

Community Health EMS for Montana

March 2016

Introduction

At 2:35 am on a cold November morning the Emergency Medical Dispatcher in the 9-1-1 center received a call from a man, frantic with concern about his wife. “Please send help! My wife is having a hard time breathing and I don’t know what to do!” After surmising that the patient was conscious with labored breathing, the local ambulance service is dispatched.

While the ambulance navigated the long, dark country roads to get the patient, they thought about the scenarios that could be unfolding. Arriving at the home, they apply oxygen and get the patient comfortable while they further assessed what help than can give.

The husband, Carl, watched nervously as the EMS responders worked with his wife. Several years ago, Jen had suffered from an infection of the lining of her heart that resulted in potential lifelong dependence on medications to keep her lungs from filling with fluid as a result of her weakened heart. Just yesterday, they had decided with her primary care provider to reduce her “fluid pill” medication in an effort to try and wean her off slowly. It looked now that it hadn’t worked.

On a mask that delivered a high concentration of oxygen, Jen still had labored breathing but was oxygenating well. Breath sounds confirmed fluid in the lungs and after the basic assessment, she was given nitroglycerin, put on a 12-lead ECG and an IV was established. Because the likely culprit of the current emergency was the reduction in the congestive heart failure medication, EMS contacted their medical control and determined that 80 mg of Lasix IV was the best next step.

Carl was just short of amazed. Within 20 minutes after the EMS crew had arrived, Jen was comfortable, off oxygen, breathing normally and saying she didn’t want to go to the hospital. What a relief! She was OK, back to normal and instead of facing an hour ride to an emergency department and what has been a guaranteed two days in the hospital, this was now a minor blip in their day and a follow-up visit with their primary care doc tomorrow.

The concept of **Community Health EMS** (CHEMS) represents an evolutionary change in the delivery of care by EMS services. By utilizing emergency medical service providers in an expanded role, CHEMS increases patient access to primary and preventative care, provides wellness interventions, decreases emergency department utilization, saves healthcare dollars and improves patient outcomes. In a mature community health EMS model, Jen could have been enrolled in a local CHEMS program as part of the care plan created by her primary care physician and response to her medical crisis could have been prevented by a follow up visit by a community health paramedic.

Note: In much of the world, paramedic is a general term used to identify all levels of EMTs – basic to advanced. Additionally, as the concept of an expanded role for EMTs and paramedics continues to evolve, programs are interchangeably described as ‘community paramedicine’ or ‘mobile integrated healthcare’. For the purposes of this discussion paper, ‘community health EMS’ or ‘CHEMS’ will be used to generically describe such programs and ‘community health EMT’ or ‘community health paramedic’ will used to describe the providers of such services.

Background

The 1996 EMS Agenda for the Future stimulated a futuristic view of EMS in which *“Emergency Medical Services (EMS) of the future will be community-based health management that is fully integrated with the overall health care system. It will have the ability to identify risks, provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring. This new entity will be developed from redistribution of existing health care resources and it will be integrated with other existing health care providers and public health and safety agencies. It will improve community health and result in more appropriate use of acute health care resources. EMS will remain the public’s emergency medical safety net”*.

The original intent of EMS systems was to provide patient care for acute or emergency events. However, studies show that 10-40% (or more) of ambulance service responses are for non-emergent events. Many times, patients who lack access to primary care utilize EMS to access emergency departments for routine health care services. While these patients could be more appropriately cared for in primary care offices or alternate locations, the current healthcare and reimbursement infrastructure systems do not support other appropriate, cost-effective EMS transport alternatives.

After some 30 years of development of the current model of providing prehospital care, the future of EMS may be much different. The erosion of the volunteer model in many rural areas, generational changes in the overall workforce, continued budget challenges and national changes in healthcare are challenging rural EMS infrastructure - and demanding innovational strategies.

Emergency medical services of the future, whether it includes community health EMS or not, will not likely involve an initial patient contact with two EMT responders in a \$150,000 ambulance and an automatic ride to the emergency room for many calls. Future calls may begin with a priority dispatch system which can triage and send a variety of appropriate resources, including community EMTs or paramedics, who then provide a more comprehensive triage followed by treat and release to primary care or other appropriate treatment options.

