

Considering the Ideal Role for Non-Emergency Transportation in Addressing Social Determinants of Health in Medicaid and Medicare Populations

Non-emergency medical transportation (NEMT) has been a part of the Medicaid program since its establishment. It was first codified in regulation in 1973 and Congress reiterated that NEMT is a mandatory Medicaid benefit in 2020's Consolidated Appropriations Act. In contrast, NEMT has no historical roots in the Medicare program. In original fee-for-service Medicare, non-emergency ambulance transport is permitted for beneficiaries who require ambulance transport due to a disability or disease, but that is small fraction of the beneficiary population. In recent years, an increasing number of Medicare Advantage (MA) plans and risk-bearing providers such as Accountable Care Organizations have voluntarily chosen to offer NEMT. Medicaid- and Medicare-funded transportation services are largely allocated for travel to medical sites. Transportation to non-medical sites, in order to more wholistically address social determinants of health (SDOH), remains uncommon.

The growing focus on the SDOH within the healthcare sector is driving more attention toward the role of transportation to both medical and non-medical sites. Since 2016, several studies have highlighted the important role of transportation in addressing SDOH, among them: *The Association of Social Determinants of Health with Health Outcomes*,¹ *The Era of Pandemic Healthcare: The Social Determinants of Health Crisis*,² and *Social Determinants of Health and Related Inequalities: Confusion and Implications*.³ Despite this growing body of research on the role of transportation for medical care, there is limited research on transportation's role in supporting access to non-medical sites (e.g., grocery stores, fitness centers, social services) and on how improved access to non-medical needs via transportation may ultimately improve people's health. If transportation services to non-medical sites are to mature into a commonly available service to address SDOH, Medicare and Medicaid will be important vehicles for transforming the greater US health care landscape.

The Medical Transportation Access Coalition (MTAC) has assessed (1) the value of transportation for vulnerable Medicare beneficiaries by analyzing claims from a regional MA plan, and (2) the variety of non-medical sites that Medicaid and Medicare plans and providers support with transportation based on a survey of 91 organizations. By undertaking two distinct but complementary analyses, we highlight the role that non-emergency transportation can play in addressing the SDOH needs of Medicaid and Medicare beneficiaries.

¹ Trudy Millard Krause, DrPH, Caroline Schaefer, MPH, Linda Highfield, PhD. (2021, March 9). The Association of Social Determinants of Health with health outcomes. AJMC. <https://www.ajmc.com/view/the-association-of-social-determinants-of-health-with-health-outcomes>

² Maureen Hennessey, PhD, CPCC, CPHQ. (2020, May 15). The Era of Pandemic Healthcare: The social determinants of a health crisis. AJMC. <https://www.ajmc.com/view/the-era-of-pandemic-healthcare-the-social-determinants-of-a-health-crisis>

³ Islam, M. M. (2019, February 8). Social determinants of health and related inequalities: Confusion and implications. *Frontiers in public health*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6376855/>

The State of Non-Emergency Transportation in Medicaid and Medicare

Transportation benefits are a mandatory benefit in Medicaid and are expanding rapidly in MA plans. In both programs, health plans and risk-bearing providers are increasingly offering transportation, not only to medical sites (e.g., medical appointments, pharmacies), but also to non-medical sites (e.g., grocery stores, social services) as an opportunity to improve the health of beneficiaries by improving their underlying SDOH.

Medicaid

As a mandatory Medicaid benefit, outside of a limited number of states with waivers allowing them to exclude NEMT for certain beneficiaries (Iowa, Indiana, Georgia, and Utah), NEMT must be available to all Medicaid beneficiaries who lack transportation. In general, Medicaid NEMT is limited to transportation to medical appointments and services. However, states can opt to provide non-medical transportation for individuals receiving home- and community-based services.⁴ Additionally, most state Medicaid programs provide Medicaid benefits and services through managed care organizations (MCOs) which have greater flexibility to offer additional services than state Medicaid programs do. Some states (e.g., Colorado and Utah) have encouraged their MCOs to offer additional services focused on addressing SDOH, including transportation to non-medical sites.^{5,6} MTAC is unaware of any attempt to tabulate the variety of non-medical sites served by Medicaid programs and their MCOs and by risk-bearing providers.

The Value of Medicaid NEMT: While the value of NEMT in Medicare is largely unstudied, the value of NEMT within Medicaid is clear. In 2017, MTAC commissioned an [actuarial study](#) examining Medicaid claims data and surveying actual NEMT users. The study was based on a hypothesis abundantly supported by prior research—NEMT helps vulnerable people with transportation insecurity to attend medical appointments that are necessary for managing expensive chronic diseases. Focusing on dialysis treatments and on the ability of NEMT to reduce the number of missed appointments, Wakely actuaries modeled that, per 10,000 members per month, NEMT has the potential to save Medicaid programs an estimated \$34 million per month. Looking at wound care for people with diabetes, actuaries modeled a potential savings of nearly \$8 million per month.

Medicare Offering Transportation Benefits

Transportation benefits within MA are growing. Historically, transportation services as a supplemental benefit have been restricted to supporting enrollees' health care needs—meaning transportation was only permissible to medical sites such as physician offices and pharmacies. This excluded locations such as grocery stores and fitness centers despite the potential value of

⁴ Anne Marie Costello, Acting Deputy Administrator and Director, Center for Medicaid & CHIP Services. Opportunities in Medicaid and CHIP to Address Social Determinants of Health (SDOH). January 7, 2021. <https://www.medicaid.gov/federal-policy-guidance/downloads/sho21001.pdf>

⁵ Colorado's Department of Health Care Policy & Financing provides non-medical transportation services as a Home and Community Based Service to members diagnosed with certain diseases (<https://hcpf.colorado.gov/nemt-billing-manual>).

