The Rural Medical Transportation Network: The Evolution of a Purpose Driven Partnership

May, 2015

Prepared by
Dennis Presley, MPA
Project Coordinator Rural Medical Transportation Network
Center for Rural Health and Social Service Development
Southern Illinois University School of Medicine

Kim Sanders, MPH, MBA
Director
Center for Rural Health and Social Service Development
Southern Illinois University School of Medicine

Ruth Heitkamp, RN, MSPH
Rural Health Project Specialist
Center for Rural Health and Social Service Development
Southern Illinois University School of Medicine

Tom Bik, PhD
Researcher
Center for Rural Health and Social Service Development
Southern Illinois University School of Medicine

The Rural Medical Transportation Network is a project of the Southern Illinois University School of Medicine Center for Rural Health and Social Service Development and is funded by the Illinois Department of Transportation.
The Rural Medical Transportation Network:
The Evolution of a Purpose Driven Partnership

The Southern Illinois University (SIU) School of Medicine’s Center for Rural Health and Social Service Development, located in Carbondale, Illinois, has been collaborating with the Illinois Department of Transportation (IDOT) since 2006. One of the first partnerships between IDOT and CRHSSD was the development of the Rural Medical Transportation Network (RMTN). This network was created in response to a study that determined that medical transportation was one of the highest priority needs in the state’s southernmost counties. In 2015, the need for medical transportation remains a priority in rural America. In fact, transportation is a vital lifeline for low-income individuals, persons living with chronic health conditions, and the medically frail and disabled.

The Development of the Rural Medical Transportation Network

In 2006, the Center for Rural Health and Social Service Development (CRHSSD) received funding from the Illinois Department of Transportation for the Rural Medical Transportation Network (RMTN). A leadership team comprised of CRHSSD, SIU School of Medicine, and SIU Paul Simon Public Policy Institute staff provided initial RMTN oversight. RMTN administrative and programmatic functions are carried out by RMTN staff under the direction of the RMTN project coordinator. RMTN’s mission was to facilitate access to transportation for rural residents in need of medical and health care services in the 34 southernmost Illinois counties. Four primary goals guided RMTN’s activities:

- Analyze the existing medical and public transportation systems of the region and assess the strengths and weaknesses of these systems.
- Identify “gaps” in service provision among the region’s transportation systems, medical/health care systems, and social service agencies.
- Identify, report, and address policy issues that impact the funding and operation of transit systems that provide transportation to rural residents in need of medical/health care services.
- Develop and implement activities and pilot programs to address the identified service provision “gaps”, and subsequently, enhance access to and availability of medical/health care for rural residents.

In 2007, the RMTN conducted a gap analysis of the entire medical transportation system in the region. Issues identified by the analysis were concentrated in seven areas:

- Issues relevant to Illinois Department of Transportation policy and procedures.
- Issues related to the Medicaid prior approval process for medical transportation authorization.
- Issues relevant to HIPAA regulations prohibiting transportation providers access to rider’s protected health information.
- Issues related to public (Medicare and Medicaid) and private insurance reimbursement for medical transportation.
- Issues that impact the ability of mental health providers to secure medical transportation for their clients.
• Issues related to the prohibitive cost of medical transportation for riders.
• Issues that impact the ability of emergency service providers to recruit and retain employees and perform services.

The RMTN leadership team concluded from the gaps analysis that there was a need for a more comprehensive and coordinated public transportation system in the region.

The RMTN began its second year by initiating a pilot program to test the effectiveness of a Community Coordinated Action Team (CCAT) model in the development of a comprehensive system of public transit for medical transportation. Two mass transit districts in southern Illinois, Southern Most Area Rural Transit (SMART) and RIDES, served as the pilot study areas. Approximately 70 community members from these two regions served on CCAT teams comprised of representatives from hospitals, primary care medical practices, health departments, transit districts, behavioral health and human service organizations, and government officials. Each CCAT developed a vision and formed priorities, goals, and objectives for transportation improvements in their region that included:
• Improving communication and coordination among transit providers, as well as, between transit and medical providers for scheduling medical transportation services.
• Mobilizing local groups for the purpose of advocating for a transportation system that is fully funded and coordinated among state agencies.
• Developing a marketing and educational campaign to raise public awareness of the medical transportation system and educate consumers on the processes for accessing the system.
• Establishing or expanding transportation routes from rural to urban centers.
• Developing park and ride systems to increase ridership.

