



National Rural Health Association

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Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

RE: Emergency Medical Services Education Agenda 2050: Request for Information [DOT-NHTSA-2023-0037]

Dear Associate Administrator Srinivasan,

The National Rural Health Association (NRHA) thanks the National Highway Traffic Safety Administration (NHTSA) for the opportunity to provide input on the re-envisioning of the EMS Education Agenda. Emergency medical services (EMS) are critical for our rural communities, but agencies providing these services often lack the necessary funding, workforce, and infrastructure to adequately serve residents.

NRHA is a non-profit membership organization with more than 21,000 members nationwide that provides leadership on rural health issues. Our membership includes nearly every component of rural America's health care, including rural community hospitals, critical access hospitals, long-term care providers, doctors, nurses, and patients. We work to improve rural America's health needs through government advocacy, communications, education, and research.

1. What are the most critical issues facing the EMS education system that should be addressed in the revision of the EMS Education Agenda? Please provide specific examples.

Addressing the pivotal challenges within the EMS education system is essential for the forthcoming revision of the EMS Education Agenda. Key areas requiring focus include:¹

Statewide Standardization of Educational Content: Ensuring baseline educational content is standardized across states is crucial for enabling EMS personnel to operate seamlessly across state boundaries, enhancing interoperability.

Incorporation of Modern Technologies and Understanding Social Determinants: It is imperative to integrate training that covers the latest technological advancements and educates on the social determinants of health (SDOH) and demographic impacts, preparing EMS professionals for a diverse range of scenarios. This is particularly important for the

¹National Advisory Committee on Rural Health and Human Services. (2022). Access to Emergency Medical Services in Rural Communities. Retrieved From: <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/rural/access-to-ems-rural-communities.pdf>



education of community paramedics and mobile integrated healthcare (MIH) clinicians at all levels.

Promoting Diversity and Making Education More Accessible Financially: The agenda should prioritize making EMS education more inclusive and financially accessible to broaden participation and ensure a diverse workforce.

Commitment to Ongoing Education: Continuous education opportunities for EMS personnel must be emphasized to maintain high standards of care and adapt to evolving healthcare landscapes.

Rural-Specific Considerations: Many rural EMS operations depend heavily on volunteer staff, leading to challenges such as lower skill levels and higher vacancy rates, which in turn result in limited opportunities for skill development and training. The agenda should consider the unique challenges of rural communities and how education can adapt to be feasible for rural EMS professionals and agencies.

In addition, the agenda should consider the use of mobile integrated healthcare and community paramedicine (MIH-CP) and how training for this type of care can be incorporated. MIH-CP is using patient-centered, mobile resources outside of the hospital or clinical setting.² MIH is provided by various healthcare entities and practitioners that are integrated with EMS agencies and community paramedicine is typically services provided by EMS agencies and practitioners that are integrated with healthcare entities. About 44% of community paramedicine or MIH-CP programs are in rural communities and 11% in super rural communities. Additionally, 22% of programs serve populations of less than 50,000. MIH-CP has great potential to serve rural areas and should be included in the agenda.³

Rural EMS Skill Discrepancies: EMS professionals in smaller rural areas, especially those with mixed or entirely volunteer staffing, often lack the skill set that aligns with the national EMS scope of practice.⁴ In addition, rural areas generally require a higher skillset as EMS clinicians have extended patient care time compared to those in urban areas.

²Mobile integrated healthcare and community paramedicine (MIH-CP): a national survey. (2018). *EMS world, Supp*, 5–16. Retrieved From: <https://www.naemt.org/docs/default-source/2017-publication-docs/mih-cp-survey-2018-04-12-2018-web-links-1.pdf>

³Mobile integrated healthcare and community paramedicine (MIH-CP): a national survey. (2018). *EMS world, Supp*, 5–16. Retrieved From: <https://www.naemt.org/docs/default-source/2017-publication-docs/mih-cp-survey-2018-04-12-2018-web-links-1.pdf>

⁴ Patterson DG, Stubbs BA, Nudell NG. How Actual Practice of Emergency Medical Services Personnel Aligns with the Recommended National Scope of Practice in Rural Versus Urban Areas of the U.S.. Center for Health Workforce Studies, University of Washington, Feb 2022. Retrieved From: https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2022/02/EMS-Scope-of-Practice-Alignment-FR-2022_ac.pdf