⁶ Utah's Section 1115 Demonstration Waiver includes general supportive services such as case management, community supports, meals, peer support, crisis intervention, representative payee supports and non-medical transportation (<https://medicaid.utah.gov/Documents/pdfs/Utah%201115%20Waiver%20Amendment-Fallback-PublicComment-Final.pdf>).

these sites for keeping beneficiaries healthy. In 2022, approximately 2,648 MA plans offered transportation services as a supplemental benefit.⁷ The number of MA HMO and PPO plans offering transportation supplemental benefits has steadily increased since 2018.⁸ Of the 2,648 MA plans offering transportation in 2022, 637 are Dual Eligible Special Needs Plans (D-SNPs)—plans that serve beneficiaries of both Medicare and Medicaid.⁹

Medicare Advantage Plans Offering Transportation Benefits as a Supplemental Benefit					
	2018	2019	2020	2021	2022
Transportation Services	957	1,398	1,885	2,233	2,648

**Plan Count includes HMO, HMOPOS, Local and Regional PPO and excludes Employer-Only plans.*

In 2018, Congress passed the Bipartisan Budget Act of 2018, which expanded the range of permissible MA benefits to people with severe, chronic or disabling illnesses. These new benefits are called Special Supplemental Benefits for the Chronically Ill (SSBCI), and they differ from prior permissible benefits because they are not “primarily health-related.”¹⁰ The list of permissible SSBCI benefits includes transportation to non-medical sites such as grocery stores, fitness centers, and community activity sites. SSBCI benefits are premised on the hypothesis that SDOH greatly affect a person’s health and that targeted SDOH interventions (such as transportation to grocery stores for individuals who live in food deserts and lack reliable transportation) may positively impact health outcomes.¹¹ In 2021, 177 plans out of 4,805 MA HMO and PPO plans (excluding employer-only plans) offer non-medical transportation as an SSBCI benefit. Transportation to non-medical sites are one of the top five most offered SSBCI benefits, even as MA plans’ implementation of this new benefit remains in the early-adoption stage.

Beyond MA, non-emergency transportation is generally unavailable in the original fee-for-service Medicare. Original Medicare covers non-emergency ambulance use when the Medicare beneficiary has a condition that necessitates ambulance usage. The number of original Medicare beneficiaries who can use an ambulance for non-emergencies is shrinking due to cost-containment strategies from the Centers for Medicare and Medicaid Services (CMS).

⁷ MTAC analyzed MA plan benefits data in the 2022 Q1 plan benefit package (PBP) files released by CMS and premium data from the 2021 and 2022 MA landscape file.

⁸ MTAC analyzed MA plan benefits data in the 2018–2022 Q1 plan benefit package (PBP) files released by CMS and premium data from the 2021 and 2022 MA landscape file.

⁹ Frequently Asked Questions on Coordinating Medicaid Benefits and Dual Eligible Special Needs Plans Supplemental Benefits (<https://www.cms.gov/files/document/dsnpmedicaremedicaidcoordbenefitsfaqs.pdf>).

¹⁰ Kathryn Coleman, Director, Medicare Drug & Health Plan Contract Administration Group, Centers for Medicare & Medicaid Services. “Implementing Supplemental Benefits for Chronically Ill Enrollees.” April 24, 2019. https://www.cms.gov/Medicare/Health-Plans/HealthPlansGenInfo/Downloads/Supplemental_Benefits_Chronically_Ill_HPMS_042419.pdf

¹¹ Crabtree, J. L., & Mushi-Brunt, C. (2013). “Public transportation to obtain food: an overlooked instrumental activity of daily living.” OTJR: Occupation, Participation and Health, 33(4), 209–217. <https://doi.org/10.3928/15394492-20130912-05>

Beyond the increasingly strict non-emergency ambulance benefit, original Medicare does not cover regular transportation. However, as CMS grows risk-bearing provider models such as Accountable Care Organizations (ACOs) and Direct Contracting Entities (DCEs), more of these capitated providers are offering transportation on the hypothesis that transportation to medical sites and targeted non-medical sites can improve health outcomes, raise quality scores, and lower avoidable healthcare costs. Unfortunately, the documented use of transportation to non-medical sites is limited, and therefore so is a thorough evaluation of its impact.

Medicare Advantage Claims Analysis

For this MA study, Wakely actuaries analyzed claims from a regional MA plan whose MA products include large D-SNP and general-market MA HMO plans. These plans have a NEMT benefit—with the MA plan benefit augmenting Medicaid’s NEMT benefit for dual-eligible beneficiaries. The D-SNP benefit has an unlimited allowance for transportation. The MA transportation benefit consists of 24 to 60 one-way trips per year (varies by plan and year) for the non-SNP plans. Claims were examined for January 2019 through July 2021. It is important to note that the COVID-19 public health emergency affected a significant portion of the study period, so the statistics reflected herein may not be reflective of a post-pandemic environment.

The analysis compared transportation utilizers against nonutilizers on a variety of medical and pharmacy cost-and-use statistics. The goal of the analysis was to examine whether the use of transportation benefits correlates with positive member engagement behaviors such as visiting Primary Care Providers (PCPs) more frequently. About 10% of studied members are documented as transportation utilizers in claims data. (Refer to Appendix B for several key caveats and disclosures related to the data analysis.)

As outlined below, positive correlations between transportation use and desirable outcomes, such as more frequent PCP visits, suggest the potential for longer-term better health outcomes, higher member engagement, and future cost savings.

Finding 1: Primary Care Usage

Transportation use is positively correlated with an average 1.5 times more primary care physician visits than for nonutilizers. Transportation users were also sicker than nonutilizers were, as measured by the risk-adjustment model applied in the MA market, likely indicating they needed greater help getting to medical appointments.

Average Yearly PCP Visits					
Transportation Utilizers			Transportation Non-Utilizers		
2019	2020	2021	2019	2020	2021
4.3	3.9	4.4	3.5	2.8	2.7

Finding 2: Morbidity of Transportation Users

Transportation utilizers tend to be sicker than nonutilizers. This assertion is based on the Hierarchical Condition Category codes assigned to them as part of the MA risk adjustment program. The average risk score of transportation utilizers is 1.97 vs. 1.35 for nonutilizers, based

on the most recent complete risk adjustment coding year (2019). This suggests that NEMT expenditures cluster toward members with the greatest medical needs; the greater utilization of primary care physicians by transportation utilizers might also lead to more-complete risk-adjustment coding, in turn contributing to a more holistic view of beneficiary circumstances and potential improvement in care management.

