Moving from “Loaded Miles” to Value-Based Models: Flex Program Support for Rural Emergency Medical Services (EMS)
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Preface

The 2019 Rural Emergency Care Summit convened by The National Rural Health Resource Center (The Center), with support from the Health Resources and Services Administration (HRSA), Federal Office of Rural Health Policy (FORHP), was held March 13-14, 2019 in Tampa, Florida to assist state Medicare Rural Hospital Flexibility (Flex) Programs and State Offices of Rural Health (SORH) by offering timely information that will aide them as they support emergency medical services (EMS) in their states in the transition to population health and value. The purpose of the meeting was to address the need for rural EMS agencies and providers to move into new roles in an evolving health care system. With the transition from payment based solely on volume (fee for service) to value (efficiency, outcomes, and satisfaction) health care providers are recognized for higher quality outcomes and population health. Rural health care providers are developing population health strategies that involve building partnerships and systems to ensure that they meet the goals set by the Centers for Medicare and Medicaid Services (CMS) of better care, healthier people and communities, and smarter spending. Health care transformation provides opportunities for rural EMS to be more fully integrated in the health care system and participate in potential new payment and collaborative care models. This report is designed to help rural EMS leaders and other health care providers during the transition, providing ideas for collaboration and potential strategies to better prepare and integrate into the new value-based environment.

The information presented in this document is intended to provide the reader with general guidance. The materials do not constitute and should not be treated as professional advice regarding the use of any technique or the consequences associated with any technique. Every effort has been made to assure the accuracy of these materials. The Center and the authors do not assume responsibility for any individual's reliance upon the written or oral information provided in this guide. Readers and users should independently verify all statements made before applying them to a situation and should independently determine the correctness of any planning technique before recommending the technique to a client or implementing it on a client's behalf.
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Introduction
The purpose of this EMS summit was to address the need for rural ambulance agencies and providers to move into new roles in the rapidly evolving American health care system. The Center will build upon the knowledge gained from summit participants to produce a report to support rural EMS providers as well as Flex Programs in the development of EMS initiatives in the Flex Program.

The objectives of the Summit were to identify:

- The opportunities, challenges, and strategies for collaborative engagement between rural ambulance providers and hospitals.
- The resources, both existing and potential needed to promote such engagement.
- How Flex Programs can support related activities.

To prepare for Summit, participants were asked to read the following information:

- **2019 Rural and Frontier EMS Three Year National Tactical Plan**: This draft document builds on the work of the original 2004 *Rural and Frontier EMS Agenda for the Future* (National Rural Health Association, 2004) and proposes a three-year tactical approach to implementing some of the most important, feasible, remaining recommendations. Understanding the changes in the national health care environment, and specific trends and issues in the past few years, has shaped consideration of the recommendations and some recrafting of them. Some of these include the volume to value reimbursement emphasis, rural hospital closures, the role of communities, and the way EMS will be treated under evolving health care financing legislation. This document is currently in draft form with final revisions being made prior to public release.
- **EMS 3.0 Transformation**: Spearheaded by the National Association of Emergency Medical Technicians (NAEMT), “EMS 3.0 is an EMS industry initiative to help EMS agencies and practitioners understand the changes that are needed in EMS to fully support the transformation of our nation’s health care system, and to provide tools and resources to
help them implement these changes.” (National Association of Emergency Medical Technicians, n.d.)

Over two half-days the participants discussed both opportunities and challenges for rural EMS, existing resources, as well as potential resources that would need to be developed. In addition, participants discussed what Flex programs might support to move the needle on progress through projects and models.

This report incorporates the summit proceedings, as well as a list of key strategies for rural ambulance services and hospital leaders to deploy when engaging collaboratively in transition to value-based payment and care delivery models. In addition to the 45 state Flex Programs, the report will be disseminated to state hospital associations, state and national ambulance/EMS associations, SORHs, FORHP funded health networks, rural hospitals, medical schools and rural accountable care organizations (ACOs). It will also be used for presentations at state and national rural hospital and EMS events, webinar trainings and to support other online educational opportunities for rural providers.