Identified Gaps in EMS Training:⁵ Research, such as the study from Nebraska, has highlighted significant training gaps within EMS education, particularly in:

- **Clinical and Non-Clinical Training Needs:** Areas needing focus include cardiopulmonary conditions, diabetes management, mass casualty incidents, maternal health, patient assessment, pediatric care, and respiratory emergency care. There is also a noticeable deficiency in non-clinical skills, particularly those related to crisis management and maintaining effective teamwork.
- **Highly Sought Trainings:** Cardiopulmonary care, pediatric care, and mass casualty incident management emerged as areas where training is acutely needed.
- **Additional Training Requirements:** There is a demand for life support-related refresher courses, updates on protocols, training specifically tailored for rural settings, and education on handling substance use-related emergencies and agricultural injuries.

Additional training needs outside of the study referenced above include behavioral health, social determinants of health, and resource navigation. EMS clinicians in rural areas may be playing the role of a primary care physician because they are the most accessible provider in the area and can more easily make visits to the home. Because of this enhanced role, training around responding to behavioral health concerns or crises, addressing SDOH, and connecting patients to the correct resources are key training needs.

By tackling these issues head-on, the revised EMS Education Agenda can significantly enhance the quality, efficacy, and accessibility of EMS education, particularly addressing the unique challenges faced in rural environments.

4. As an EMS Stakeholder, how might a revised EMS Education agenda be most useful to you?

National publications are beneficial in driving local change. Educational standards are easier to “sell” or are seen as more legitimate when they are driven by national standards. These standards should include all EMS practitioners, such as EMTs, paramedics, community paramedics, and critical care paramedics.

9. How could the revised EMS Education Agenda enhance collaboration among EMS systems, health care providers and facilities, public safety answering points, public health, public safety, emergency management, insurers, and others?

⁵Wehbi, N. K., Wani, R., Yang, Y., Wilson, F., Medcalf, S., Monaghan, B., Adams, J., & Paulman, P. (2018). A needs assessment for simulation-based training of emergency medical providers in Nebraska, USA. *Advances in simulation (London, England)*, 3, 22. <https://doi.org/10.1186/s41077-018-0081-6> . Retrieved From: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6251128/>



Adoption of Virtual and Distance Learning:⁶ Expanding virtual and distance learning opportunities can facilitate licensure and continuing education for rural EMS providers, ensuring that geographical barriers do not impede access to necessary training and information. This approach allows for a more inclusive and accessible educational framework that accommodates the diverse needs of EMS personnel across different regions.

Integrated Training and Continuing Education: The development and implementation of integrated training programs that promote collaboration with public health authorities and healthcare providers are essential. Such programs should emphasize a better understanding and recognition of the social determinants of health (SDOH) and how to effectively utilize social needs screenings to address health inequities and improve patient outcomes.

Diverse and Collaborative Programs: Programs that bring together individuals from various backgrounds for emergency preparedness drills and other collaborative exercises can foster a sense of community and teamwork among EMS professionals, healthcare workers, and other stakeholders. These programs can serve as a platform for sharing knowledge, best practices, and innovative solutions to common challenges faced by emergency services.

Cross-sectoral Partnerships for Comprehensive Care:⁷ Establishing formal partnerships between EMS providers and other sectors and providers such as behavioral health services, substance abuse treatment facilities, and social services can enhance the overall care continuum for patients. For example, the integration of EMS with behavioral health crisis intervention teams has shown promise in improving outcomes for individuals experiencing mental health emergencies by ensuring timely and appropriate care. This is especially important for community paramedics that work closely with primary care physicians and specialists to ensure care coordination and care management.

Leadership education: Outside of entry-level positions, the agenda should discuss guidance for leaders of EMS agencies or programs.

10. How could the revised EMS Education Agenda be used to promote community sustainability and resilience?

⁶King, N., Pigman, M., Huling, S., Hanson, B. (2018) EMS Services in Rural America: Challenges and Opportunities. National Rural Health Association. Retrieved From: https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/Advocacy/Policy%20documents/05-11-18-NRHA-Policy-EMS.pdf

⁷Substance Abuse and Mental Health Services Administration. (2020). *Crisis Services: Meeting Needs, Saving Lives*. PEP20-08-01-001. Retrieved From: <https://store.samhsa.gov/product/crisis-services-meeting-needs-saving-lives/pep20-08-01-001>



Development of Sustainable Community Pipelines:⁸ Prioritizing the establishment of sustainable community pipelines is vital for maintaining uninterrupted access to EMS services. This includes creating robust recruitment and retention strategies tailored to rural areas, fostering local partnerships for EMS training and education, and ensuring that EMS careers are attractive and viable options for community members.