In addition, we looked at NEMT usage among members with four common chronic diseases in the Medicare population: diabetes, hypertension, substance abuse disorder, and congestive heart failure. Of the four disease groups, diabetes had the highest prevalence of transportation utilizers, and substance use disorder had the lowest prevalence of transportation utilizers.

Type	Utilizers by Disease Group		
	Transportation Utilizers		
	2019	2020	2021
Diabetes	40%	42%	38%
Hypertension	24%	25%	21%
Substance Use Disorder	10%	10%	9%
Congestive Heart Failure	27%	29%	25%
Total Population	10%	11%	10%

Finding 3: Transportation Use and Ride Limits

Transportation utilizers rarely reached annual limits on covered rides. For example, for a plan whose benefit was limited to 60 one-way rides per year, a negligible (less than 0.5%) portion of transportation utilizers hit the 60-trip cap. The vast majority were well below the annual limit, with 62% of transportation utilizers using 24 trips or fewer. This is an important indicator that transportation benefits tend not to be overused within an MA plan, even for a higher-acuity population such as Dual Eligibles. MA plans may face minimal additional expense from removing the annual trip limit and might be able to better serve exceptionally vulnerable members who would benefit from being allowed to exceed current limits.

The notion of removing barriers to transportation access is evident in the evolution of MA plan benefits. For 2021, among the 2,333 plans offering NEMT benefits that were examined, 443 plans offered unlimited trips, in most cases only to plan-approved health locations. For 2022, among the 2,233 plans offering NEMT benefits that were examined, 527 plans are offering unlimited trips, in most cases only to plan-approved health locations. This suggests that more MA plans are not only seeing the value of NEMT benefits as part of more effectively managing and serving beneficiaries, but also seeing value in removing real and perceived barriers to beneficiaries receiving such services.

The SDOH Transportation Survey

MTAC, with the help of the coalition’s allied members, conducted a first-of-its-kind survey of organizations that provide transportation to Medicare and Medicaid beneficiaries. Survey

respondents were recruited through MTAC’s coalition members¹² and their respective information-sharing platforms (i.e., newsletters, weekly updates, general email outreach), administrators of health plans, and providers financed by Medicare and Medicaid. Survey responses were purposely collected anonymously to improve response rates and to minimize bias from the Hawthorne effect. No compensation was offered to respondents.

For this survey, we defined non-medical transportation as “a transportation service to a non-medical location such as a bank or grocery store provided to those who lack reliable and affordable access to transportation to promote the overall health and well-being of the rider.”¹³ We focused on Medicare and Medicaid programs and compared the responses for entities serving one set of beneficiaries or both sets.

To date, the extent to which health plans, risk-bearing providers, and public payers are incorporating non-medical SDOH-focused transportation into their provided services is unknown. Below, we discuss the results of our survey, which attempted to document the diversity of SDOH-focused transportation services.

The survey (contained in Appendix A) consisted of three sections. The first section collected data on the reporting organization (e.g., organization type and role of organization in providing non-medical transportation). The second section focused on Medicare beneficiaries, collecting information on the approximate number of beneficiaries provided with non-emergency transportation services, allowable destinations (e.g., medical and non-medical), and limitations to the services. The third section mirrored the second but focused on Medicaid beneficiaries.

We received 91 responses to our survey from organizations that provide transportation to Medicare or Medicaid beneficiaries. A majority, 56% of the respondents, were health plans or associations of health plans; 11% were patient-advocacy organizations; 10% were hospital systems or integrated health providers; 11% were transportation providers; 7% were human services organizations; 3% were transportation brokers; and 4% selected “other.” Of the 86 organizations that responded with substantive information on the services they provide, a large majority (79%) responded that they “provide, manage, or offer non-emergency medical transportation services.” The estimated average number of people per organization who were provided with NEMT in 2019 was 338,437, with a high of 11,000,000 and a low of 3.