Background

EMS 1.0

In 1965, President Lyndon B. Johnson received a report titled Accidental Death and Disability: The Neglected Disease of Modern Society (National Academy of Sciences, 1966). The report came to be known as The White Paper and detailed that accidental death was the leading cause of death in the first half of a person’s life. Further, if a person were seriously injured their chance of survival would be better if that individual were in a war zone than on the streets of America. The Journal of Emergency Medical Services (JEMS) highlighted that the report also suggested standardization of training for emergency personnel and created the first EMS curriculum.

This first era in EMS has been described as, “You call, we haul, that’s all”. The first ambulance services in rural areas were set up to do little more than basic care and payment was based on how many miles a person was transported, not on the care that was given. Even with the onset of modern EMS with the Emergency Medical Services Systems Act of 1973, which
ushered in a more standardized basis of care and training, this payment methodology would be the basis of EMS payment for decades. While there have been many advances in the delivery of EMS, more modern equipment and life saving techniques, for almost 50 years the delivery of rural EMS has looked much the same.

EMS 2.0
In 2004, the Rural and Frontier Emergency Medical Services Agenda for the Future (National Rural Health Association, 2004) laid out a path forward for rural EMS and built upon the 1996 EMS Agenda for the Future (National Highway Traffic Safety Administration, 1996). Sponsored by NRHA and authored by Kevin McGinnis, the report focused on 14 different attributes:

- Integration of Health Services
- EMS Research
- Legislation and Regulation
- System Finance
- Human Resources
- Medical Oversight
- Education Systems
- Public Education
- Prevention
- Public Access
- Communication Systems
- Clinical Care and Transportation Decisions/Resources
- Information Systems
- Evaluation

The report dissects each of the attributes for the current state (where we are), future state (where we want to be), and outlines methods to get to the desired state (how to get there). It defined and reported on promising models and concepts that could move rural EMS forward such as community paramedicine and the Informed Community Self-Determination (ICSD) process and others. The noted “promising models” have seen varying degrees of success in subsequent years.

In recent years, interest in rural EMS has gained momentum. Funding opportunities such as the Flex Program, funded by FORHP and others, have allowed models to be piloted and implemented. Community Paramedicine
(CP), a promising innovation in health care, allows EMS personnel to keep their skills fresh, while filling gaps in prevention and primary care in rural communities. However, among Summit participants, it was noted that some EMS personnel might not be satisfied with delivering preventative care when their training has been largely in emergency care. According to the Mobile Integrated Health and Community Paramedicine 2nd National Survey (National Association of Emergency Medical Technicians, 2018) there are now over 200 CP or mobile integrated health (MIH) programs in the country and 93% of states have at least one program. But many of the programs still lack funding or are losing money due to the absence of beneficial reimbursement models. With that said, there are examples of CP programs, often in value-based models, that do not bill for services but find cost-savings by reducing preventable hospital readmissions and avoidable emergency department (ED) visits.

Although progress in rural EMS has been made in the way of innovative programs and processes, struggles remain. Ongoing issues include:

- Rural ambulance services continue to have recruitment and retention issues related to a workforce that remains largely volunteer.
- EMS is not deemed an essential service such as police, fire, and even garbage collection in many areas, despite the community expectation of an ambulance response to a 911 call.
- Ambulance agencies struggle to provide services on limited funds.
- EMS has worked hard to take its place as a legitimate health care provider and not as only an emergent, episodic transport at the legislative and regulatory levels.

**EMS Transformation**

Many of the patients that ambulance agencies currently serve are not in need of emergent care. Combined with the health care system shifting to a value-based model, there is an opportunity for ambulance agencies to help address a gap in primary and preventative care. EMS lead by its national organizations and associations, is finding ways to transform itself to fill health care gaps and provide its services in new ways. Once such effort includes the EMS 3.0 (National Association of Emergency Medical Technicians, n.d.) initiative. Described earlier as an “EMS industry initiative”, aims to educate about a next level transformation for EMS. One key component to achieving an EMS system that is fully integrated and
participating in the health care system is the alignment of its reimbursement methodology to better reimburse the care being delivered.

