

Policy Brief - February 2023

State-Based Recommendations to Support Rural Ambulance Agencies

Principal Author: A. Clinton MacKinney, MD, MS

Prepared by the RUPRI Health Panel: Keith J. Mueller, PhD, Chair; Alva O. Ferdinand, DrPh, JD; Alana D. Knudson, PhD; Jennifer P. Lundblad, PhD, MBA; Timothy D. McBride, PhD; Nancy E. Schoenberg, PhD

State-Based Recommendations

- To ensure access to emergency medical services (EMS) for all rural residents, state legislatures should designate EMS as an essential service and provide a portion of the funding necessary to support the costs of maintaining essential service designations.
- State EMS advocacy organizations should promote, and support with educational grants, professional EMS management certification for rural and low-volume ambulance agency directors.
- State-based EMS regulatory boards, supported by applicable federal agencies and programs, should create (or modify existing) EMS zones to comprehensively include rural areas and accelerate reliable EMS coordination within geographically defined EMS zones.
- State legislatures should preferentially direct ambulance agency funding to cover ambulance agency standby costs and support EMS coordination within geographically defined EMS zones that include all rural parts of the state.

Introduction

More than 23,000 licensed emergency medical services (EMS) agencies operate in the U.S.,¹ and 73 percent of those report serving rural areas.² The majority of ambulance services are small agencies responding to fewer than 650 calls per year.³ Thus, EMS and ambulance agencies provide life-saving care to rural residents every day. Yet in the 2021 policy paper “Characteristics and Challenges of Rural Ambulance Agencies,” the RUPRI Health Panel found that rural ambulance agencies are often challenged by geography that prolongs emergency response and transport time, insufficient payment to cover standby costs, a mixed and changing volunteer and employed workforce, lack of regional planning to coordinate services, and insufficient state and federal policy coordination.⁴ The RUPRI Health Panel recommended federal public policy changes to address these challenges. However, ambulance agencies are funded by multiple sources (e.g., county, state, and federal governments; commercial insurers; grants; charitable contributions; and taxes) and regulated by multiple oversight agencies (e.g., transportation-oriented and health-oriented governmental agencies at both the state and federal levels), suggesting that state EMS and ambulance agency policies should be considered.

This RUPRI Health Panel policy brief focuses on *state* policy opportunities to support rural ambulance agencies, and should be of interest to state EMS directors, state departments of health, state legislators, and county officials.

EMS as an Essential Service

An important state-based policy approach to rural ambulance agency support is the designation of EMS as an *essential service*. An essential service is a service to which every citizen should be guaranteed access regardless of utilization frequency or ability to pay. For example, in the U.S., firefighting and law enforcement are considered essential services. A 2021 review by the Maine Legislature identified only 11 states that have deemed EMS an essential service,^{*5} unchanged from the 11 states identified 2 years earlier.⁶ There appears to have been no expansion of state-based EMS designation as an essential service from 2019 to 2021. Despite the apparent importance of essential service designation to rural ambulance agency continuance, some essential service designations have been enacted by states without a funding source (unfunded mandate) or with funding that relies on local or county support. While it is important that EMS be recognized as an essential service, available 24/7 to all Americans whether an individual actually uses the services or not, EMS (like firefighting and law enforcement) should be funded where support is needed most.

Recommendation #1 – To ensure access to EMS for all rural residents, state legislatures should designate EMS as an essential service and provide a portion of the funding necessary to support the costs of maintaining essential service designations.

Professional Management

A 2016 survey of Minnesota ambulance agencies found that 92.3 percent of agencies serving a population of greater than 15,000 employed a formally trained manager. In contrast, only 37.8 percent of ambulance agencies serving a population less than 2,500 persons employed a formally trained manager. The challenges to ambulance agency success are detailed in the RUPRI Health Panel report cited above and include inadequate funding and workforce shortages that may be ameliorated by a formally trained manager. A formally trained manager, with dedicated time to apply managerial skills to the complexity of ambulance agency operations, can provide the following:

- Manage multiple funding streams (government and commercial insurance reimbursement, cost-recovery, grants, charitable contributions, crowd funding, and membership programs)⁷ and optimize funding from those streams;
- Apply for and manage grants and charitable contributions;
- Understand, arrange, and appropriately observe licensing, training, and other compliance issues;
- Manage personnel issues;
- Develop teams to recruit and retain personnel; and
- Integrate training and services with health care systems.⁸

*States with EMS designation as an essential service in 2021: Tennessee, Louisiana, Nebraska, Hawaii, West Virginia, Nevada, Iowa, Pennsylvania, Virginia, Delaware, California.

Emergency medical services manager training programs, such as programs offered by the National EMS Management Association,[†] Fitch and Associates,[‡] and Creighton University,[§] provide EMS manager certification. However, it is beyond the scope of this paper to assess EMS manager training programs.

Increasing professional management training opportunities, especially to rural and low-volume ambulance agency directors, could help improve ambulance agency funding and personnel management, and address other ambulance agency challenges.