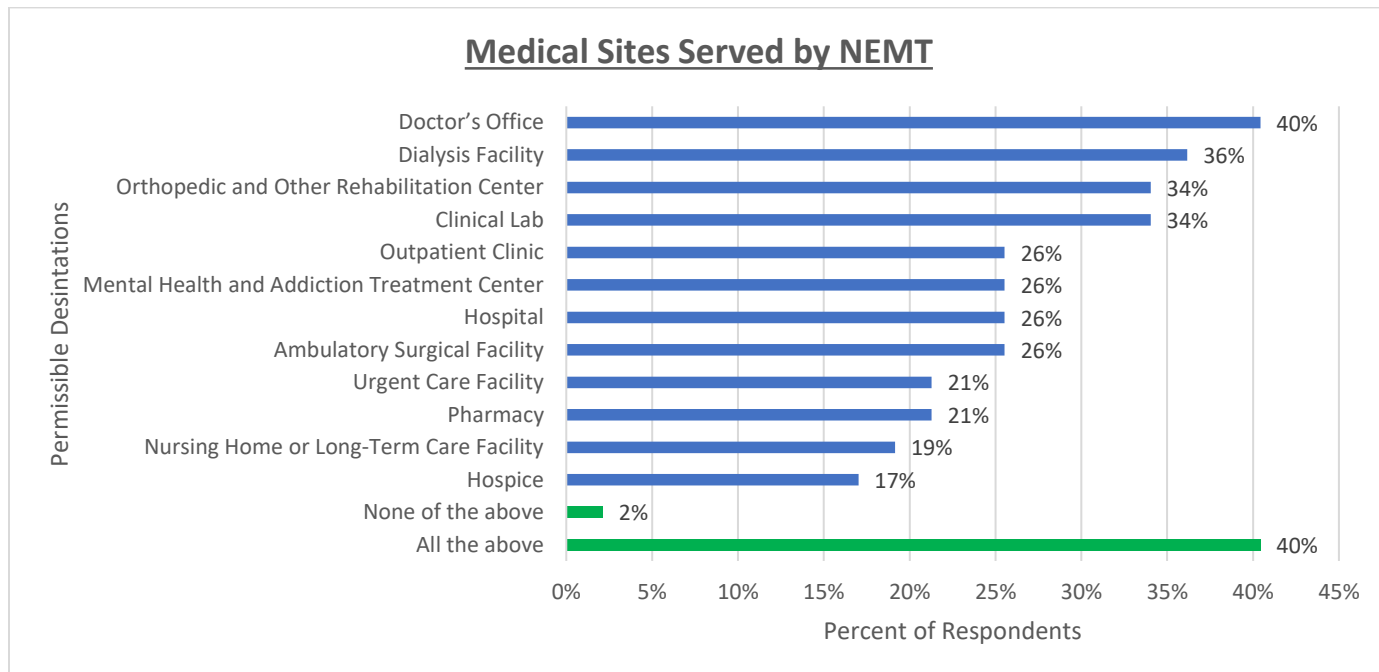
Allowable Medical Site Transportation

Of the 70 organizations that responded to the question about annual limits on rides, 67% indicated that they do indeed place limits on provider destinations. We then asked those organizations to indicate the allowable destinations for their NEMT services. Doctor’s offices were the most frequently indicated provider destination at 80% (40% for “Doctor’s Office” and 40% for “All the above”), followed by Dialysis Facility at 74% (34% for “Dialysis Facility” and

¹² A list of MTAC members can be found here: <https://mtaccoalition.org/about-mtac/allies-and-supporters/>

¹³ The definition of non-medical transportation was based off of MTAC’s definition of NEMT to include non-medical aspects.

40% for “All the above”). As noted in prior studies of NEMT and NEMT users, dialysis patients are frequent users of non-emergency medical transportation.¹⁴



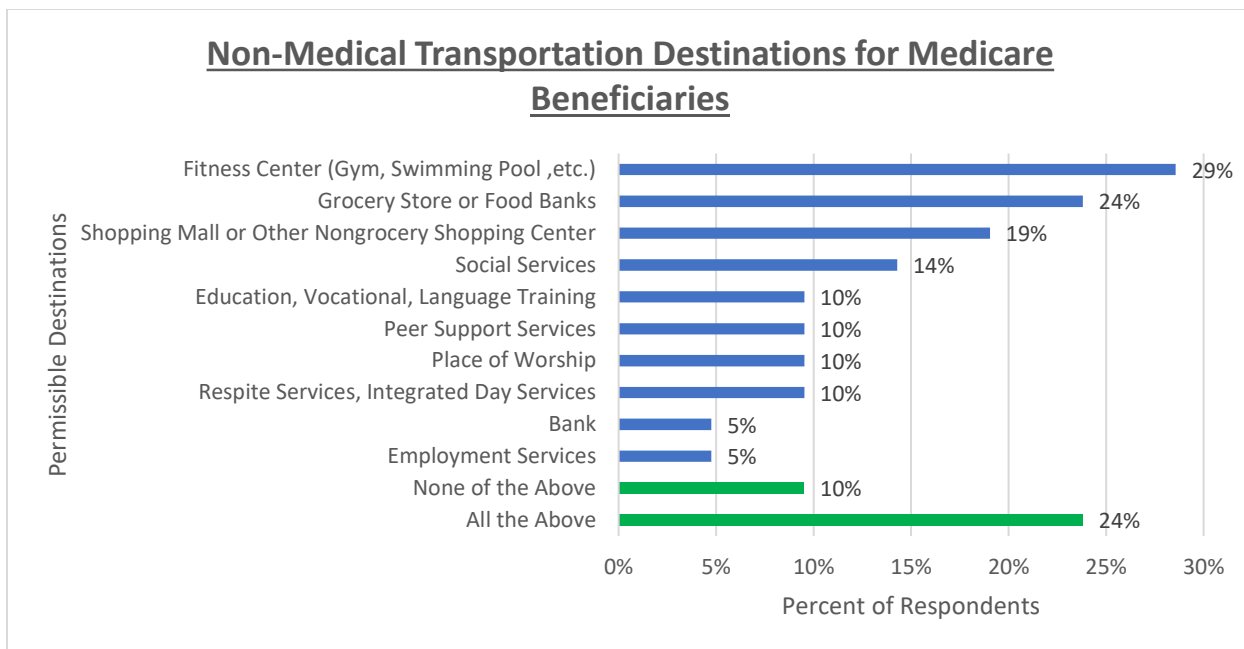
Allowable Non-medical Transportation

Of the 91 responding organizations, sixty-seven (74%) offered information on non-medical transportation. Twenty-four percent indicated that they provide non-medical transportation to Medicare and Medicaid populations. Sixteen percent indicated that they only provide non-medical transportation to Medicare populations, while forty percent indicated that they only provide non-medical transportation to Medicaid populations.

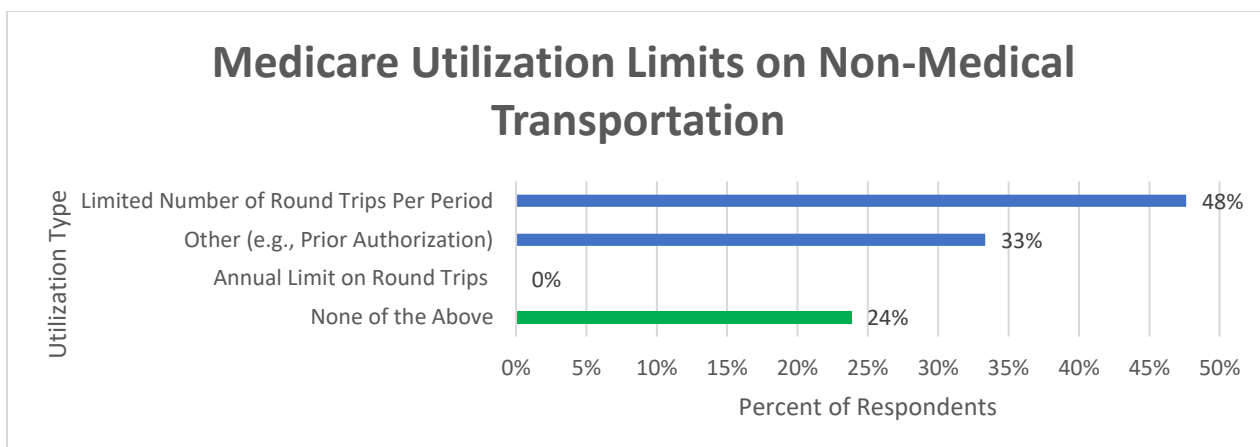
Allowable Non-medical Transportation - Medicare