The Center for Medicare and Medicaid Innovation (the Innovation Center) is poised to launch a demonstration of just that kind of payment alignment called Emergency Triage, Treat and Transport Model (ET3) (Center for Medicare and Medicaid Innovation). ET3 will be a voluntary, five-year payment pilot to allow emergency responders with proper triage enabled by telemedicine to better identify a patient’s transport needs and destination alternatives more appropriate than the ED to meet his or her need (e.g. urgent care or primary care). In some cases, patients may be treated and left in place, but the patient will always have the choice of being transported to the ED if that is their preference. CMMI released a Request for Applications (RFA) in August 2019 for Medicare-enrolled ambulance suppliers and providers that wish to participate in the pilot of ET3. In fall of 2019, CMMI also intends to release a Notice of Funding Opportunity (NOFO) for local governments, its designees, or other entities that operate or have authority over one or more 911 dispatches. The funding opportunity will promote successful model implementation by establishing a medical triage line for low-acuity calls received via their 911 dispatch system.

In addition, the 2019 Rural and Frontier EMS Three Year National Tactical Plan, a project supported by FORHP and coordinated by the National Organization of State Offices of Rural Health (NOSORH), is nearing completion. Currently in draft form, the Tactical Plan builds on the work of the original 2004 Rural and Frontier EMS Agenda for the Future (National Rural Health Association, 2004) and proposes a three-year tactical approach to implementing some of the recommendations from that 2004 report. It proposes five immediate priority areas, as well as seven future priority areas.

**Summit Participants**

Summit participants included rural EMS providers, leaders of state EMS offices, rural hospital leaders, state Flex Programs, a representative from NAEMT and the Flex Monitoring Team (FMT). Contact information for Summit attendees is available in Appendix A.

- Christy Edwards, FORHP
- John Eich, Wisconsin Office of Rural Health
Proceedings
The meeting began with a series of presentations. Christy Edwards of FORHP shared that the Flex Program is focused on sustainability of the systems of care in rural health, including EMS. Terry Hill of The Center shared information about the transition to a value-based health care system. Next, Kevin McGinnis, NASEMSO, talked about the draft 2019 Rural and Frontier EMS Three Year National Tactical Plan and the rural EMS landscape and Matt Zavadsky, Med-Star Mobile Healthcare/NAEMT, gave an overview of the EMS 3.0 initiative (National Association of Emergency Medical Technicians, n.d.). These presentations gave the participants context and a common reference point from which to formulate their discussions and ponder the questions presented to them over the next day and a half.

Opportunities for Collaboration in the Transition to Value
Summit participants brainstormed, grouped and prioritized opportunities for rural EMS and hospitals to collaboratively engage with one another in the
changing health care environment. Opportunities identified by the group fell into the following categories:

1. Communities
2. Providers (EMS, primary and acute care)
3. Information

Community

Health Planning

Integrate EMS into health planning at the community and state levels. EMS has historically been underrepresented in health planning, and since community paramedicine now places EMS in both pre- and post-hospital care, it’s even more important to have representatives at health planning sessions.

Community Engagement

Increase community awareness of the emergency response currently offered in the community. Does it meet their expectations? Concepts such as ICSD provide a tool to for creating such community engagement by creating awareness. It facilitates an understanding of the capabilities and limitations of the EMS currently offered (e.g. cost, staffing), establishes options for improved or otherwise different service, and informs them of the relative costs of all available options. The community can then make an informed selection of the level and type of service it wants to fund.

Providers (EMS, Primary, and Acute Care)

Address Leadership

- Focus on improving leadership, both organizationally and among stakeholders.
- Create a culture of change for both EMS and hospitals.
- Create a vision of what could be with the transition to value and prepare for both EMS and hospitals for change.
Relationship Building

- Create incentives to overcome siloes across organizations. Encourage both hospitals and ambulance services to work together toward common goals, such as the creation of financially sustainable ambulance agencies and hospitals.
- Structure and operational improvements could include things such as shared staffing, assistance with compliance and creation or revision of formal policies.
- Rural hospitals could act as the hub of integrated health care, to include EMS. Benefits would include provision of reliable staffing for EMS, quality improvement in the trauma system, and others. This could also be an opportunity to break down scope of practice barriers.
- Convene rural stakeholders for emergency preparedness planning.
- Consider creation of a regional coalition of EMS services to look for benefits of working collectively to sustain effective and efficient care delivery and possibly develop an integrated system with other agencies.

Medical Direction

When maximized by an ambulance agency, medical direction ensures consistency through development of medical protocols and quality review processes. Quality review can be used to identify opportunities to change and improve services. When used jointly with another agency (or more than one), medical direction can be used to pave the way for integration.