CHEMS is not a new concept in practice, either here in Montana or in other parts of the world. In the aftermath of the Agenda document and a Rural EMS Agenda for the Future document that followed, community health EMS programs were implemented in several states. Scenarios such as the one related at the beginning of his document are not isolated events. Ambulances are often called to transport a patient to the emergency room, only to be asked to wait for the patient to get their medications adjusted or some other non-emergent treatment and then take the patient back home. EMS has long been active in emergency rooms and clinics, as wildland fire medics, in industrial sites and with other roles.

However, significant expansion of CHEMS has been most evident in the last six years as the health care system and its priorities have evolved rapidly. Increasingly, state EMS offices have been involved in leadership and regulatory aspects of CHEMS system development. In a Spring 2015 survey, only five EMS offices reported no known CHEMS related activity in their states.

How might CHEMS serve Montana?

Community Health EMS in Montana needs to be considered for two primary reasons:

- 1) CHEMS can fill gaps in healthcare for patients who otherwise are not eligible for traditional primary care resources (e.g. Medicare, home health) or lack of these resources in communities. CHEMS provides an expanded role in health care, not an expanded scope, and they can complement the services of the other health care professionals in the health care system.

- 2) CHEMS may be one solution to the continued decline of EMS providers and the fragility of EMS services, particularly in rural communities. CHEMS may provide opportunities for an aging EMS workforce that cannot continue to provide 9-1-1 response but still wants to provide a service to their community. With reimbursement and funding, CHEMS may provide a paid EMS provider with increased education and skills to support a traditional 9-1-1 role as well as this new primary care roll.

Community health EMS is conceptually based on using EMS resources to address unmet health needs and access to additional health resources in a given community. As such, CHEMS in one community may look very different from CHEMS in another community. However, examples of key roles that CHEMS programs are meeting across the country include:

- Navigation through the healthcare system - Patients tend to use EMS and the emergency room as a safety net for primary care. With CHEMS, EMS services can provide more than an automatic ride to the ED and transportation may not occur in the back of an ambulance. If a patient does not have an emergency condition, he or she may be treated at home, connected to an appropriate community resource, or scheduled for an appointment with a primary care physician.
- Chronic disease management such as for congestive heart disease, COPD, diabetes and asthma. In a Minnesota example, Robert's diabetes was so severe doctors planned to amputate his leg. But because Minnesota's community paramedicine program, CHEMS providers got involved. Three times a week they stopped by to care for his wound, share diabetes management tips and evaluate his overall health. Today Robert still has his leg and he credits the community paramedics for saving it.
- Return to emergency room or hospital within 24-72 hours of discharge – Patients leaving the ED or hospital receive discharge instructions, but patients frequently find that they really don't understand what is expected of them until they arrive home and relax more. In numerous small communities, they may not have access to a pharmacy over the weekend. CHEM program visits can assist with providing follow up care about their instructions or other needs and unnecessary transports, at times over long distances in Montana, can be avoided.
- Reduce hospital readmissions - If a patient is released from the hospital and readmitted within the next 30 days, the discharging hospital will receive a penalty. CHEMS providers can make home visits on these potential high-risk readmissions and ensure they are progressing well, taking prescribed medication, and help them adhere to their physician prescribed healthcare plan. This decreases the likelihood of them seeking medical treatment in an emergency room and promotes regular visits with their primary care physician.
- Integration and collaboration with other health care resources – CHEMS programs do not compete with home health, hospice or mental health organizations, but function in concert with them. Home health agencies may provide specialty services; e.g. infusion therapy, while hospice groups deliver palliative care. CHEMS programs can assist with gap coverage when these organizations may not be readily available or have delays in response to meet the needs of the recipients of these services.

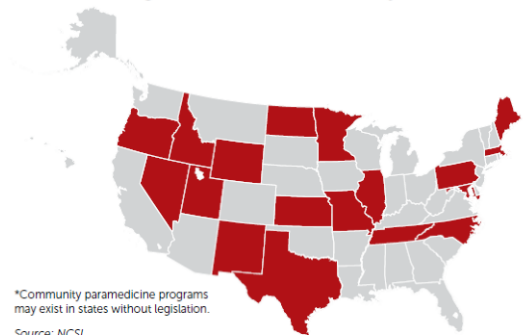
Montana CHEMS Challenges and Opportunities

It is important for Montana to assess the opportunities and challenges to development of community health EMS programs. Among these, the statutory challenges are most relevant to this committee. Such regulatory issues need to be considered early-on if a CHEMS program is to be successfully implemented.