Medicare beneficiaries are less frequently provided non-medical transportation than Medicaid beneficiaries. Survey respondents provided non-medical transportation to as many as 500,000 and as few as 100 beneficiaries. Fitness centers were the most popular non-medical destination with 53% responding positively (29% for “Fitness,” 24% for “All the above”), closely followed by grocery stores and food banks. Interestingly, 43% of respondents indicated that they permit shopping malls or other nongrocery shopping centers as permissible destinations. It is important to note that 24% of respondents stated that they permit all listed destinations as part of their services.

¹⁴ Kacey Buder. Medicaid and CHIP Payment and Access Commission. Mandated Report on Non-Emergency Medical Transportation: Work Plan and Preliminary Findings. October 29, 2020. <https://www.macpac.gov/wp-content/uploads/2020/10/Mandated-Report-on-Non-Emergency-Medical-Transportation-Work-Plan-and-Preliminary-Findings.pdf>



Organizations frequently put utilization limits on their non-medical transportation services. 48% of respondents stated that they opted to place limits on the number of round trips per period as opposed to other forms of limitation such as prior authorization.

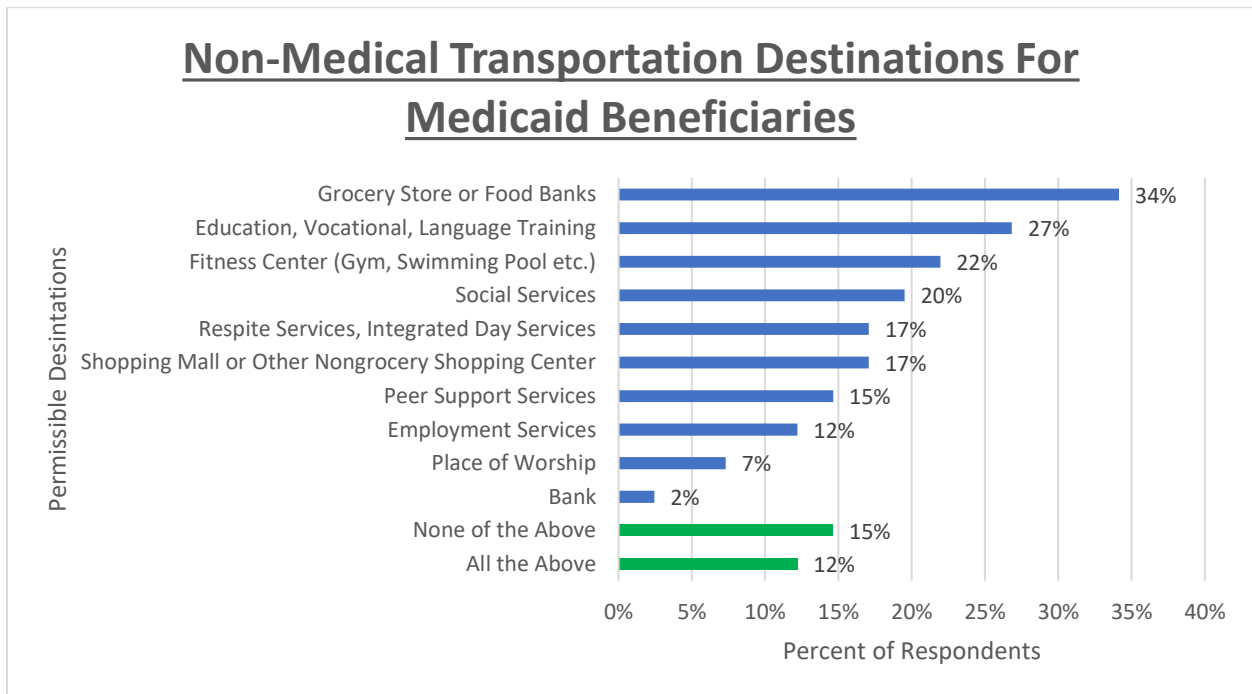


When asked why they offer non-medical transportation services, 38% of respondents stated that they were interested in increasing member satisfaction. When asked why they did not offer non-medical transportation, respondents stated that they were worried about program integrity (23%) and lack of non-medical transportation reimbursement (23%).

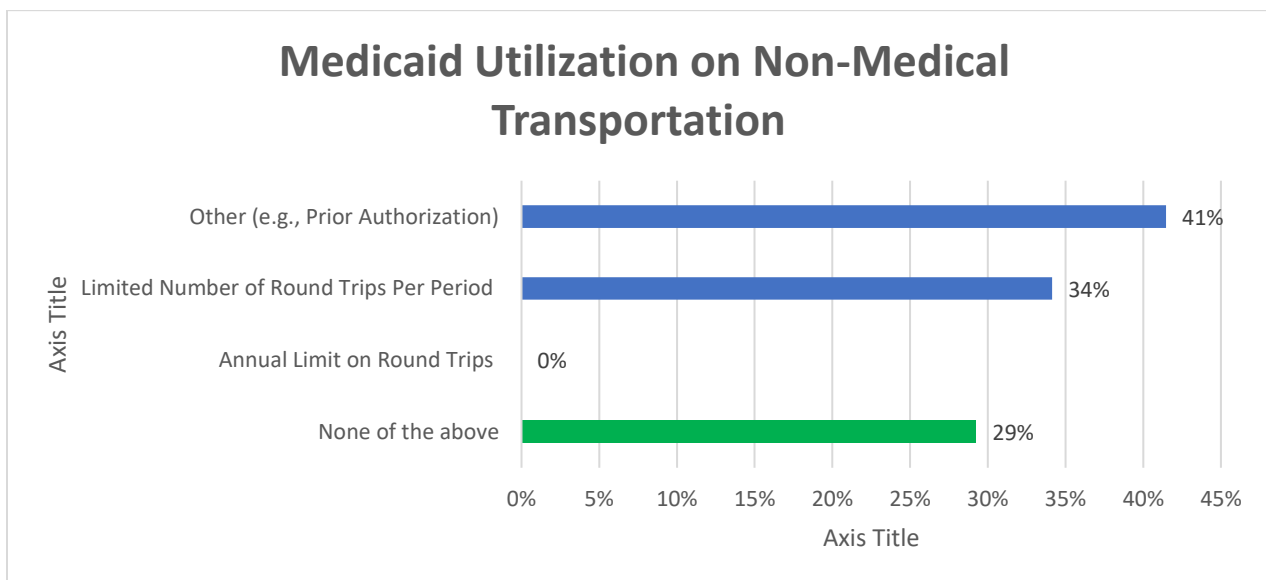
Allowable Non-medical Transportation - Medicaid