Recommendation #2 – State EMS advocacy organizations should promote, and support with educational grants, professional EMS management certification for rural and low-volume ambulance agency directors.

EMS Zones

In 1973, the federal EMS Systems Act created a grant program to develop regional EMS systems. About 300 EMS regions were established. However, by 1981, regional system development efforts ceased when the program was eliminated.⁹ Despite the failure of the federal legislation 50 years ago, the need for such a program remains. Possibly as a residual effect of the 1973 legislation, 31 states currently maintain geographic EMS regions or districts and 8 maintain EMS Regional Councils. Eleven states plus the District of Columbia do not have EMS regions.¹⁰ However, it appears that most of the state-based EMS regions serve administrative purposes rather than functioning to organize EMS service areas.

An opportunity exists for state regulators to implement a system that periodically requests proposals from EMS agencies or consortiums to serve a particular geographically defined EMS zone. With local input, this process would encourage ambulance agency collaboration, address service area shortages, reduce service duplications, and help ensure access to EMS care for all rural Americans. Contracts would be granted based on predetermined factors, such as ambulance response times, personnel education plans, emergency equipment adequacy, regulatory compliance, and budget. As an example, the Minnesota Emergency Medical Services Board issues a request for proposals to operate EMS systems in each of Minnesota's eight geographic EMS regions.¹¹

Minnesota Emergency Medical Services Board Regional Goals

- Promote systematic, cost-effective delivery of emergency medical care throughout the state.
- Identify common local, regional, and state emergency medical system needs and assist in addressing those needs.
- Provide discretionary grants for emergency medical service projects with potential region-wide significance.
- Provide public education about emergency medical care.
- Promote the exchange of emergency medical care information.
- Ensure the ongoing coordination of regional emergency medical services systems.
- Establish and maintain training standards to ensure consistent quality of emergency medical services throughout the state.

[†] <https://www.nemsma.org/page/CertificationHome>

[‡] <https://fitchassoc.com/ambulance-service-manager-asm-program/>

[§] <https://www.creighton.edu/academics/programs/ems-management>

Expanding the administrative use of currently existing state-based EMS zones to allow health systems, EMS systems, or collaborating ambulance agencies to serve geographically defined populations would improve access to emergency care for all rural residents and reduce EMS service duplications. With a larger population base to serve, an EMS collaborative organization could spread standby costs over a greater number of ambulance runs (thus increasing ambulance agency solvency), afford professionally trained management, centralize personnel training and licensure, apply professional recruitment and retention strategies, and more successfully obtain and manage multiple funding streams. State-based, but federally funded, organizations (e.g., the Flex Program and State Offices of Rural Health) may be positioned to assist policy implementation in support of rural EMS zones.

Recommendation #3 – State-based EMS regulatory boards, supported by applicable federal agencies and programs, should create (or modify existing) EMS zones to comprehensively include rural areas and accelerate reliable EMS coordination within geographically defined EMS zones.

Standby Costs

Standby costs are those costs that do not change based on the number of services provided. Ambulance agency standby costs include equipment depreciation, ambulance garage rent, personnel education, personnel compensation while waiting for calls, liability insurance coverage, and more. A standby cost rate is the ratio of standby costs to total costs. Like the essential services of firefighting and law enforcement, ambulance agency standby cost rates can be significant, especially in low-volume agencies. Most ambulance agency revenue comes from government insurers (e.g., Medicare and Medicaid) and commercial insurer payments primarily based on ambulance runs.¹² The greater the number of runs, the greater an ambulance agency's opportunity to spread standby costs over multiple runs, effectively lowering the unit cost of each run. Rural, low-volume ambulance agencies may find covering standby costs difficult given that they have fewer runs over which to spread those costs. Quantifying and collecting data on ambulance agency cost has been difficult, so national cost comparisons between rural and urban, and between low-volume and high-volume ambulance agencies, are not readily available. In response, the Centers for Medicare & Medicaid Services (CMS) has launched the Medicare Ground Ambulance Data Collection System (GADCS). When complete, the GADCS should provide more detailed ambulance cost data than are currently available. Originally scheduled to start in 2020, the GADCS implementation was delayed by the COVID-19 Public Health Emergency. However, implementation was restarted in 2022.¹³

While all states contribute to ambulance agency revenue through Medicaid payments, other state-based ambulance agency funding varies by state and by program. For example, concurrent with essential service designation, California established the Maddy Emergency Medical Services Fund. Seventeen percent of the fund is distributed to counties to support EMS. Hawaii established the Emergency Medical Service Special Fund. Three and half million dollars of the fund is distributed to counties operating a county emergency medical services system.¹⁴

State-based support for ambulance agency standby costs should be administered with three priorities:

