportation support to treatment-adjacent services.

Based on an estimate of 26 visits on average for mental health or addiction treatment per year, we estimate that the costs of providing transportation to treatment only for 84 people would run from \$118,950 to \$325,380 per year, depending upon the combination of transportation options utilized and the average travel distance. The lower-end estimate represents a combination of CDTA passes and a ride-sharing service for trips averaging 17 miles in distance; the upper-end estimate represents a combination of CDTA passes and a medicab service for trips averaging 40 miles. While we outlined cost estimates for biweekly roundtrips for each SUD patient, some patients will only require one or two rides a year to in-patient rehabilitation, while others may need daily transportation. Thus, in practice, trip distance and frequencies are expected to be highly variable and costs will be somewhere between these two numbers.

Whether and how much cost savings could be realized by an NEMT program depends upon whether direct cost savings to state and local taxpayers or "general benefits to society" are considered. Based on previous literature it is estimated that \$90,048-\$192,948 in direct costs could be saved by getting 84 additional residents into SUD treatment each year; the upper number suggests that it might be possible for an NEMT program – depending upon the parameters of such a program – to be cost-neutral. However, when "general benefits to society" are considered (e.g., increased employment, increased family stability, decreased crime, decreased use of social services), the value of getting 84 residents into SUD treatment is estimated at closer to \$1,286,544 per year. This greatly exceeds the estimated cost of providing transportation services to these residents. Clearly the use of opioid settlement funds for this purpose rather than resident tax dollars further changes the calculus of costs and benefits.

Discussion and Recommendations

Transportation is a structural barrier which, if addressed, could create positive social change for the individuals involved and the community at large.

While Medicaid covers transportation to treatment for eligible residents, a minority of Saratoga County residents (as few as 3-6% in some ZIP codes) are covered by Medicaid. This transportation is also strictly limited to medical treatment and does not cover non-medical transportation, such as to locations that support SUD recovery by addressing social determinants of health (e.g., support groups, pharmacy visits, court dates, childcare, and social visits).

Public transportation is also a limited option within the county. Given the few treatment services within Saratoga County and their concentration into a small number of ZIP codes, there needs to be more than CDTA to solve the NEMT issue for this population. Furthermore, all residents with geographical access to public transportation may not be able to use such services due to physical or cognitive limitations or inability to afford regular bus fare.

The problem of transportation is most acute for the rural populations of Saratoga County. While these residents are more likely than those living near public transportation to have access to a vehicle, those who do not face a number of barriers to reaching SUD treatment. Rideshare programs do not offer services in many of the more remote ZIP codes, and medicab companies can be unreliable (although Medi Cab Corp has an excellent MAS scorecard and may be a good option for SUD patients in remote areas).

Another challenge of providing transportation support is that fraud is complex to avoid. Bribes to and from drivers, selling bus passes to others for cash, using NEMT inappropriately for non-medical transportation, and the sale and purchase of drugs during transportation services are all reported as by the DOH. Fraud can occur on all levels, and creating structural barriers to disincentivize misusing resources will help ensure treatment success. In sum, the need for NEMT for SUD patients is an ongoing social issue. The Saratoga County Department of Health will not solve the matter in one 12-month period, and so sustainability should be a key concern in the implementation of any program. Longterm, the county should consider expanding this program to include transportation to services that support recovery but are not covered by programs such as Medicaid.

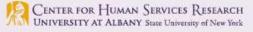
To achieve the most effective and potentially sustainable NEMT program for this population, the following approach is recommended:

- Institute a combined approach including CDTA, medicabs, and rideshares to address the NEMT needs of SUD patients in a wide range of geographic locations within Saratoga County. This approach is likely the most efficient and cost-effective way to serve the most people and reach the most vulnerable populations.
 - CDTA needs more routes or frequent trips to meet SUD patients' needs, which are currently insufficient.
 - A medicab is the only option for SUD patients in remote areas.
 - Although the quality of medicab services in general is highly variable, Medi Cab Corp has an excellent MAS scorecard.
 - Of the programs offered by Lyft, Lyft Concierge is likely the best fit.
- Incorporate transportation to additional destinations (e.g., support groups, pharmacy visits, court dates, childcare, and social visits) into a budget to address the needs of SUD patients effectively and help them achieve a successful and long-lasting recovery.
- Work closely with local agencies already engaging in this work in order to Ο better leverage valuable resources. At least one local nonprofit has expressed willingness to work with the county to assist SUD patients with urgent rides to treatment, provided funding were to be available.

In summary, we believe that offering a mix of medicab, rideshare services, subsidized monthly passes to use public transportation, and supporting local non-profit agencies to hire staff to provide rides to treatment will best balance affordability with effectiveness to transport SUD patients.