Forty-three responding organizations reported that they provide non-medical transportation to Medicaid beneficiaries. Respondents estimated, on average, providing 58,814 Medicaid beneficiaries with non-medical transportation, with as many as 500,000 and as little as 60. Grocery stores or food banks were the most popular non-medical destination with 46% of respondents answering positively (34% “Grocery Store or Food Banks,” 12% “All the above”).

Educational, vocational, or language training was the second highest with 39% (27% “Education, Vocational and Language Training,” 12% “All the above”). This is logical, given the educational and vocational needs of the Medicaid population.



Twenty-nine percent of respondents choose not to employ any utilization-management tools. Forty-one percent of respondents opt to implement tools such as prior authorization while 34% choose to limit rides based on maximum number of trips per time period.



Discussion: Comparing Non-medical Transportation in Medicare and Medicaid

When analyzing allowable medical sites within NEMT for both Medicaid and Medicare, it is important to note that “All the above” was just as popular as any one specific destination, indicating that service providers are often allowing significant flexibility in non-medical destinations within both Medicare or Medicaid. In comparison to MA non-medical transportation benefits, Medicaid non-medical transportation covers a somewhat wider range of non-medical sites, including more frequently covering trips to social service, respite, and educational/vocational destinations. This is the case despite the fact that MA plans can make their own decisions with respect to non-medical transportation, while Medicaid plans and providers often require authorization from the state. It may also reflect the fact that Medicaid has a long history of providing non-medical transportation, while widespread use of non-medical transportation in MA is new. Medicaid beneficiaries are less likely to encounter utilization limitation rules than those in MA plans. It is understandable that Medicare and Medicaid would choose different utilization limitations, given the differences in underlying legislation and populations served.

Overall, non-medical transportation in both Medicare and Medicaid shows a great diversity in the sites served. There is no single “consensus” destination served by a large majority of responding organizations. Permissible sites for MA plans trend toward destinations with an obvious correlation with physical health (grocery stores, fitness centers); Medicaid destinations, understandably, have a broader focus that more often includes social services and vocational destinations. CMS data confirms that transportation to non-medical sites (provided by MA plans as a SSBCI benefit), while growing in frequency, remains uncommon.¹⁵

Limitations

Both the claims analysis and the survey have limitations that need to be fully acknowledged. The claims analysis is of one northeastern health plan. Further, the examined plan was selected because its membership skews toward Medicare-Medicaid “duals” and other lower-income Medicare beneficiaries. The generalizability of the study findings to other regions and to more affluent Medicare beneficiaries needs to be considered. While it is plausible to assume that the positive correlations observed in the claims analysis will be observed elsewhere, further research is needed to prove this.

Given the anonymous format, it is difficult to know how precisely the 91 responding organizations represent the universe of organizations providing non-medical transportation. In MA, publicly available CMS data permits us to determine that 176 MA organizations offer a non-medical transportation benefit in 2021. Of those, at least 27 responded to our survey. There is no equivalent information for Medicare Accountable Care Organizations; we cannot know if our survey is representative. Similarly, the lack of easily accessible national Medicaid data makes it hard for us to know the representativeness of our Medicaid responding organizations.

¹⁵ In 2021, 177 plans offered Transportation for non-medical needs to their chronically disabled population. This is up from 88 in 2020.

Conclusion

This study consisted of two independent but complementary components: (1) a claims analysis of an MA plan that describes the positive member behaviors of transportation users in comparison to non-users, and (2) a survey of organizations that provide non-emergency transportation to Medicare and Medicaid beneficiaries, which seeks to detail the scope of non-medical transportation provided. While there are limitations to both components of this study, those limitations do not negate that both components are the most complete analyses to date on the specific questions asked.

The claims analysis found several examples of non-emergency transportation correlating with helpful member behaviors, including increased primary care visits. In addition, the claims analysis offers evidence that non-emergency transportation is being used by sicker members and is not being over-utilized. More work is needed to consider the impact of these correlations on member outcomes and potential cost savings.

The first-of-its-kind survey documents that non-medical transportation is occurring in both MA and Medicaid but is occurring heterogeneously with individual organizations (or states) selecting allowable sites based on the perceived need of local Medicare and Medicaid beneficiaries. While some diversity of permissible sites is to be expected, given the different populations served and local variations, this same diversity suggests that a good deal of trial and error is occurring among organizations seeking to meet the SDOH needs of the beneficiaries they serve. Over time, consensus will likely emerge regarding permissible sites and logical checks against benefit over-utilization. It is also likely that more organizations will offer non-medical transportation as today's innovations are evaluated and more research emerges on the value of targeted non-medical transportation.

This study provides new evidence that non-emergency transportation could help vulnerable people navigate the healthcare system more successfully and that many payers and providers are supporting non-medical transportation in the Medicaid and Medicare programs to address social determinants of health. Over time, more research will fill in gaps in our knowledge and further strengthen the case for financing comprehensive, appropriate transportation based on medical and social needs, including transportation to non-medical sites, in the Medicaid and Medicare programs.