Statutory Authorization of Community Health EMS

Many state's EMS authorization legislations were crafted in the 70's – well before a concept of community health EMS delivery was well thought out. Now, numerous states have found it necessary to update and revise their statutes to allow for a CHEMS non-emergency, primary care role. In Maine, for example, community paramedicine programs were planned and ready to begin when the state's Attorney General issued an opinion that the state law did not allow for it. Implementation was on hold for over a year while legislation was adopted to authorize CHEMS.

States with Legislative Action on Community Paramedicine*



50-6-101 MCA. Legislative purpose. The public welfare requires the providing of assistance and encouragement for the development of a comprehensive emergency medical services program for Montanans who each year are dying and suffering permanent disabilities needlessly because of inadequate emergency medical services. The repeated loss of persons who die unnecessarily because necessary life-support personnel and equipment are not available to victims of accidents and sudden illness is a tragedy that can and must be eliminated. The development of an emergency medical services program is in the interest of the social well-being and health and safety of the state and all its people.

50-6-201 MCA. Legislative findings. (1) The legislature finds and declares that prompt and efficient emergency medical care of the sick and injured at the scene and during transport to a health care facility is an important ingredient necessary for reduction of the mortality and morbidity rate during the first critical minutes immediately after an accident or the onset of an emergent condition and that a program for emergency medical technicians is required in order to provide the safest and most efficient delivery of emergency care.

Concerns and challenges have been raised that Montana statutes do not provide for or allow the expanded, non-emergency role that community health EMS providers may practice. This is evidenced by the recent request for a legal opinion to the Attorney General from the Montana EMS Association (attached). As a suggested resolution for these concerns, DPHHS has drafted legislation for discussion among appropriate stakeholders. While not a Department bill request, this draft still needs to be widely vetted among boards of medical examiners and nursing, nursing groups, EMS medical directors, EMS providers and others. With an upcoming 2017 legislative session, the timing is right to assure that there are no statutory delays or barriers to implementation of CHEMS.

A discussion is needed about whether it is desired and necessary to facilitate Medicaid statutory amendments to reimburse CHEMS providers for their services. In states such as Minnesota and North Dakota, statutes were modified to allow Medicaid reimbursement for CHEMS providers providing community health services.

Currently, EMS services are only eligible to be reimbursed for the transport of a patient to an emergency room. While Medicare is becoming ever closer to changing to a value-based reimbursement model that allows for payment of CHEMS treatments in the home or transport to alternative destinations, Montana should also consider if Medicaid reimbursement for such services (at less cost than transports and care at an emergency room) should be considered.

Other Challenges and Opportunities

While not related to statutory or other reforms, additional challenges and opportunities to development of community health EMS need to be considered in order to assure successful implementation of Montana community health EMS. These can be approached concurrently with resolution of statutory solutions. DPHHS has been engaged - and will continue to engage - appropriate partners and stakeholders about these issues.

Expanded Role of CHEMS providers:

Every day, EMTs and paramedics encounter patients who require assistance with non-emergent conditions. As well, many patients have chronic and secondary conditions that have precipitated the emergency call such as loneliness, mental health, lack of home care and other special needs. With additional education, CHEMS providers can perform health assessments, monitor chronic diseases, ensure patients use medication correctly and follow up after hospital discharges. They are also a great source of information and help educate patients on the care and treatment of their illnesses, injuries and diseases. CHEMS responders are familiar with many of these patients as they have likely responded to the initial emergency and transported them to an emergency department. Now that this patient is home and in need of additional care, the CHEMS provider is well positioned to perform initial assessments of the home, conduct a medication reconciliation, and to reinforce discharge instructions.

CHEMS Provider Education

CHEM providers must have additional education to prepare them to meet identified community health needs revealed by a community assessment. As such, CHEMS education should be standardized, but capable of being tailored for each community.

National CHEMS paramedic provider course curriculums have been developed. Encompassing approximately 100 hours of foundational skills and 15 to 150 hours clinical skills (depending on the student's previous knowledge and background), they are similar but can be customized to meet the needs of a variety of students.