The CCAT model proved to be an effective local planning tool. In 2009, the RMTN leadership team supplemented local efforts with macro-level initiatives to address medical transportation needs and formed the Rural Transportation Steering Committee (RTSC), comprised of administrators from the five transit districts in the RMTN region. The RTSC provided a regional perspective and one of their first recommendations was to initiate collaboration with emergency medical services (EMS) providers. Based on the RTSC's recommendation, the RMTN adopted a “Triad” framework designed to facilitate communication and collaboration between transit, health care, and emergency medical services. The RMTN has continued to operate under the Triad framework and RMTN initiatives have been designed around the Triad - coordinated activities to address emergency and non-emergency medical transportation (NEMT) needs.

The RTSC established an EMS committee that included recognized EMS state leaders. This committee identified five deficiencies that were contributing to gaps in EMS service delivery throughout the state:
• Reimbursement from government programs (Medicare and Medicaid) was inadequate and payments were delayed.
• EMS services were being misused for non-medically necessary purposes.
• A shortage of emergency medical technicians, both paid and volunteer, in rural regions.
• An inadequate number of EMS lead instructors.
• Inadequate training opportunities for continuing education units (CEU) for rural EMS personnel that are needed to maintain licenses and keep up to date on latest technical developments.

To address these issues four work groups were formed comprised of Triad stakeholders. Each work group was tasked with providing input on a specific medical transportation priority:
• Developing an evaluation system to capture information about non-emergency medical transportation (NEMT) including patient needs (routes, days, times, cost), healthcare providers needs (types, days, times), and EMS needs (number of non-medically necessary ambulance transports, number of instances of prolonged response times due to non-medically necessary transports).
• Developing and implementing a plan for educating the public about medical transportation.
• Advocating for increases in state and federal reimbursement for EMS services, and an improved system for Medicaid transit authorization.
• Designing and implementing an innovative EMS Patient Navigator program (described below).

In 2011, the Illinois Department of Transportation requested that the RMTN broaden its scope beyond the original 34 southern Illinois counties and expand into north central and northern Illinois. RMTN expansion goals were to assist these regions with planning and programming to strengthen medical transportation coordination and services.

The expansion not only provided RMTN with the opportunity to share its model and programs with other Illinois regions, it also allowed the RMTN to increase its number of partners, and expand its reach to leverage the support needed to address statewide changes in approaches to medical transportation in Illinois. The RMTN network cultivated the support of regional, statewide, and national organizations such as the Illinois Governor’s Rural Affairs Council EMS subcommittee, Western Illinois University's Rural Transit Assistance Center, Illinois Rural Health Association, Illinois Hospital Association, Illinois Critical Access Hospital Network, Illinois State Ambulance Association, Illinois EMT Association, and the American Heart Association. Through the efforts of the RMTN these organizations are now engaged in the dialogue about ways to improve the system and delivery of medical transportation in Illinois.

**Rural Medical Transportation Network: Innovative Programs**

Since 2011, RMTN programs have focused on supporting transit, healthcare, and EMS initiatives, and enhanced member collaboration. RMTN activities have included innovative programs to test new models of service delivery; advocacy to inform policymakers and
stakeholders about issues important to medical transportation; needs assessments and surveys to identify gaps and deficiencies in programs and services; programs to educate health care professionals and consumers about transit services; and efforts to stimulate EMS workforce development.

**EMS Patient Navigator Program**

One significant threat to the financial viability of EMS agencies throughout the nation is the high number of non-reimbursable, non-medically necessary calls for EMS ambulance services. In an effort to address this issue the RMTN and its EMS Committee developed the EMS Patient Navigator (EMS PN) program. The program was envisioned as a proactive method to educate and obtain non-emergency services for individuals with an established pattern of inappropriate/repeated EMS use, while providing an improved response to their medical needs. Potential benefits of this model include provision of less costly, more medically-appropriate health care services, decreased frequency of unnecessary emergency responses by EMS units, enhanced transportation coordination, and increased public transit ridership.

In 2011 the RMTN received funding from the IDOT Division of Planning and Programming to conduct three EMS PN pilot programs in diverse areas of the RMTN region. The program framework is similar at each of the pilot EMS agencies. Recommendations for PN services come primarily from EMS staff, although others in the service chain can also initiate the process. Anyone who observes a situation that (they believe) would benefit from PN intervention contacts the EMS Supervisor who then completes a Patient Navigator Referral form. Clients must be 18 years of age or older in order to qualify for PN services. Criteria for referrals may include: frequent calls to 911 about maintenance medical screenings or treatments (such as breathing treatments, blood pressure and glucose checks); evidence of quality of life issues, such as frequent falls due to impaired physical mobility; emotional problems (anxiety, loneliness); environmental problems (poor living conditions, hoarding behavior); social/family problems (family violence, abuse); economic issues (lack of transportation to medical appointments); or any other home situation that is considered to be a concern by the referring person. Following a referral, the PN (a registered nurse) contacts the client and assesses their need for EMS services. Where appropriate, PNs can help to arrange for public (or volunteer) transportation to non-emergency health care services, such as walk-in clinics or primary care providers. PNs also can engage a wide variety of other health and social services agencies in order to respond to the needs of referred individuals, such as social welfare agencies, alcohol or mental health counseling, senior citizens services, etc. The EMS PN program also educates clients' about available public transportation options for non-emergency medical transportation; thereby reducing overutilization of EMS emergency services.