About the Center for Human Services Research

The Center for Human Services Research (CHSR) is a research department at the University at Albany. CHSR has over 30 years of experience conducting evaluation research, designing information systems, and informing program and policy development for a broad range of agencies serving vulnerable populations.



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Appendix: Detailed Methods

Estimating the prevalence of SUD and the demand for treatment services in Saratoga County

The foundation of the analysis was the estimation of the demand for substance use treatment. It should be noted that the relevant metric is "demand" rather than "need" – although arguably every resident with SUD has a need for treatment, the literature shows that only a small percentage of people with substance use disorders will seek treatment services in any given year.

Initial estimates of residents with SUD were derived from rates of SUD found in the 2021 National Survey of Drug Use and Health (NSDUH) Public Use Data File. The greatest demographic predictors of having an SUD in the NSDUH data were age, sex, and employment status. Data on the population of Saratoga County by ZIP code were obtained from the U.S. Census broken out by age, sex, and employment status. The rates of SUD for each group from the NSDUH were applied to the population of each ZIP code. This resulted in estimated ZIP code-level SUD prevalence between 13.92% and 18.03%, with a mean rate of 15.74%.

To refine these estimates using the available data on opioid overdoses by ZIP code, opioid overdose rate per 100k population were obtained from Saratoga County DOH for 2021, 2022, and the first five months of 2023. The 2023 data were annualized by dividing by five and multiplying by 12. Then the rates from the three years of data were averaged.¹¹ The resulting average rates by ZIP code were standardized by standard deviation units from the overall average for Saratoga County to quantify in standard units how much higher or lower than the county average each ZIP code's 3-year overdose rate was. Then that was applied as an adjustment factor for each ZIP code's estimated SUD rate based on population. A similar adjustment procedure was followed using data on binge drinking rates by ZIP code from CDC PLACES data. Opioids and alcohol do not account for all cases of SUD, but NSDUH data shows that opioid use disorder and alcohol use disorder are the two most common SUDs nationwide, therefore accounting for both should provide a good sense of geographic variation in SUD rates overall.

The refined SUD estimates were not substantially different than those calculated only based on population characteristics, resulting in estimated SUD prevalence between 12.9% and 18.4%. The mean of 15.7% did not change, by design. However, the refined

¹¹ A more precise way to obtain a 3-year average would be to add the numerator (# of overdoses) and denominator (100,000 population) for all three years before dividing, but the raw numbers for numerators and denominators were not readily available; the average of the three rates should be an adequate measure.

SUD estimates were more closely correlated with overdose rates across the various ZIP codes, resulting in estimates that may help account for factors behind local variation in SUD rates that are not captured in the age/sex/employment status data. The refined SUD estimates were also compared to the opioid burden rates calculated by ZIP code in the New York State Opioid Data Dashboard. Unfortunately, data for many ZIP codes were suppressed due to low numbers, but the estimated SUD rate by ZIP codes that did have data varied in the direction expected based on the level of opioid burden.

As the estimates of SUD rates seem reasonable in relation to other available data, these rates are applied to the population to estimate the overall number of residents in each ZIP code who have an SUD. According to published numbers, only about 6% of people with an SUD seek treatment in a 12-month period overall. There are no data to refine this to a local level, so the 6% figure was applied to the estimated number of people with an SUD in each ZIP code to estimate the number of residents seeking SUD treatment annually.

Estimating the need for transportation services or subsidies to access SUD treatment

Treatment provider locations were identified using the National Provider ID (NPI) index to find the practice locations of physicians, counselors, psychologists, and social workers reporting a specialization in addiction treatment, and active status of these providers was confirmed using internet searches and phone calls. Public transportation routes and schedules were identified using the CDTA website.

Information on household vehicle access was taken from the U.S. Census based on American Community Survey (ACS) 5-year public use data for 2017-2021. This data is available at the level of ZIP Code Tabulation Area (ZCTA), which is a Census geography that largely but not exactly corresponds with the boundaries of ZIP codes. According to this data, the percentage of households with no vehicle available ranges from 0% to 14% by ZIP code in Saratoga County, with a mean of 4.11%.