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Appendix A: SDOH Transportation Survey

MTAC Landscape of Non-medical Transportation in Health Care

Welcome! We appreciate your time. This survey is being conducted by Faegre Drinker Consulting on behalf of the Medical Transportation Access Coalition (mtaccoalition.org). With this poll, we want to find out the prevalence of healthcare entities financing transportation to non-medical destinations such as grocery stores or fitness centers. We are focused on both Medicare and Medicaid populations for this survey and will compare the two populations, so please pay attention to prompts about one population or the other when answering questions.

While transportation itself is widely recognized as a social determinant of health, the results of this survey will give us an understanding of how transportation is being used to address other social determinants of health and to contribute to the “whole health” of vulnerable people.

We will not spam you with multiple follow-ups, and your responses will remain completely anonymous.

The survey should take approximately 20 minutes and will allow us to gather essential information for publishing the first study of this topic. We understand how precious your time is, and we thank you for your insights.

Helpful Definitions

Non-emergency medical transportation: A transportation service to medical locations such as a physician’s office, dialysis center, pharmacy or post-hospital admission discharge trip provided to those who lack reliable and affordable access to transportation.

Non-medical transportation: A transportation service to a non-medical location such as a bank or grocery store provided to those who lack reliable and affordable access to transportation in order to promote the overall health and well-being of the rider.

Questions

1. Which of the following best describes your organization?
 - a. Health Plan/Association of Health Plans
 - b. Human Services Organization
 - c. Hospital/ Health System
 - d. Transportation Provider
 - e. Transportation Broker
 - f. Rideshare Company
 - g. Patient Advocacy Organization
 - h. Other (please specify)
2. Do you provide, manage, or offer **non-emergency medical transportation** services?
 - a. Yes
 - b. No
3. What is the approximate number of people provided with non-emergency **medical transportation** by your organization in 2019 (the last year not impacted by COVID-19)?

4. Do you place limits on the provider destinations for which you provide **non-emergency medical transportation**?
 - a. Yes
 - b. No
5. Please indicate the provider destination to which your organization provides, manages or offers **non-emergency medical transportation** (check all that apply):
 - a. Ambulatory Surgical Facilities
 - b. Clinical Lab
 - c. Dialysis Facility
 - d. Doctor's Office
 - e. Hospital
 - f. Hospice
 - g. Mental Health and Addiction Treatment Centers
 - h. Nursing Home or Long-Term Care Facility
 - i. Orthopedic and Other Rehabilitation Centers
 - j. Outpatient Clinic
 - k. Pharmacy
 - l. Urgent Care Facilities
 - m. All the above
 - n. Other (please specify)
 - o. None of the above
6. Do you provide, manage or offer **non-medical transportation** to the following populations? Choose one:
 - a. Medicare
 - b. Medicaid
 - c. Both
 - d. None

Please answer the following questions based on your Medicare population

7. What is the approximate number of people provided with **non-medical transportation** by your organization in 2019 (the last year not impacted by COVID-19)?
8. Please indicate the **non-medical transportation** destinations where your organization provides, manages or offers services to (check all that apply):
 - a. Bank
 - b. Education, Vocational, Language Training
 - c. Fitness Center (gym, swimming pool etc.)
 - d. Grocery Store or Food Banks
 - e. Place of Worship
 - f. Shopping Mall or Other Non-Grocery Shopping Center
 - g. Social Services
 - h. Respite services, integrated day services
 - i. Employment services
 - j. Peer support services
 - k. All the above
 - l. Other (please specify)

- m. None of the above
- 9. Does your organization collect demographic information for its transportation users?
 - a. Yes
 - b. No
- 10. Please select the populations of **non-emergency medical transportation** that utilize more than 5% of your rides to medical locations? (Check all that apply)
 - a. Hispanic or Latino
 - b. American Indian or Alaska Native
 - c. Asian
 - d. Black or African American
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. N/A
 - h. Other (please specify)
- 11. Please select the population of **non-medical transportation** that utilize more than 5% of your rides to non-medical locations? (Check all that apply)
 - a. Hispanic or Latino
 - b. American Indian or Alaska Native
 - c. Asian
 - d. Black or African American
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. N/A
 - h. Other (please specify)
- 12. Does your organization collect income information for its **non-emergency medical transportation** and **non-medical transportation** users?
 - a. Yes, for non-emergency medical transportation
 - b. Yes, for non-medical transportation
 - c. Yes for both
 - d. No
- 13. What is the average yearly income of those utilizing **non-emergency medical transportation** services?
- 14. What is the average yearly income of those utilizing **non-medical transportation** services?
- 15. Does your organization offer specialized services for people with disabilities? (Check all that apply)
 - a. Specialized vehicles
 - b. Specially trained drivers
 - c. Arrangements with transportation organizations that service people with disabilities
 - d. Other (please specify)
 - e. All the above
 - f. None of the above
- 16. Please indicate how you place utilization limits of **non-emergency medical transportation** services:
 - a. Limited number of round trips per period (insert number and periodicity)

- b. Other (e.g. prior authorization)
 - c. None of the above
17. Please indicate utilization limits of **non-emergency medical transportation**
- a. Insert number of round trips
18. Please insert the periodicity for the above indicated number of round trips
- a. Daily
 - b. Weekly
 - c. Monthly
 - d. Quarterly
 - e. Annually
19. Please indicate the other utilization limits of **non-emergency medical transportation services**
- a. Write-in
20. Please indicate how you place utilization limits of **non-medical transportation services**:
- a. Limited number of round trips per period (insert number and periodicity)
 - b. Other (e.g. prior authorization)
 - c. None of the above
21. Please indicate utilization limits of **non-medical transportation**
- a. Insert number of round trips
22. Please insert the periodicity for the above indicated number of round trips
- a. Daily
 - b. Weekly
 - c. Monthly
 - d. Quarterly
 - e. Annually
23. Please indicate utilization limits of **non-medical transportation services**:
- a. Write-in
24. What is your reason for offering **non-medical transportation services**? (Check all that apply)
- a. Enhanced disease management
 - b. Increased member satisfaction
 - c. Increased health risk scoring
 - d. Attracting new members
 - e. To facilitate community integration
 - f. Many members in rural areas
 - g. Many members in urban areas lacking transportation resources
 - h. Not applicable
 - i. Other (please specify)
 - j. None of the above
25. What is your reason for not offering **non-medical transportation services**? (check all that apply)
- a. Operational complexity
 - b. User friendliness/ customer complaints
 - c. Program integrity
 - d. Cost of delivering the service
 - e. No reimbursement from Medicare

- f. Not applicable
- g. Other (please specify)
- h. None of the above

Please answer the following questions based on your Medicaid population.