While the three pilot PN programs are still underway, preliminary evaluation of two programs offer some promising results. The number of 911 calls was reduced by 59% at one site and 69% at the other. This reduction in the number of calls translates into considerable savings by transitioning clients to a less costly form of medical transportation, and to less costly forms of treatment. These pilots have also developed mutually beneficial
relationships between EMS and public transit providers. As the program shifts clients away from using EMS ambulance transport, public transit must offer a viable alternative mode of transportation that is readily accessible and affordable for the user. The EMS PN program is providing evidence of the value of developing a seamless partnership between public transit, health care, and EMS. Obtaining appropriate health care services for the EMS PN clients, with reliable and affordable transport to these services, can only be achieved by developing cooperative alliances with hospital administrative and clinical staff, and public transit providers.

**EMS Workforce Development Programs**

The RMTN has developed three types of educational programs to support EMS workforce development: a first responder course, EMS continuing education workshops, and an EMS lead instructor training. The RMTN has continuously sponsored first responder courses for students at local high schools since 2011. These courses encourage teens to consider a career or volunteer commitment to EMS and is an effective way to sustain and grow the local EMS workforce. More than 75 students have enrolled in these courses that are offered by 6 high schools in the region. The RMTN has conducted four EMS educational workshops offering quality clinical educational programs for EMTs at all levels, providing them with much needed continuing education credits. The RMTN has also sponsored two EMT lead instructor courses for more than 130 EMTs throughout the region. The RMTN plans to continue to offer these programs on a regular basis throughout the region.

**MEDTrans Mobility Management Program**

Another innovative RMTN collaboration resulted in the development of MedTrans, a Mobility Management Specialist program launched in December of 2014. The RMTN partnered with Rides Mass Transit to obtain funding for this one-of-a-kind pilot program that utilizes trained mobility management specialists to facilitate non-emergency medical transportation. From a centrally-located office, mobility management specialists use geographic information software (GIS) to identify affordable, non-emergency medical transportation options for individuals travelling to medical appointments and treatments. They provide confirmation of all scheduled trips, including pickup and drop-off locations, estimated transport times, and the cost of services. They also obtain prior approvals for all Medicaid eligible trips. MedTrans mobility management specialists also receive referrals from health care providers and serve as a liaison between the client, their health care providers, and public transit. A toll free telephone number and a user-friendly website provide easy access to the service. The MedTrans mobility management specialists complement the mobility management efforts of local public transit agencies. The RMTN is confident that an expanded effort in mobility management will greatly reduce the number of missed medical appointments and treatments, contribute to improved health outcomes for Illinois residents, and result in increased ridership and revenues for public transit.
Rural Medical Transportation Network: Policy and Advocacy

The RMTN has commissioned two reports, *Rural Medical Transportation Project-Health Policy Report 2011* and *Rural Medical Transportation Project-Legal Report 2010*, that provided an assessment of Illinois policies and laws related to the transportation of persons in need of medical or health-related services in both emergent and non-emergent scenarios. The RMTN has utilized the findings of these reports in program planning and in advocating for changes in state medical transportation policy.

The RMTN and its stakeholder organizations advocate for policies that will meaningfully address reliable and affordable public medical transportation services and thus reduce the overreliance on EMS. RMTN members and project staff also serve on numerous boards and advocacy organizations throughout the state and contribute directly to the development of state policy. For example, the RMTN was one of five founding partners of the Illinois EMS Alliance that was established in 2012, and the RMTN Project Coordinator currently serves as the Chair of the statewide EMS-Transit Committee. Other organizations that benefit from the involvement of RMTN members include: the Illinois State Ambulance Association, American Heart Association-Illinois Advocacy Committee, Advisory Board of the Governor’s Office of Health Innovation & Transformation, Statewide Independent Living Council of Illinois – Transportation Committee, IDOT Districts 9, 10, and 11 Human Services Transportation Planning Committees, Statewide EMS – Transit Committee, and the Illinois Public Transit Association.