Information

Information Exchange

Continuity of health information is essential for patient-centered, coordinated care between EMS, hospitals, clinics and public health. Push notifications when a patient is registered in an electronic health record (EHR) or patient care record (PCR) was suggested as one way keeping different provider types informed. The group acknowledged that to date this has been a difficult concept, but that the EHRs must contain pre-hospital to hospital data and provide exchange between the two.
Education about Value Models

- Provide education to providers on evolving health care models.
- A focus on leadership and emergency preparedness for ambulance services and rural hospitals to collaboratively provide better educated providers.

Challenges to EMS and Hospital Collaboration in the Transition to Value

The group identified that some of the most significant challenges were external and due to fragmented systems, that have created barriers to coordination.

Policy and Payment

Outdated Payment Systems

One barrier to care coordination is regulation and payment. One example is the CMS classification of EMS practitioners as a supplier rather than a provider. This causes a misalignment of financial incentives as ambulance services are paid for transportation, but not for the medical care they provide. Hospitals are increasingly being paid under a value and population health formula which tends to discourage unnecessary ED visits, which is one of the most costly ways to provide medical care.

Technology

Technology has the potential to dramatically improve access to health care in rural America and will allow rural people to be treated in their homes. For both hospitals and EMS, however technology potential is hindered by lack of broadband and cellular connectivity. Implementation of telehealth and data exchange are extremely difficult without them.
Providers

Organizational Priorities

Hospitals and EMS have different business models, and as such, different organizational priorities. Hospitals have a far broader scope of services and multiple payers while EMS is more singularly focused. A change in the culture within each and between the two would benefit them both in understanding the benefits of collaboratively engaging with one another. However, culture change is not easily accomplished. Factors that hinder change within an organization include a lack of leadership, succession planning and funding to make change, and calcified thinking regarding potential partners and other stakeholders.

Value-Based Payment Models

Both hospitals and EMS generally lack an understanding of value payment models and how to move into them. Value models, by design, have inherent benefits that encourage different provider types to work together to improve patient outcomes.

Workforce

While hospitals have provider shortages of their own to contend with, as noted previously, rural ambulance services continue to have recruitment and retention issues related to a workforce that remains largely volunteer. This leads to high staff turnover and at times, inconsistent staffing availability to response to calls. With that said, the struggle to function daily takes away attention from leadership development, innovation, and data collection and reporting, initiatives that could help an EMS agency move forward to make improvement.

Another workforce barrier is scope of practice which can sometimes prohibit integration. EMS is regulated at the state level, usually within a state bureau or office of EMS, with each state functioning in a way that works best for them. Allied health practitioners are generally regulated by a state board. There is no alignment between two and no pathway between the EMS credentials and allied health careers.
Financial

Heavy fixed costs and a much lower call volume create a financial burden for both rural ambulance services and rural hospitals. Meeting the financial requirements of these fragile organizations often prohibits investment in innovation and curtails engagement and collaboration outside of their own organizational perspectives.

“Financial insecurity often precludes innovation.”

Strategies for Rural EMS and Hospitals to Collaborate in the Transition to Value

Participants acknowledged that many of the strategies could be used with rural hospitals or ambulance services interchangeably.

Information and Technology

Access to relevant health information in patient records, such as medical history, medications, and allergies is critical to pre-hospital emergency care and the ability to effectively communicate patient information from EMS to the ED and the hospital is vital for patient care. Working together, hospitals and ambulance services can also create economies of scale in purchasing as well as providing valuable use of data and information sharing.

Use and invest in technology to advance data collection and validation. EMS and hospitals should have regional discussions about the value of data and data sharing.

Infrastructure

Technology and infrastructure, such as FirstNet, the first dedicated broadband network for emergency responders to advance communication, enhance the capabilities of data collection and the use of data.

Finance

Business and financial skills are vital for EMS agencies to move toward paid services, a more sustainable financial model of operation. Consider billing and patient models. Make a business case for the services offered to the
community. Create models of care that through collaboration, benefit both EMS and hospitals.

**Bridge the Value Proposition**

With the transition to value, it becomes necessary for different stakeholders to come together and find ways to improve care and patient outcomes. One possible way to improve collaboration is to consider EMS based out the hospital ED with joint hiring.

The community also needs to understand value and the cost of emergency medical response. A community consensus process is a great way of helping them understand the current level of response they can expect to an emergency, the different levels of response they could receive and what each cost. They can also consider what level of services they really need. Alternative payment models should be included in any cost modeling occurring as part of this community engagement process. Use this process to articulate the value of EMS.

