AMA Journal of Ethics®
July 2025, Volume 27, Number 7: E518-524

POLICY FORUM: PEER-REVIEWED ARTICLE

How Should Rural EMS Funding Streams Be Improved?

James Small, MJA, CPM

Abstract

This article considers how to reliably provide emergency medical services (EMS). EMS responses are critical functions of local governments, yet, in rural areas, many are staffed by licensed volunteers. As requests for emergency health services increase and the workforce decreases, transitioning to a paid workforce is critical to maintaining response capacity. This article discusses the need and mechanisms for more robustly funding rural EMS systems.

Funding, Not Fundraisers

A poster at the gas station announced a fun community event: The Annual Public Works Fundraiser was back again with games, food, and music. The community's volunteer truck drivers spent the weekend putting on an event attended by almost everyone. They were excited to count the money and proudly announced how many roads would be repaired over the next year and that they could finally replace a 40-year-old dump truck.

But, in the United States, this isn't how communities fund most government functions, and public works fundraisers don't pay for roads and dump trucks. A lone exception is emergency medical services (EMS), as nearly every rural community uses volunteer staff[1] and fundraisers to provide this critical service. Volunteers, who provide emergency response for free, donate additional time to raise funds to purchase the equipment they need to provide that lifesaving response. This funding model, started in the 1960s,[2] has produced a crisis of collapsing EMS agencies today, as response times have lengthened,[3] and sometimes no ambulance arrives at all.[4] The volunteer EMS model has failed communities around the country, and local leaders are grappling with how to provide this essential service.

Critical Community Service

People access EMS by calling 9-1-1; the calls are answered in government-operated dispatch centers. Ideally, a 9-1-1 call leads to an ambulance being immediately sent into the community to provide emergency health care to someone who is sick or injured. Each ambulance is staffed with at least 2 people who have specialized training and state-level licensing as EMS responders, with scopes of practice ranging from basic life support to advanced care. These responders are trained to provide emergency care on

scene and during transport, which prepares patients for emergency department care, thereby improving health outcomes.

Delivery of EMS in the United States is a function of local municipal government and part of an emergency-response framework that includes law enforcement and firefighting. Municipal governments usually designate an EMS agency to be responsible for providing critical health services within its boundaries, either directly or by contracting with other organizations. Many EMS systems were formed in the 1960s and 1970s, with licensed volunteers providing labor and grant funding paying for start-up equipment. In 1973, Congress passed the Emergency Medical Services Systems Act, which provides funding for communities to purchase ambulances, develop EMS systems, and standardize emergency medical technician programs.[5] Grant and training programs like this led to the formation of EMS systems in communities across the nation.

As EMS agencies appeared and nationwide use of 9-1-1 for emergencies eased access to EMS, communities recognized many benefits. EMS improved health outcomes for citizens,[6] provided an additional point of access to social and community services, assisted with public health emergencies such as the COVID-19 pandemic, and became part of the emergency preparedness framework. Although these improvements increased demand for services without adding funding, the volunteer workforce allowed leaders to overlook the rising public demand and scope of services. A simple service with a wealth of volunteers functioned well in a way that more advanced services with falling volunteerism could not.

Finding Funding

Local governments face funding challenges when suddenly transitioning EMS from a nearly free volunteer service to a fully funded, paid staffing model, especially when a common public misconception is that taxes are already paying for EMS. Some communities are being asked to increase support from almost no financial contribution to allocating hundreds of thousands (or even millions) of dollars to pay for staffing.[7] EMS is also facing inflationary pressures, making this transition even harder. According to US Bureau of Labor statistics, from 2019 to 2022, the consumer price index increased by 15.7%.[8] A 2023 National Association of Emergency Medical Technicians national survey found similar increases in wages, with 14% of agencies reporting wage increases exceeding 25% during this time period.[3]