A 2011 RMTN healthcare provider needs assessment found that more than 90 percent of respondents felt that a better non-emergency medical transportation system was needed in the region, and more than half (51%) thought that an improved system was *extremely needed*. Twenty-five percent of respondents also reported that patients are often hospitalized because their health had deteriorated due to their inability to find medical transportation for routine care. More than 82% of general and critical access hospitals experienced costly delays in medical discharges due to the lack of non-emergency medical transportation.

In 2012, the RMTN responded to these findings by hosting a series of four public forums throughout the region focusing on non-emergency public transportation. These forums provided an opportunity for community members to offer their thoughts and ideas about transportation issues in the region. The RMTN also hosted a *Medical Transportation Advocacy Forum* for healthcare providers, emergency medical services agencies, and representatives from mass transit districts to discuss medical transportation issues in rural communities. During 2012, the RMTN also took their advocacy efforts to Springfield and met with legislators about the need for improved coordination of medical transportation services and the tenuous viability of EMS in Illinois.

Rural Medical Transportation Network: Outreach and Education

Perhaps the most significant barrier to effective medical transportation is the misconceptions and inadequate understanding of the range of readily available options, not
only among the public, but also among health care professionals, public officials and policy makers. There is also chronic miscommunication between EMS agencies and mass transit districts regarding the capacities of each domain to provide medical transportation services.

The RMTN places a high priority on educating the public, as well as healthcare, transit, and EMS providers about the medical transportation system. RMTN staff devotes considerable effort to educating health care providers and consumers about medical transportation. In 2010, seven RMTN regional transit district members collaborated to create the first Non-Emergency Medical Transportation Resource Guide. This guide educates health care providers about the medical transportation services and programs available in each transit district. RMTN staff regularly updates this guide and also prepare brochures that can be used to inform consumers about public transit in the region. These brochures are distributed to numerous hospitals, clinics, physician offices, health departments, and behavioral health and human service organizations.

The RMTN also uses their website, Facebook page, and presentations to civic organizations to disseminate information about medical transportation services, issues impacting medical transportation, and other RMTN initiatives. RMTN staff travel to numerous regions of the state speaking directly to community stakeholders at community and senior centers, service organizations, and community and other coalitions about available medical transportation services in their area. RMTN staff provides ongoing programs for hospital personnel (administrators, physicians, patient navigators, case managers) about medical transportation. To date, RMTN presentations have reached more than 2,000 healthcare professionals and 20,000 consumers.

The RMTN also provides opportunities for undergraduate research projects and internships, and graduate assistantships for masters and doctoral students at the SIU Center for Rural Health and Social Service Development. Each academic year RMTN student-staff members learn about community outreach and engagement by participating in programs to educate community members about medical transportation and services in the region. Students regularly update brochures and training materials; maintain the RMTN website and Facebook page; assist with planning and developing trainings; and assist with survey design, implementation and analysis. Students have received opportunities to present RMTN studies and projects at local, regional and statewide professional meetings and to participate as co-authors on published research.

**Rural Medical Transportation Network: Survey Research Activities**

The RMTN is data driven and has conducted numerous surveys for its partners to help them identify factors that promote or impede coordinated medical transportation in their service areas:

- In 2011, the RMTN conducted a mailed survey to EMS agencies throughout two telephone area code service areas in the 34 RMTN counties. This survey assessed the levels of services provided by the region’s EMS agencies. It also collected information about the extent of inappropriate requests for EMS services.
In 2011, the RMTN conducted a comprehensive needs assessment throughout the 34 RMTN counties in southern Illinois to solicit feedback from health care providers and to ascertain their perception of the current system of non-emergency medical transportation.

In 2012, the RMTN conducted a survey in an urban fringe county that contained both urban and rural areas. The survey assessed the public’s perception of public transportation services, including non-emergency medical transportation, in areas of the county served by public transportation and areas lacking public transportation.

In 2013, the RMTN Health Care Transportation Needs Survey was mailed to randomly selected households in 14 counties that were served by RMTN member transit providers. The purpose of this survey was to explore non-emergency medical transportation issues.

In 2014, the RMTN conducted a survey of Medicaid transportation providers about their experiences with First Transit and Healthcare and Family Services.