Integrated Community Health Approaches: Strengthening the integration of EMS within the broader health and social services ecosystem of a community can enhance resilience. This involves EMS actively participating in community health planning and prevention efforts, ensuring a holistic approach to health and wellbeing. Integrated healthcare is the future of healthcare and MIH-CP systems of care will augment and support EMS programs. Establishing baseline education standards that include MIH-CP will be key.

Evidence-Based Training on Social Determinants of Health: Incorporating evidence-based training on social determinants of health (SDOH) into the EMS curriculum can prepare providers to better understand and respond to the unique needs of their communities, particularly in addressing the challenges faced by rural, aging populations.

12. How could the revised EMS Education Agenda enhance the exchange of evidence-based practices between national, Federal (and military), State, and local levels?

To enhance the exchange of evidence-based practices across all levels of EMS—national, federal, state, and local—a multifaceted approach centered around the implementation of a comprehensive EMS data reporting and monitoring system is critical.⁹ This system is essential for fostering more efficient and effective service provision, particularly in rural areas that often face unique challenges.

Data interoperability and regularly collecting standardized data at local and state levels, and consolidating this information at the national level, will break down barriers currently hindering the development of operational improvement strategies, enhancing provider safety, and elevating patient care standards. The establishment of uniform data standards will facilitate the seamless sharing of information and best practices across jurisdictions, contributing significantly to the development of an effective EMS workforce—the cornerstone of any robust EMS system.

Furthermore, the integration of evidence-based practices into EMS education and operations requires an actionable framework.¹⁰ This entails not just the collection and

⁸Rural Health Information Hub. (2023). *Emergency medical services*. Retrieved From: <https://www.ruralhealthinfo.org/topics/emergency-medical-services>

⁹National Highway Traffic Safety Administration. (2011, May.). *The Emergency Medical Services Workforce Agenda for the Future*. Retrieved From: https://www.ems.gov/assets/EMS_Workforce_Agenda.pdf

¹⁰Mclaughlin, C., Riutta, O., Busko, J., (2020). *EMS Workforce: A Call to Action*. National Rural Health Association. Retrieved From: https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/Advocacy/Policy%20documents/NRHA-Policy-Brief-Rural-EMS-Workforce.pdf



analysis of data but also the dissemination of insights gained to inform training programs, protocol development, and policy making. Engaging stakeholders at all levels in a continuous feedback loop will ensure that the data collected drives meaningful improvements in EMS practice and policy.

13. How could the revised EMS Education Agenda support the seamless and unimpeded transfer of military EMS personnel to roles as civilian EMS providers?

Acknowledgment of Military Medical Training:¹¹ Establish a framework for recognizing the medical care training received by military personnel as equivalent to civilian EMS educational requirements. This recognition should help convert military educational experiences into credentials directly applicable in civilian EMS roles, especially benefiting rural and underserved communities given the significant veteran population in rural areas.

Support for Ongoing Education and Training: Recognizing the burdens placed on EMS personnel, who must balance their employment, family commitments, and the necessity of continuous education and training to maintain their skills and certifications, the revised agenda should propose solutions to ease these pressures. This includes conducting research and providing sustainable funding aimed at increasing both the number of full-time paid positions and paid training opportunities for volunteers. Enhancing support in these areas could significantly alleviate recruitment and retention challenges within rural EMS units.

15. How could the revised EMS Education Agenda support improved patient outcomes in rural and frontier communities?

SIREN Grant Program for Rural EMS¹²: This program is pivotal as it extends financial support to licensed EMS agencies specifically serving rural communities. By focusing on crucial areas such as training EMS personnel, acquiring necessary equipment, and refining service delivery methods, the SIREN grant program aids in fortifying the operational capabilities of rural EMS agencies. Agencies have the potential to secure up to \$200,000 per award, which can be allocated towards essential activities like providing initial and re-certification training, addressing the needs of patients with mental and substance use disorders, and procuring personal protective equipment. This strategic funding support

¹¹ King, N., Pigman, M., Huling, S., Hanson, B. (2018) EMS Services in Rural America: Challenges and Opportunities. National Rural Health Association. Retrieved

From: https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/Advocacy/Policy%20documents/05-11-18-NRHA-Policy-EMS.pdf

¹² McLaughlin, C., Riutta, O., Busko, J., (2020). EMS Workforce: A Call to Action. National Rural Health Association.