Those ZIP codes with the highest percentage of households with no vehicle tend to be the more urban ZIP codes, including the ZIP code which mostly falls into the city of Amsterdam (12010, 14%), the one that mostly falls into the city of Schenectady (12302, 7%), and the one that encompasses the city of Saratoga Springs (12866, 7%). These are ZIP codes where many residents have access to public transportation and, presumably, have less need for a vehicle. (In 12010 and 12302, the minority of residents within the boundaries of Saratoga County might not have access to public transportation, but also are probably much more likely to have vehicles than those who live within the boundaries of Amsterdam or Schenectady.) Other ZIP codes have relatively high percentages of vehicle non-availability, as well as little or no access to CDTA – 12188 (Waterford, 7%), 12871 (Schuylerville, 6%), 12803 (South Glens Falls, 6%), and 12020 (Ballston Spa, 6%). The percentages of households with no vehicle availability from the ACS data were applied to the estimated number of residents seeking treatment for SUD, derived as described above. As only 6% of those with an SUD are estimated to seek treatment in a 12-month period, and in most ZIP codes no more than 6% are estimated to lack vehicle access, these numbers are very small. Across all ZIP codes in the county, it is estimated that approximately 135 people would be seeking treatment for an SUD and not have a vehicle available. However, 43 of those people are in ZIP codes that mostly lie within other counties, so relatively few of those 43 are probably Saratoga residents. This leaves 92 residents; however, another 36 of them are living in ZIP codes where they probably have access to CDTA. Thus, it is likely only about 57 people who have an unmet need to transportation to treatment in a year's time. After adjusting for the prevalence of Medicaid coverage by ZIP code, it is estimated that 3 of those people who have access to CDTA and 6 of those people who require a passenger vehicle ride service would be able to participate in Medicaid NEMT. This leaves an estimated 33 people without vehicle access or Medicaid coverage who could take CDTA and another 51 who would require a ride service – a total of 84 residents who would benefit from some type of transportation support.

Evaluating NEMT options and costs

To comprehensively evaluate non-emergent patient transportation options and costs, particularly for patients with substance use disorder, CHSR employed a multifaceted data collection approach utilizing qualitative and quantitative research methods to gather information, synthesize insights, and formulate recommendations.

First, an extensive review of any available literature to identify NEMT program options available for patients with substance use disorder was conducted. This review encompassed a thorough examination of existing research, reports, and publications, focusing on each program's known pros and cons in general and with specific relevance to patients dealing with substance use disorder.

Finding the academic literature to be sparse and slightly outdated in this area (e.g., only highlighting the emergence of rideshare options as a potentiality) and the online information regarding the practices and costs of NEMT options to be lacking, the investigation pivoted to initiating direct communication with key stakeholders in the transportation sector. Formal and informal inquiries were made with governmental agencies, transportation providers/vendors, Medicaid transportation management, NEMT brokers¹², and non-profit staff and volunteers, including former SUD patients.

¹² A broker is an independent contractor supporting NEMT businesses in a defined geographic area, acting as an intermediary between service providers and patients; they assign trips based on passenger needs. Medicaid NEMT brokers, e.g., Medical Answering Services (MAS) in NYS, contract with health plans or State Medicaid Agencies to manage patient transportation in specific areas.

Through communication with vendors, insights were gained into program costs, implementation options, and specific considerations for SUD patients. The environmental scan helped develop an understanding of the current landscape of transportation options for NEMT for residents with SUD. This outreach involved investigating whether the New York State Department of Health was actively employing any of the identified programs for SUD patients—the scan aimed to provide context for the existing implementations and identify any gaps or opportunities for improvement.

A few stakeholders were more challenging to reach or have yet to respond to our initial outreach, including UberHealth, select medicab vendors, and some NEMT broker administrators. Many others were very responsive and available for informational interviews, including representatives from Lyft Healthcare, NYS Medical Answering Service (MAS), Medi Cab Corps, Healing Springs Recovery Center, the NYS Medicaid transportation policy team, and the NYS Department of Health. At least eight informational interviews and informal focus groups were conducted through online video conferencing and phone consultation in the Fall of 2023 with approximately 24 individuals, representing six types of organizations.

Taking all of this data into account, potential costs of program implementation in Saratoga County were estimated. This estimation took into account the estimated number of SUD patients lacking reliable transportation and the number of appointments each patient might have. The costs for each viable program option were considered in this estimation to provide a comprehensive overview of the financial implications. Building upon the insights gathered through literature review, vendor communication, environmental scan, and cost estimation, CHSR developed a set of best practices. These practices serve as a foundation for guiding the Saratoga County DOH in selecting an appropriate transportation program or combination of programs. Recommendations were grounded in evidence-based approaches and tailored to the specific needs of SUD patients. Combining these data collection methods allowed CHSR to conduct a thorough and holistic evaluation of NEMT options and costs, providing a robust basis for the subsequent development of best practices and implementation recommendations for the Saratoga County DOH.

About the Center for Human Services Research

The Center for Human Services Research (CHSR) is a research department at the University at Albany. CHSR has over 30 years of experience conducting evaluation research, designing information systems, and informing program and policy development for a broad range of agencies serving vulnerable populations. CENTER FOR HUMAN SERVICES RESEARCH UNIVERSITY AT ALBANY State University of New York

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