**Community**

Collaborative engagement between hospitals and EMS can be used to build trust and rapport. The two can then provide a united front for better community care. Healthcare Preparedness Coalitions could be a vehicle for creating a vision and working together effectively on a joint effort.

**Federal Incentives**

Explore federal incentives related to information exchange. The Health Information Technology for Economic and Clinical Health (HITECH) Act, a component of the 2009 American Recovery and Reinvestment Act (ARRA), promotes adoption of HIT, including EHRs and information exchange. HITECH provides funds through state Medicaid for the facilitation of data interaction with state health information exchanges.

**Workforce**

With a largely volunteer workforce, leadership development is often neglected due to competing priorities and just keeping the doors open. Investing in leadership development can make all the difference in an
organization just barely functioning, and one that has the capacity to look forward and address things like succession planning, for example.

Retention of current staff is a significant struggle for the volunteer workforce. Suggestions from the participants related to staff retention included:

- Since retention of skills is an important part of retaining practitioners, provide high quality education that is easily accessible.
- Address emotional fatigue of practitioners to ensure they are mentally well and are able to continue doing EMS work without burnout becoming an issue.
- Also related to burnout, create job opportunities for different career tracks.
- Understand the needs of younger generations of workforce. Learn what they value and understand how it differs from the older workforce.

**Flex Program Support for Rural Emergency Care**

The Flex Program provides a platform as well as resources for states to strengthen rural health care by supporting improvement initiatives with CAHs and rural EMS. In addition to the program areas related to hospital finance, there is a program area in Flex dedicated to rural EMS improvement. The following are suggestions for Flex Program activities to help promote collaborative engagement in rural emergency care:

- A role of the Flex Program is to be the convener and liaison between local, state and national rural health groups, while maintaining a neutral position.
- Partnerships are key to success. The state Flex Program could play a role in fostering partnerships between CAHs and rural EMS agencies and help them understand how they could be working together and what the benefit would be.
- Flex Programs could identify existing EMS models that are working and think creatively about how to adapt them to their state.
- Flex Programs could help to promote the idea that EMS needs to be a part of a comprehensive system of care.
• Flex Programs could help educate CAHs and rural EMS and make them aware of the resources available.
• Flex Programs could help to fund planning and implementation of innovative models of EMS-hospital collaboration.
• Flex Programs could fund initiatives to engage the community in understanding and supporting emergency response.

Some examples of recent EMS activities that state Flex Programs have supported have funded:

• Education, toolkits, guides
• Community engagement to better understand emergency response
• Community Paramedicine
• Mental and behavioral health, including opioid-related activities
• Training for providers such as leadership and medical direction
• View Flex-funded EMS activities as described by the state Flex Programs themselves in the State Flex Profiles on the TASC website.

State Flex programs that want to propose a new or innovative EMS project should speak with their Flex project officer at FORHP to discuss incorporating it into their work plan.

Conclusion
The Summit wrapped up as participants pondered the best ways to disseminate the proceedings of the meeting and provide the most value for Flex Programs, rural ambulance services and rural hospitals. The group acknowledged that Flex programs in many states have been working on projects that compliment many of the strategies and address many of the opportunities identified in this report. Mining the current and past Flex Program workplans and EMS supplemental projects to gather information about what is already being implemented and providing the information in a searchable, updateable format was suggested as a potential source of information for Flex Programs to consider.

A few common themes resonated throughout the summit:
• Rural ambulance services and rural hospitals both struggle with embracing new reimbursement methodologies because they still require income to operate while trying new things.

• Rural hospitals and rural ambulance services have a lot in common in regard to data, HIT, workforce, and resource needs and may benefit from collaboration.

• Collaboration is not always incentivized and is sometimes disincentivized. The transition to value-based payment has the potential to changes this.

• Strategies for ambulance service entry into value-based payment programs do exist, including aligning EMS-CAH financial incentives and working with ACOs.

Participants mentioned that this was an exciting time for rural ambulance services. Much of the value in the summit meeting, they suggested, will be realized as the summit information is disseminated, and linkages are made that advance the opportunities and challenges addressed above, expand on existing programs and resources, as well as identify innovations and possibilities that will lead us into a new future for rural ambulance services.
References