To meet these fiscal realities, communities use a combination of sources to fund EMS. First, EMS agencies bill patients (and health insurance providers) for services provided. Billing includes the fee for services plus a mileage rate to the hospital. According to US Census Bureau 2022 data, over 92% of the US population is covered by health insurance, with around 36% being covered by Medicare or Medicaid.[9] It is typical for an EMS agency to have more than 50% of its patients covered by Medicare or Medicaid.[10] However, there is a large disparity between the billed amount and the reimbursement Medicare and Medicaid provides. A 2022 report by Fair Health found that the average billed cost of basic life support ambulance services in 2020 was $940 while the average Medicare reimbursement for basic life support ambulance services was $390.[11] This reduced reimbursement makes rural EMS impossible to fund solely based on billing. As most EMS patients are covered by Medicare and Medicaid, there is a need for continued advocacy at the state and federal level to increase reimbursement rates to levels that recognize the cost of providing services.

Grants are an additional way to provide some revenue for services. The 1973 federal grant program that launched EMS expired in 1981,[12] and Congress has not provided any similar national programs to cover ongoing costs or personnel. While grants are sometimes available from state and local entities, there is no consistent and easy way to access EMS grant funding. Grants, when available, are best used to purchase a piece of equipment but do not provide sustainable recurring funding sources for operating costs. Development of state and federal grant programs to fund high-dollar capital items, such as ambulances, would allow local governments to focus their funds on daily operational costs.

A third source of support for rural EMS is volunteerism and local fundraising. According to SafeTechSolutions, as many as 80% of ambulances are staffed by volunteers, and these ambulances are predominantly in rural communities.[13] Although approximately 97% of the land in the United States is rural, only 21% of the population lived in rural communities in 2000.[12] That's a lot of ground to cover with a much smaller, largely volunteer workforce. Staffing one ambulance requires at least 17 520 hours annually (24 hours daily x 365 days x 2 people). In many communities, EMS systems were formed near the peak of volunteerism in the 1960s and 1970s, after which the EMS volunteer workforce declined for decades before reaching the current crisis point.[2] The impact of this major shift has been noticed by the media; a multitude of articles have been published on EMS systems in crisis across the United States.[14,15,16] It is rarely considered that when someone volunteers with an EMS agency they are personally subsidizing the cost of providing that service. Volunteerism shifts the cost of staffing from the community to the volunteer and their family, who are a key linchpin in the service existing at all. Continued dependency on volunteers to staff ambulances ignores a decades-long nationwide reduction in volunteerism.[17] This decline impacts not just EMS but many other community organizations as well.[18]

Finally, when all other funding sources are exhausted, local government is tasked with imposing taxes to fund the remaining cost of EMS. EMS competes with all other governmental services for scarce dollars. The Fair Health report found that the average allowed amount for ambulance service increased by 56% (from $486 to $758) for advanced life support and by 40% (from $373 to $522) for basic life support from 2017 to 2020.[11] These price increases reflect the increased cost of providing service while cost recovery on most of these bills is limited. Rapidly increasing service costs create a larger funding gap that must be filled by local tax dollars. Some municipal governments are mitigating the increase in costs by creating regionalized EMS with neighboring communities. In these systems, multiple local governments collaborate, sharing personnel and equipment to improve cost efficiencies and reduce the financial impact to each community. There are a variety of political challenges that come when local governments, which have been historically independent, begin to work together. These can range from disagreements on cost sharing to community disapproval of dissolving agencies that have served for decades.[19]

Rural EMS Crises

Decline in volunteerism has made reliable ambulance staffing nearly impossible. The rising cost of EMS has made it challenging for local municipalities to afford a paid service in a piecemeal, township-by-township manner. Meanwhile the system is crumbling around us.