Development of alternative curriculums for basic or advanced EMTs in rural areas are also becoming more available. However, delivery of any of these curriculum presents an 'educational paradox' where the people who live in our rural communities and most need the education may not be able to access necessary resources to receive that education.

Medical Direction and Oversight

As with traditional delivery of prehospital care, CHEMS programs must also be physician-driven.

In well-developed CHEMS programs, the EMS provider can be the eyes and ears of primary and emergency care physicians and an extension to their practices. EMS is a delegated practice and nothing in a community health paramedic's expanded role is designed to change that to an independent practice.

Community health is designed to link the patients with their primary care physician. Therefore, a community health paramedic may evaluate a patient and decide that the patient's care may be best met by transport to an urgent care clinic or to their primary care physician's office. Given this expanded role, traditional medical control will need be comfortable directing patients to alternate sites without ever seeing the patient themselves.

Everything in the continuum of care from how the CHEMS provider participates in the development and implementation of a patient's care plan, where to get the orders and, how to provide documentation in the patient medical record, will present new challenges for community health providers and medical directors.

Integration with Other Healthcare Providers

Key agenda documents recommend that EMS needs to be more integrated with the other elements of the health care system. CHEMS represents opportunities and challenges to effect such integration.

Approached correctly, the introduction of CHEMS should be viewed as an opportunity, not a challenge or a threat to other providers. Particularly in rural communities where health resources are limited, extending the role of the CHEMS provider into different settings and partnering with public health should be viewed as a benefit to the patient. As long as communities continue to understand that CHEMS providers have a unique education and background and that nursing also has a unique education and background – and that each can complement rather than compete with each other – potential conflicts should be negligible.

Montana needs to continue open discussions, provide education, and develop partnerships with professional groups and advocates to best ensure CHEMS providers are part of a healthcare team.

Funding and Reimbursement

There are increasing concerns about shrinking healthcare reimbursements and budget shortfalls. CHEMS programs can save healthcare dollars by reducing illness and injury and preventing unnecessary ambulance transports, emergency department visits and readmissions through more efficient use of existing resources.

Community paramedicine is not without data showing cost savings. After five years, a Nova Scotia program demonstrated a 40% reduction in emergency room visits and a 28% reduction in clinic visits. A U.S. program that focused on preventing readmissions of frequent users of EMS quoted a 64% reduction in 9-1-1 visits and \$1 million savings in health care costs. Programs across the country are showing similar savings in cost.

CHEMS programs will need funding for the training and planning necessary to initiate a program. Many programs, including a proposed program in Glacier County, have been successful at receiving health innovation grants to fund initial startup costs. However, long term sustainability cannot rely on grants.

Health payment and reimbursement reforms such as Medicaid reimbursement are needed. Medicare has funded several innovation grants for CHEMS program which may be the foundation for changes in their reimbursement model of these services. Fundamental changes that allow for reimbursement for treat and release, treat at home, and transport to destinations other than an emergency room are needed. Even while programs await these changes, there have been other avenues to support payment. Hospitals attempting to prevent penalties for patient readmits, insurance payment as a service to their members, accountable care organizations and medical homes are several examples of how CHEMS programs have been successful getting payment which funds the programs and supports salaries for CHEMS providers.

Summary

As it has done since its formal inception in the U.S. in 1976, emergency medical services will continue to evolve and develop to meet the needs of Montana citizens. All healthcare will continue to be challenged by healthcare reform, workforce issues, cost containment, changing reimbursement models, rapidly expanding technology, educating the next generation of providers and many other issues. Because EMS is the healthcare link between public safety, healthcare and public health, it remains the safety net for patients and will face these challenges at an accelerated rate due to its proximity and value to community-based efforts.

Community health EMS is one piece of the future of Montana emergency medical services. While we must continue to support innovations that insure EMS can respond every day to 9-1-1 calls, CHEMS services can be instrumental in providing better healthcare and healthier patient at less cost than traditional EMS response predicated on the 'you call, we haul' principle. While community health EMS can save healthcare dollars, it can also be an avenue to fund staff and services not otherwise available. This additional funding can be utilized to pay for staff that will fill gaps in our crumbling volunteer staffing model and provide for more stable, better trained EMS services.

DPHHS will continue to be engaged with educating and obtaining support from stakeholders and partners to solve some of the challenges to developing a Montana community health EMS program.