I. Introduction

The ideal emergency medical services (EMS) system involves dispatching the right EMS provider from the right location to provide timely and, if necessary, life-saving interventions followed by transport to an appropriate hospital. The reality for many rural patients is vastly different. Although many factors contribute to challenges in delivering optimal rural EMS care, issues related to the workforce are some of the most pervasive. Understanding the nature, function, and role of rural EMS and the individuals who provide the care is necessary to drive legislative and regulatory priorities.

Emergency medical systems look different in every community and vary by: 1) the kind of organization providing EMS, 2) how the organization is funded, 3) the level of training and licensure of staff, 4) whether staff are paid or volunteer, 5) staff access to and utilization of medical consultation, 6) availability of mutual aid from surrounding agencies, and 7) the distance to a hospital or trauma center. These factors result in EMS programs that play very different roles in their communities’ overall access to emergency and non-emergency care. For almost all rural communities, the local EMS agency is the geographically closest and most personal access to health care that the residents have.

In looking at these variables in rural and frontier EMS systems, a few notable trends emerge. Rural EMS systems are more likely to be staffed by volunteers and staffed by emergency medical technicians (EMTs), and less likely to be publicly funded than their
urban counterparts. Rural communities also face longer transport distances and less access to advanced trauma care. This is only exacerbated by the rural hospital closure crisis, where, as of August 2020, over 100 rural hospitals have closed since 2010. As rural hospitals close, EMS services become even more important in ensuring overall access to healthcare in rural and frontier communities.

EMS agencies also exist along a spectrum from purely public safety emergency response to full healthcare system integration. Public safety response assures citizens have access to life-saving medical interventions where minutes truly do count such as controlling severe bleeding, supporting breathing for a patient who cannot breathe independently, or defibrillating a patient in cardiac arrest. Most of these skills can be performed by first responders or EMTs, can be provided at a relatively low cost, and can be effectively implemented in almost every rural community. Fully integrated EMS agencies, while providing public safety emergency care, also provide an extensive array of more advanced medical interventions in emergencies as well as non-emergency transport and medical care services and are typically staffed by advanced EMTs and paramedics. These agencies are active participants in patients’ medical homes and care teams. While all citizens benefit from fast, local access to public safety emergency response, rural communities with limited access to other health services benefit from local EMS agencies that are fully integrated into regional healthcare systems.

II. Current Barriers and Opportunities for the Rural EMS Workforce

The rural EMS workforce is facing an increasing number of barriers including access to training, reimbursement, recruitment and retention, and developments in the EMS scope of practice. First, EMS professionals, including volunteers, often pay out-of-pocket for classes that require 40 hours for first responder, between 120-150 hours for EMT, and 1000 hours for paramedic programs just to achieve initial certification. Costs continue for continuing education credits and recertification. For rural EMS in particular, non-degree, non-university affiliated training programs are typically cheaper and more ubiquitous. Privately owned and operated EMS systems may be able to mitigate training and certification barriers, while local or state-based public systems are subject to the same financial pressures as other government services. Without ensuring access to training and financial support, the pool of qualified EMS professionals will continue to shrink in rural areas.

EMS supplies a high-value service with intermittent spikes in demand, but requires a consistent budget to maintain. There are many different EMS funding models, ranging from fully reimbursement-dependent to fully funded by municipalities or other public entities. If local support declines or a hospital providing oversight closes, the effects on EMS may not manifest until patient care is compromised due to increased EMS response times, decreased levels of care or increased distance to the nearest facility. For agencies dependent on reimbursement, uncompensated care due to non-transport or non-payment is a significant challenge.
Recent data shows increasing rates of burnout and a higher average age of EMS providers in rural agencies. Overall rates of volunteering are decreasing across the United States. The pool of EMS professionals and volunteers is shrinking, not just because of retirement and burnout, but also the cost of training, implications of responding while employed (for an average of 2 hours per call), and poor reimbursement leading to inability to keep facilities and equipment up to date.

Given the variety in need for and availability of care in communities across the United States, communities need guidance to determine the role and scope of local EMS. The Informed Community Self Determination (ICSD) process has been recommended by the Joint Committee on Rural Emergency Care as a way to identify the level of care and availability necessary to ensure patient safety and cost effectiveness. For communities without local healthcare access, a greater degree of EMS scope of practice may be necessary. A significant opportunity exists for rural hospitals to solidify relationships with local EMS agencies by providing education, especially as the scope of EMS grows to include chronic disease monitoring. This may have implications for reimbursement and savings under population health cost parameters. Community paramedicine and enhanced scopes of practice engage untapped EMS resources to provide patient care. In the context of health systems, community paramedics can also be incorporated into a primary care network and provide a new source of needed revenue. Future opportunities for rural EMS include facilitating transition of military personnel to civilian practice, financial relief for training activities, and facilitation of ICSD. Policymakers, healthcare providers, and community members must tactically confront these issues while still meeting the needs of each community to safeguard the future of rural EMS.

III. Policy Recommendations

Given these challenges and opportunities, implementing the following recommendations would strengthen and expand rural residents’ access to emergency medical care through an expanded EMS workforce and expanded role for EMS.

a. Encourage federal and state legislators to support alternate funding models for EMS and emergency care delivery in rural areas such that payments are not contingent on transporting a patient. Such models include the Minnesota Medicaid Waiver program for Community Alternate Care delivery waiver and block grants for geographically targeted integrated emergency services delivery.

b. Support the use of rural economic impact models that account for losses in state revenue when healthcare services are lost in rural areas. These models can be used to allocate state funds to support the rural EMS workforce and emergency care access based on the impact of the loss of emergency services on agriculture, manufacturing and tourism receipts instead of population-based allocations.
c. Continue to provide funding through the SIREN Act and other mechanisms to support education, particularly asynchronous and distance learning, for rural EMS licensure and continuing education programs.

d. Provide guidance to private insurers on paying for treat-and-discharge EMS care and community paramedicine.

e. Advise CMS to incentivize Accountable Care Organizations (ACOs) to partner with rural EMS agencies to deliver healthcare system integrated care.

f. Encourage ACOs and healthcare systems to provide community benefit grants to support the development of local community paramedicine and EMS system based expanded care delivery models.

g. Recommend that procedures performed by EMS providers in conjunction with and as a result of a telehealth visit by a Qualified Healthcare practitioner be allowed to be billed using "incident to" billing practices even if the procedures occur simultaneously with the telehealth visit.

h. Urge the Center for Medicare and Medicaid Innovation (CMMI) to support demonstration projects around expanded scope of service and practice EMS beyond the Emergency Triage, Treatment, and Transport (ET3) project.

i. Facilitate the development of a federal interdepartmental task force between the Departments of Defense, Education, and Labor (and in particular the Veterans’ Employment and Training Services [VETS]) to create a mechanism for formal recognition of military training in medical care that would transfer those educational experiences into civilian educational and licensure opportunities. This has the added value of allowing US taxpayers’ investment in training of members of the military to return benefits in the civilian sector.
   - Support national educational associations in developing guidance for academic institutions for accepting these credits.
   - Provide guidance for state licensing boards to accept these academic accomplishments towards licensure.

j. Incentivize states and healthcare systems to use the Informed Community Self Determination process to drive the development of rural emergency care.

k. Support EMS professional associations and academic institutions to research the causes of professional burnout in EMS and to implement solutions to the crisis.
Reference List