Maine and Wisconsin are instructive. The Maine Rural Health Research Center released a report in 2023 that found that 4.3 million Americans live in ambulance deserts, which are defined as locations that are over 25 minutes away from an ambulance station.[20] Moreover, 4 of 5 rural counties have at least one ambulance desert.[20] A 2023 Wisconsin Office of Rural Health study on ambulance reliability reported that 62% of Wisconsin agencies serve rural communities and that 55% of these rural agencies have 6 or fewer people providing 80% or more of the staffing.[4] Moreover, 41% of Wisconsin's EMS agencies were not available continuously, ie, 24/7, every day of the year.[4] Of services relying on volunteer staffing, 63% failed to provide continuous service, and 15% of services with paid staff met the definition of unreliability.[4] Finally, 10 agencies reported that, in the communities they served in the previous year, an ambulance never reached a call for service because there was no staffed ambulance in the community and neighboring communities were unable to assist.[4]

When considering the Maine and Wisconsin studies together, it is likely that the issue of providing reliable rural EMS may be much larger than it first appears. The Maine study considered the location of agencies, and Wisconsin considered whether agencies are functioning. Unreliable staffing models appear to be leading to additional intermittent ambulance deserts where EMS is sometimes completely unavailable.

Sustainable Rural EMS Responsiveness

EMS is a government service used by ill and injured people when they are at their most vulnerable. Local, state, and federal governments must prioritize their roles in providing reliable EMS and commit to developing sufficient recurring funding sources that can be used to produce a sustainable workforce. Cost efficiencies through regionalization must be considered at the local level.

While continuing to use free labor is a seductive option for local governments balancing budgets, research indicates that the use of volunteer EMS responders increases the likelihood of unreliable service.[4] Elected leaders need to have the courage to consider alternative delivery methods to ensure reliable service within their limited financial means. To do so means confronting apprehension about changing from longtime EMS models and possibly cooperating with nearby communities to share workforce and financial resources. It is likely that neighboring communities are trying to solve similar challenges. Solutions like bringing together 2 struggling volunteer ambulances and forming 1 ambulance with paid staff servicing both communities can consolidate workforces and reduce the financial impact on each community of hiring its own paid staff. While this regionalization may potentially create ambulance deserts through the increased size of response areas, the improved reliability of a paid ambulance staff as compared to that of a volunteer service improves the likelihood of an ambulance arriving at a call. It should also be considered that the response times may be shorter due to reduced reliance on mutual aid.

Reliable EMS requires communities to make difficult decisions while allocating sufficient resources to EMS. Every community faces similar challenges but needs to find specific solutions that work within its means. The collapse of rural EMS is solvable but requires that communities no longer ignore the crisis of a failed response system and encourage elected leaders at the federal, state, and local levels to make courageous decisions by prioritizing EMS.

References

1. Colyer J, Anzaldua A, Blancato R, et al. Access to emergency medical services in rural communities: policy brief and recommendations to the secretary. National Advisory Committee on Rural Health and Human Services; 2022. Accessed February 21, 2025. https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/rural/access-to-ems-rural-communities.pdf
2. Lukens J. Recruitment and retention: overcoming the rural EMS dilemma. *The Rural Monitor*. February 7, 2018. Accessed January 2, 2025. https://www.ruralhealthinfo.org/rural-monitor/ems-recruitment-retention
3. National Association of Emergency Medical Technicians. 2023 national survey: EMS economic and operational models executive summary. National Association of Emergency Medical Technicians; 2023. Accessed January 2, 2025. https://www.naemt.org/docs/default-source/ems-data/ems-economic-and-operational-models-survey-02-20-2023-final.pdf?sfvrsn=1fb9f493_2
4. Wisconsin Office of Rural Health. The reliability of Wisconsin's 911 ambulance response. Wisconsin Office of Rural Health; 2023. Accessed January 2, 2025. https://worh.org/wp-content/uploads/2023/03/EMS-Reliability-Report_March2023.pdf
5. Harvey JC. The Emergency Medical Service Systems Act of 1973. *JAMA.* 1974;230(8):1139-1140.
6. National Highway Traffic Safety Administration. EMS makes a difference: improved clinical outcomes and downstream healthcare savings. A position statement of the National EMS Advisory Council. *Ann Emerg Med*. 2011;57(2):169.
7. Jonk Y, Wingrove G, Nudell N, McGinnis K. A consensus panel approach to estimating the start-up and annual service costs for rural ambulance agencies. Maine Rural Health Research Center; 2023. Accessed January 2, 2025. https://digitalcommons.usm.maine.edu/cgi/viewcontent.cgi?article=1016&context=ems
8. Meyers S, Paulin GD, Thiel K. Consumer expenditures in 2022. US Bureau of Labor Statistics. December 2023. Accessed February 21, 2025. https://www.bls.gov/opub/reports/consumer-expenditures/2022/
9. Keisler-Starkey K, Bunch LN, Lindstrom RA. Health insurance coverage in the United States: 2022. US Census Bureau; 2023. Accessed January 2, 2025. https://www.census.gov/content/dam/Census/library/publications/2023/demo/p60-281.pdf
10. Finance Committee. EMS funding and reimbursement. National EMS Advisory Council; 2016. Accessed February 27, 2025. https://www.ems.gov/assets/NEMSAC_Final_Advisory_EMS_System_Funding_Reimbursement.pdf
11. FAIR Health. Ground ambulance services in the United States: a study of private healthcare claims. FAIR Health; 2022. Accessed February 27, 2025. https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/Ground%20Ambulance%20Services%20in%20the%20United%20States%20-%20A%20FAIR%20Health%20White%20Paper.pdf
12. Warden GL, Altman SH, Asplin BR, et al; Institute of Medicine. History and current state of EMS. In: *Emergency Medical Services at the Crossroads.* National Academies Press; 2007:31-72.
13. Reinert A. The state of our nation's rural EMS system. SafeTech Solutions; 2015. Accessed January 2, 2025. https://ambulance.org/wp-