1. State funding should be preferentially directed to systems or EMS collaborations that successfully bid to serve an EMS zone. Other ambulance agencies would not be precluded from offering services in that zone but would not receive monetary support for standby costs. This strategy would encourage collaboration among ambulance agencies, especially those with overlapping service areas.
2. State-based grants should prioritize those ambulance agencies with proportionally high standby costs. The grants could be monetary and/or states could provide in-kind services necessary to operate an ambulance agency, such as personnel training and access to health and other insurances.
3. States should include rural add-on payments in their Medicaid ambulance fee schedule. These add-on payments should be similar to the Medicare temporary add-on payments that increase ambulance payment for transports that originate in rural areas or super rural areas (within the lowest 25th percentile of all rural areas arrayed by population density).¹⁵

Recommendation #4 – State legislatures should preferentially direct ambulance agency funding (state-based grants, in-kind support, and Medicaid rural add-on payments) to cover ambulance agency standby costs and support EMS coordination within geographically-defined EMS zones that include all rural parts of the state.

Conclusion

Rural ambulance agencies are disadvantaged by low run volumes and consequently high standby cost rates. Inadequate rural ambulance agency funding results in a cascade of challenges, including workforce shortages, inadequate personnel training, unsuccessful grant applications, and more. Addressing rural ambulance agency challenges is complicated by multiple ambulance funding streams that include federal and state payments and grants. The federal government has a vital role to play supporting rural ambulance agencies. Federal policy recommendations are outlined in a previous RUPRI Health Panel paper.⁴ States should also play a vital role supporting rural ambulance agencies by designating EMS as an essential service, supporting professional EMS management, and establishing and funding EMS zones that would increase EMS coordination, reduce service duplication, and improve access to EMS for all rural Americans.

¹ National Association of State EMS Officials. 2020 National Emergency Medical Services Assessment. May 2020. Accessed November 21, 2020. https://nasemso.org/wp-content/uploads/2020-National-EMS-Assessment_Reduced-File-Size.pdf

² Federal Interagency Committee on Emergency Medical Services. 2011 National EMS Assessment. U.S. Department of Transportation, National Highway Traffic Safety Administration, DOT HS 811 723, Washington, DC, 2012.

³ Kromer J, Elkins K. Healthcare Resilience Task Force: EMS/911. (n.d.) U.S. Departments of Health and Human Services and Homeland Security. https://www.ems.gov/assets/COVID-19_EMS_911_Briefing.pdf.

⁴ MacKinney, AC et al. Characteristics and Challenges of Rural Ambulance Agencies. (2020) RUPRI Health Panel Policy Paper. January 2021. Accessed January 9, 2023. <https://rupri.org/2021/02/04/characteristics-challenges-rural-ambulance-agencies/>.

⁵ States that Designate EMS as an Essential Service: Structure and Funding. Maine Legislature review. Prepared September 29, 2022. Accessed January 9, 2023. <https://legislature.maine.gov/doc/9057>

-
- ⁶ Edwards, E. (2019) What if you call 911 and no one comes? Inside the collapse of America's emergency medical services. NBC News. Accessed March 4, 2020. <https://www.nbcnews.com/health/health-care/there-s-shortage-volunteer-ems-workers-ambulances-rural-america-n1068556>
- ⁷ Avsec, R. Sources of EMS Funding. Gov1. October 17, 2016. Accessed January 11, 2023. <https://www.gov1.com/public-safety/articles/6-sources-of-ems-funding-4T6ORnygO2xXMNAa/>.
- ⁸ Ann Jensen. Quoted in Rural EMS: Taking the next step. Center for Rural Policy and Development. April 2022. Accessed January 11, 2023. <https://www.ruralmn.org/rural-ems-taking-the-next-step/>.
- ⁹ Institute of Medicine. (2007). Emergency Medical Services: At the Crossroads. Washington, DC: The National Academies Press. Accessed November 20, 2020. <https://doi.org/10.17226/11629>
- ¹⁰ RUPRI Center research of state EMS agency websites. January 2023.
- ¹¹ Emergency Medical Services Regulatory Board. Regional EMS System – Grant Request for Proposal. Accessed January 9, 2023. <https://mn.gov/emsrp/grantprojects/regional-programs/request-for-proposals.jsp>
- ¹² Office of the Legislative Auditor. State of Minnesota. Emergency Ambulance Services – 2022 Evaluation Report. Accessed January 11, 2023. <https://www.auditor.leg.state.mn.us/ped/pedrep/ambulance.pdf>.
- ¹³ Centers for Medicare & Medicaid Services. Medicare Ground Ambulance Data Collection System. Accessed January 11, 2023. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AmbulanceFeeSchedule/Ground-Ambulance-Services-Data-Collection-System>.
- ¹⁴ States that Designate EMS as an Essential Service: Structure and Funding. Maine Legislature review. Accessed January 9, 2023. <https://legislature.maine.gov/doc/9057>
- ¹⁵ Centers for Medicare & Medicaid Services. Ambulance Agency Public Use Files. Accessed February 1, 2023. <https://www.cms.gov/medicare/medicare-fee-for-service-payment/ambulancefeeschedule/afspuf>.