26. What is the approximate number of people provided with **non-medical transportation** by your organization in 2019 (the last year not impacted by COVID-19)?
27. Please indicate the **non-medical transportation** destinations where your organization provides, manages or offers services to (check all that apply):
- a. Bank
 - b. Education, Vocational, Language Training
 - c. Fitness Center (gym, swimming pool etc.)
 - d. Grocery Store or Food Banks
 - e. Place of Worship
 - f. Shopping Mall or Other Non-Grocery Shopping Center
 - g. Social Services
 - h. Respite services, integrated day services
 - i. Employment services
 - j. Peer support services
 - k. All the above
 - l. Other (please specify)
 - m. None of the above
28. Does your organization collect demographic information for its transportation users?
- a. Yes
 - b. No
29. Please select the populations of **non-emergency medical transportation** that utilize more than 5% of your rides to medical locations? (Check all that apply)
- a. Hispanic or Latino
 - b. American Indian or Alaska Native
 - c. Asian
 - d. Black or African American
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. N/A
 - h. Other (please specify)
30. Please select the population of **non-medical transportation** that utilize more than 5% of your rides to non-medical locations? (Check all that apply)
- a. Hispanic or Latino
 - b. American Indian or Alaska Native
 - c. Asian
 - d. Black or African American
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. N/A
 - h. Other (please specify)

31. Does your organization collect income information for its **non-emergency medical transportation** and **non-medical transportation** users?
 - a. Yes, for non-emergency medical transportation
 - b. Yes, for non-medical transportation
 - c. Yes for both
 - d. No
32. What is the average yearly income of those utilizing **non-emergency medical transportation** services?
33. What is the average yearly income of those utilizing **non-medical transportation** services?
34. Does your organization offer specialized services for people with disabilities? (Check all that apply)
 - a. Specialized vehicles
 - b. Specially trained drivers
 - c. Arrangements with transportation organizations that service people with disabilities
 - d. Other (please specify)
 - e. All the above
 - f. None of the above
35. Please indicate how you place utilization limits of **non-emergency medical transportation** services:
 - a. Limited number of round trips per period (insert number and periodicity)
 - b. Other (e.g. prior authorization)
 - c. None of the above
36. Please indicate utilization limits of **non-emergency medical transportation**
 - a. Insert number of round trips
37. Please insert the periodicity for the above indicated number of round trips
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Quarterly
 - e. Annually
38. Please indicate the other utilization limits of **non-emergency medical transportation** services
 - a. Write-in
39. Please indicate how you place utilization limits of **non-medical transportation** services:
 - a. Limited number of round trips per period (insert number and periodicity)
 - b. Other (e.g. prior authorization)
 - c. None of the above
40. Please indicate utilization limits of **non-medical transportation**
 - a. Insert number of round trips
41. Please insert the periodicity for the above indicated number of round trips
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Quarterly

- e. Annually
42. Please indicate utilization limits of **non-medical transportation** services:
- a. Write-in
43. What is your reason for offering **non-medical transportation** services? (Check all that apply)
- a. Enhanced disease management
 - b. Increased member satisfaction
 - c. Increased health risk scoring
 - d. Attracting new members
 - e. To facilitate community integration
 - f. Many members in rural areas
 - g. Many members in urban areas lacking transportation resources
 - h. Not applicable
 - i. Other (please specify)
 - j. None of the above
44. What is your reason for not offering **non-medical transportation** services? (check all that apply)
- a. Operational complexity
 - b. User friendliness/ customer complaints
 - c. Program integrity
 - d. Cost of delivering the service
 - e. No reimbursement from Medicare
 - f. Not applicable
 - g. Other (please specify)
 - h. None of the above
45. Are you willing to provide your email address to provide additional context if needed?
- a. Yes
 - b. No
46. Please provide your email below:

Appendix B. Actuarial Disclosures

Responsible Actuary. I, Tim Murray, am the actuary responsible for this communication. I am a Member of the American Academy of Actuaries and a Fellow of the Society of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to issue this report.

Conflict of Interest. I am financially independent and free from conflict concerning all matters related to performing the actuarial services underlying this analysis. In addition, Wakely is organizationally and financially independent from MTAC and Faegre Drinker.

Intended Users. This information has been prepared for MTAC and Faegre Drinker.

Risks and Uncertainty. Users of the results should be qualified to use it and understand the results and the inherent uncertainty. The summary statistics contained herein are not indicative of a causal relationship between the use of NEMT benefits and particular cost outcomes. Rather, the statistics contained herein reflect interesting observations on the differences between the cost and risk profile of transportations utilizers and non-utilizers. The variability in cost-and-use statistics between the cohort studies may be driven by variables other than the availability and use of NEMT benefits. The relationships observed may be attributable to member behaviors and engagement levels unrelated to transportation benefit availability and use. A more-robust study of larger data sets controlled for a broader array of confounding variables would be needed to ascertain the existence/absence of a causal relationship.

Contents of Actuarial Report. This document includes summary-level statistics and observations from the data analysis of Medicare Advantage claims data.

Deviations from ASOPS. Wakely completed the analysis using sound actuarial practice. To the best of my knowledge, the report and methods used in the analysis are in compliance with the appropriate Actuarial Standards of Practice (ASOP) with no known deviations.