2013 Health Care Transportation Needs Survey

The 2013 Health Care Transportation Needs Survey provides an example of the type of useful information that is generated by RMTN’s research in the region. Surveys were mailed to a sample of households from 14 southern Illinois counties served by eleven public transit providers. Over 4,600 surveys were returned. Results showed that approximately 13% of respondents had used public transportation to travel to their non-emergency medical appointments. Respondents who regularly used public transportation for non-emergency medical appointments were more likely to be lower income, unemployed, disabled (or have a family member who is disabled) and/or a member of a racial minority. Survey results suggested that public transportation is often the only choice for NEMT for low-income households. About 7% of survey respondents missed one or more medical appointments in the previous six months because of transportation problems. Missed medical appointments are a serious problem, especially for individuals who are chronically ill and would benefit from routine health care treatment. Analysis of survey responses also revealed a significant “knowledge gap” in survey respondents’ understanding of public transportation. The lack of understanding about basic transit system operations is a barrier to effective NEMT and improved health care in the region.

RMTN partners are well-positioned to take action on these survey findings. The existing collaboration among RMTN partners provides opportunities for optimizing transit systems and schedules to improve the ease and timeliness of non-emergency medical transportation in the region. Partners are expanding upon existing community outreach to create awareness and acceptability of NEMT alternatives, and address the perceived ineffectiveness of public transit for NEMT. Creating effective transportation awareness programs and linkages to health services has the potential to improve health care and increase transit ridership.
Rural Medical Transportation Network: Publications and Presentations

One goal of the RMTN is to identify and address gaps in medical transportation, and to report this information to the stakeholder community. To raise awareness of medical transportation needs, the RMTN Project Coordinator and network Partners have delivered presentations to local, regional, and state-wide stakeholder groups, such as the Department of Transportation, Illinois Rural Health Association, and Illinois Public Health Institute. The RMTN maintains the Non-Emergency Medical Transportation Resource Guide internally on its website for health care providers to facilitate the transportation of their patients. The RMTN has also published internal reports and peer-reviewed articles about their survey research. A listing of RMTN presentations and publications is included in the Appendix.

Summary: RMTN Core Functions and Strategies

Over the years the activities of the RMTN have changed as the coalition has matured and adapted to an ever-changing health care landscape. However, a set of core functions continues to guide RMTN activities:

- Communicating and networking with RMTN partners and local, regional and state government officials that have a stake in medical transportation.
- Promoting coordination of medical transportation systems and services throughout the state.
- Researching medical transportation policy, services, and service delivery at both the state and national level.
- Monitoring the effectiveness of transportation systems, services, and service delivery in the RMTN region.
- Developing programs to address identified gaps and deficiencies in policy, services, and service delivery in Illinois.
- Advocating for sound and purposeful medical transportation policy and services throughout Illinois.
- Educating consumers, medical transportation, EMS, and healthcare providers about medical transportation services and service delivery.
- Facilitating educational programs to maintain a high quality EMTs and medical transportation workforce in Illinois.

The RMTN community, context, and culture is dynamic and the network will continue to explore issues concerning emergency and non-emergency medical transportation, in order to:

- Identify and assess new and ongoing problems regarding transportation.
- Identify and implement strategies that facilitate solutions.
- Improve networking, community access, problem solving, and coordination of resources.
- Identify new methods to share resources and coordinate scheduling.
- Develop services that better meet the consumer’s medical transportation needs.
- Increase ridership through programs that target education and outreach.
• Develop regional funding strategies that facilitate transportation across transit districts.
• Increase community awareness and satisfaction with medical transportation services.

RMTN members also conduct periodic strategic planning retreats in order to:
• Assess the relevance of RMTN’s mission and mandate.
• Assess how effectively RMTN is functioning as a network.
• Assess how stakeholders in the network are accountable to each other.
• Assess RMTN’s impact on medical transportation policy in the state.
• Assess the impact of RMTN activities on medical transportation services in Illinois.

With the support of the Illinois Department of Transportation Division of Planning and Programming, the Rural Medical Transportation Network is now in its ninth year and has evolved to become a recognized and respected entity in Illinois. Through its research, issue advocacy, and pilot programs the RMTN has demonstrated its expertise and commitment to overcome the barriers to medical transportation in Illinois. Organizations throughout the State recognize the RMTN as a valuable resource, and a trusted and reliable partner. Health care, transportation, and EMS professionals regularly seek out the RMTN to find solutions to the obstacles consumers face when accessing medical transportation.

Over the next fifteen years, our nation will have 30 million more seniors in need of non-emergency medical transportation services. For this reason, now is the time to develop new and innovative approaches to meet these growing needs. Using the Triad model of health care, transit, and emergency medical services, the RMTN is poised to assist Illinois communities and local governments prioritize needs and resources to meet the transportation challenges of tomorrow.
Appendix

Conference Presentations


Internal Publications (online)


External Publications


References

1. MJS & Company. Medicaid Expansion and Premium Assistance: The Importance of Non-Emergency Medical Transportation (NEMT) To Coordinated Care for Chronically Ill Patients. 2014