

Mobile Integrated Healthcare and Community Paramedicine in Iowa

The original intent of our EMS systems since the mid-1960s was to provide patient care for acute or emergency events. However, studies show that 10-40% (or greater) of ambulance service responses from across the United States are for non-emergent events. Many times patients who lack access to primary care, regardless of the reason, utilize EMS to access emergency departments for routine health care services. A majority of 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 transport alternatives.

After some 30 plus years of development of this model of providing prehospital care, the future of EMS may be much different. The erosion of the volunteer model in many areas, generational changes in the overall workforce, continued budget challenges and national changes in healthcare are challenging the EMS infrastructure and demanding innovative strategies. Mobile Integrated Healthcare Systems and utilization of Community Paramedicine is one area of interest that is being looked at by many organizations.

The *EMS Agenda for the Future*, released in 1996 by the National Highway Traffic Safety Administration and the Health Resources and Services Administration, Maternal and Child Health Bureau presented the following vision: *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 and modify illness and injury 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 will be integrated with other health care providers and public health and public 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.*

This vision above helped to establish the concept that community paramedicine can utilize EMS providers in an expanded role as part of a community-based team of health services and providers. This community-based team would have the ability to not only provide acute illness and injury care, but could also identify health risks and provide follow-up care, treatment for chronic conditions, and community health monitoring.

Mobile integrated healthcare (MIH) is a model in which a variety of community health care providers and agencies (e.g. practitioners, public health, hospitals, social services, etc.) organize to deliver a broad spectrum of patient-centered preventive, primary, specialty, and rehabilitative care outside of traditional medical facilities. MIH is an organization of multi-disciplinary medical, nursing, and other practitioners which may or may not include EMS. MIH is also an

administrative organization of mobile health care services which is operated by a health/medical agency, facility, or system.

Community paramedicine (CP) services are able to fill gaps in patient care identified by its providers and by others in the community's health care network. EMS can prevent new or recurrent medical episodes through these services. This reduces the incidence of ambulance transports, emergency department visits, hospital admissions and readmissions, preserving medical resources and helping to reduce healthcare costs. Paramedicine practitioners may provide clinical, operational, or logistical services as part of a comprehensive MIH system, but not as a standalone or independent entity. CP emphasizes the role of EMS members providing primary care in the patient's home which is an environment and role EMS is already familiar with and practices in.

Iowa Code chapter 147A and Iowa Administrative Code section 641, chapters 131 and 132 currently allows certified Iowa emergency medical care providers to render emergency and nonemergency medical care within their scope of practice as part of an authorized service program, hospital, or other entity in which healthcare is ordinarily provided. These provisions would be applicable to a certified Iowa EMS provider functioning as a member of a MIH system either working directly for an authorized EMS program or another component of the MIH. Regardless of which component of the MIH system the certified Iowa EMS provider was working for, they would still be limited to the scope of practice based on their current level of certification. Development of a "Community Paramedic" certification or endorsement currently is not required for MIH systems utilizing Iowa certified EMS providers.

The term "expanded role" is used to describe the difference between a community paramedicine EMS provider and a traditional EMS provider. Traditional EMS practices in a prehospital setting with a skill set designed for acute responses to medical diseases or traumatic injuries. An expanded role would depict the ability of the CP EMS provider to perform an enhanced assessment and medical history and to develop care plans; use non-traditional medications such as vaccines; perform treatments for chronic diseases such as diabetes or congestive heart failure; and conduct injury prevention activities such as home safety assessments for falls and other hazards. CP as part of a MIH system should not be viewed as a new scope of practice, but rather a specialty area for EMS.

As with the traditional delivery of prehospital care, CP programs must also be physician-driven and employ physician oversight. To ensure CP programs are effective, the program must be an integral part of the medical home concept where patients are cared for by a physician who leads the medical team and all aspects of prevention, acute, and chronic needs of the patients. Everything in the continuum of care from how the CP EMS 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's medical records needs to be addressed and established by policy and protocol.

The agency that employs an Iowa EMS Provider must ensure that each individual has the necessary education and skill capabilities to complete the required tasks. This may require the EMS provider to obtain additional education and skill training beyond their initial education for certification. While the CP EMS provider's additional education should be standardized, there should also be "built in flexibility" to tailor the education to meet the identified community gaps and needs. Caution must be employed when a skill or procedure that is outside of the EMS provider's scope of practice has been identified as a community gap or need. In these instances the CP program would need to request and receive approval from the Iowa Department of Public Health for a pilot program employing the new skill or procedure. If approved, data from the pilot program would be utilized to determine if a change in scope of practice would be necessary.

MIH systems are encouraged to first conduct a community assessment to identify their community health care needs. This assessment should be conducted with involvement from all health care partners to include not only EMS but local practitioners, hospitals, public health, social services, and other partners identified at the local level. Once the assessment has been completed results should be reviewed, analyzed, and shared with all involved partners. The community assessment results would be used to build a local program that may include CP to assist in filling the identified gaps.

Since its formal inception in the United States in 1973, EMS will continue to evolve and develop to meet the needs of our society. All healthcare components will continue to be challenged by healthcare reform, workforce issues, cost containment, and reimbursement models, rapidly expanding technology, educating the next generation of providers, and many other issues. Because EMS is the healthcare link between public safety and public health, it will remain the safety net¹ for patients and will face these challenges at an accelerated rate due to its proximity and value to community-based efforts. The decision to develop and implement a MIH system will require involvement from multiple partners, community assessment data, increased knowledge and psychomotor skills may be required for involved EMS providers, and acceptance from other health care partners as well as the public.

The Iowa Department of Public Health and the Bureau of Emergency and Trauma Services continues to support the development and implementation of effective community-based healthcare teams such as Mobile Integrated Healthcare (MIH) systems that are comprised of multiple partners and helps to decrease the burden on limited healthcare resources, saves healthcare dollars, and improves patient outcomes.

¹ EMS Agenda for the Future, released in 1996 by the National Highway Traffic Safety Administration and the Health Resources and Services Administration, Maternal and Child Health Bureau