content/uploads/2015/11/AAA-2015-State-of-our-Nations-Rural-EMS-Systems.pdf
14. Kafanov L. Rural ambulance crews are running out of money and volunteers. In some places, the fallout could be nobody responding to a 911 call. *CNN.* May 22, 2021. Accessed February 27, 2025. https://www.cnn.com/2021/05/22/us/wyoming-pandemic-ems-shortage/index.html
15. Watkins A. Rural ambulance crews have run out of money and volunteers. *New York Times*. April 25, 2021. Updated June 23, 2023. Accessed June 6, 2025. https://www.nytimes.com/2021/04/25/us/rural-ambulance-coronavirus.html
16. Rural ambulances on the brink of collapse as funds plummet. *Scripps News.* May 23, 2021. Accessed February 27, 2025. https://www.scrippsnews.com/politics/health-care/1-in-3-rural-emergency-services-in-danger-of-closing
17. McElwee CF. An overlooked crisis. *City Journal.* October 23, 2019. Accessed February 27, 2025. https://www.city-journal.org/article/an-overlooked-crisis
18. Lenkowsky L. Americans are volunteering less. What can nonprofits do to bring them back? *The Chronicle of Philanthropy*. February 14, 2023. Accessed February 21, 2025. https://www.philanthropy.com/article/americans-are-volunteering-less-what-can-nonprofits-do-to-bring-them-back
19. Cahill J. Mergers, volunteerism, and cost considerations. *Domestic Preparedness*. February 18, 2009. Accessed January 2, 2025. https://domesticpreparedness.com/articles/mergers-volunteerism-and-cost-considerations
20. Jonk Y, Milkowski C, Croll Z, Pearson K. *Ambulance Deserts: Geographic Disparities in the Provision of Ambulance Services*. Maine Rural Health Research Center; 2023. Accessed March 25, 2025. https://digitalcommons.usm.maine.edu/cgi/viewcontent.cgi?article=1013&context=ems

James Small, MJA, CPM is the rural emergency medical services (EMS) outreach manager at the Wisconsin Office of Rural Health at the University of Wisconsin-Madison School of Medicine and Public Health. Prior to his current role, James spent over 30 years as an emergency responder and 11 years as a municipal public safety administrator, serving as fire chief and police chief. He has also served on the Wisconsin Legislative Council Study Committee on Fire and EMS Volunteers and under gubernatorial appointment to the Wisconsin EMS Board and the Wisconsin Law Enforcement Standards Board.

Citation
AMA J Ethics. 2025;27(7):E518-524.

DOI
10.1001/amajethics.2025.518.

Conflict of Interest Disclosure
Contributor disclosed no conflicts of interest relevant to the content.

The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

ISSN 2376-6980