Retrieved From: https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/Advocacy/Policy%20documents/NRHA-Policy-Brief-Rural-EMS-Workforce.pdf



embodies a crucial opportunity for rural EMS agencies to augment their service capabilities and directly cater to the specialized training needs inherent in rural settings.

Adaptation to Rural EMS Needs¹³: Given that rural EMS services often rely more heavily on volunteers compared to their urban counterparts—a national survey highlighted that rural agencies are more likely to be staffed by volunteers only, with isolated small rural areas having 53% volunteer staff versus 14% in urban areas—it is crucial that the EMS Education Agenda addresses the unique demands of these areas. In certain rural locales, it is estimated that volunteers manage over 90% of EMS calls, underscoring the importance of supporting these volunteer forces. Addressing the needs of a volunteer workforce in the agenda is crucial. The agenda must also address how rural communities can move beyond a heavy reliance upon volunteers and build a robust, full-time workforce in rural EMS agencies.

The agenda should also work towards establishing standards of care for critical care transport and advanced practice providers involved in EMS. EMTs are an integral part of providing EMS services, but those practicing outside of and above that scope should have a baseline, uniform set of standards of care.

Community Paramedicine Model¹⁴: This innovative model transcends the conventional scope of EMS services by equipping EMS professionals to undertake roles in primary care, public health, and preventive services. Such a broadened scope of operation has been demonstrated to decrease hospital readmission rates, elevate the standards of value-based care, and bridge healthcare service gaps, especially in rural areas where access to comprehensive healthcare resources is often constrained. The practical application of this model can be seen in initiatives like the one in Eagle County, Colorado, where EMS workers receive training on post-surgical guidelines and care, showcasing the model's versatility and direct impact on improving patient care and outcomes in rural communities¹⁵. Another example is Washington County's Mobile Integrated Healthcare Network (MIHN) in Missouri.^{16,17} MIHN is a partnership between a Federally Qualified Health Center and an

¹³Patterson DG, Skillman SM, Fordyce MA. Prehospital emergency medical services personnel in rural areas: results from a survey in nine states. Final Report #149. Seattle, WA: WWAMI Rural Health Research Center, University of Washington, Aug 2015. https://depts.washington.edu/uwrhrc/uploads/RHRC_FR149_Patterson.pdf

¹⁴Rural Health Information Hub. (2023). *Community Paramedicine*. Retrieved From:<https://www.ruralhealthinfo.org/topics/community-paramedicine#:~:text=The%20community%20paramedicine%20model%20can,not%20reimbursable%20as%20emergency%20services>

¹⁵ Eagle County Paramedic Services. (n.d.). Community paramedics. Retrieved from <https://www.eaglecountyparamedics.com/community-paramedics>

¹⁶ Rural Health Information Hub. (2022). Breaking the Cycle: Missouri Community Paramedicine Program Brings Primary Care to High-Risk Patients. Retrieved from <https://www.ruralhealthinfo.org/rural-monitor/missouri-community-paramedicine>

¹⁷ Rural Health Information Hub, 2023. Mobile Integrated Healthcare Network (MIHN) [online]. Rural Health Information Hub. Available at: <https://www.ruralhealthinfo.org/project-examples/1119>



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ambulance district that began as a pilot focused on care and education for diabetic patients and has continued to expand.

By integrating these strategies into the EMS Education Agenda, there is a clear pathway to enhancing the quality of care and patient outcomes in rural and frontier areas. The focus on specialized training, resource acquisition, and the expansion of EMS roles into preventive and primary care fields represents a holistic approach to addressing the unique healthcare challenges faced by these communities.

NRHA again thanks NHTSA for the chance to offer feedback on the EMS Education Agenda. We look forward to working together to ensure rural communities have access to EMS services no matter where they live. For additional information, please contact NRHA's Government Affairs and Policy Director, Alexa McKinley (amckinley@ruralhealth.us).

Sincerely,

Alan Morgan

Chief Executive Officer

National Rural Health Association