

National Emergency Medical Services Advisory Council
Joint Report from: the Provider and Community Education Committee
and the Data Integration and Technology Committee
October 15, 2016

Title: A Practice Analysis of Community Paramedics and Mobile Integrated Healthcare Systems: A method to determine the need for a new specialty care-focused scope of practice, education standard, and a standardized data dictionary.

Background

Mobile integrated healthcare (MIH) is a term used to describe an increasingly common health care delivery model offered by emergency medical service (EMS) agencies. There are many derivatives of the MIH title. This model differs from the traditional EMS model in that it is not transportation and emergency care-focused. Instead, MIH programs focus on assessing the health and social needs of an individual, and then helping the individual to gain access to these health and social services resources, frequently in a non-hospital setting and often immediately following hospital discharge as part of the patient’s on-going healthcare plan.

EMS professionals who work in a MIH system are commonly called community paramedics (CP) or some derivative of this title.

MIH programs are increasing in number across the United States.¹⁻³ A common characteristic of MIH programs is the use of an existing workforce (i.e. EMS professionals) to assess the unmet social or health needs in a community. In this function, EMS professionals partner with other healthcare providers including, but not limited to, community health, home health, and hospice providers. To date, there are no standardized curricula, practice standards, or delivery guidelines to direct the development and execution of CP/MIH across the United States.

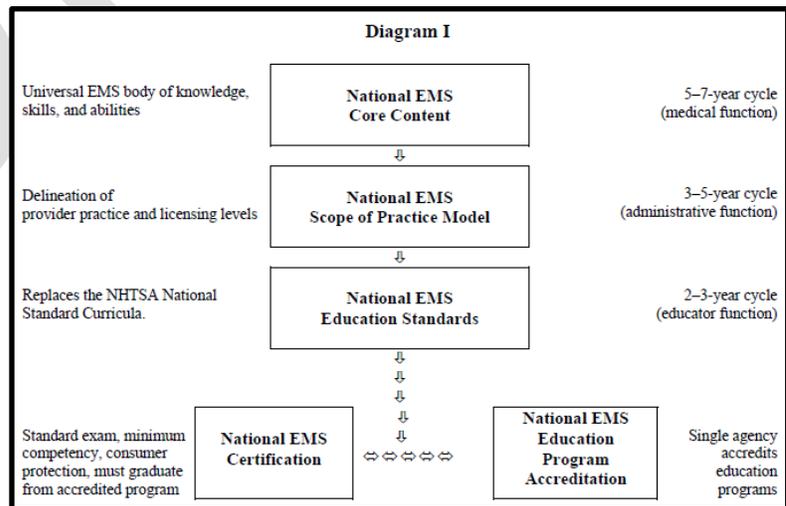
For the purposes of this document, ‘practice analysis’ means a systematic review of the cognitive and psychomotor skills used in the MIH setting by EMS personnel.

Problem Statement

Research has demonstrated the value and importance of the use of standards in many industries, including health care⁴⁻⁷. EMS, like all other health care delivery models, functions optimally when supported by standards⁸.

There is a strong tradition in the United States for a standards-driven practice of EMS. Evidence for this includes guidelines developed by the American Heart Association for treating cardiovascular disease and by the American College of Surgeons and the National Association of EMTs for the treatment of injuries.

There is also a strong



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tradition of standardization in healthcare education and credentialing. EMS has followed that tradition as evidenced by the *National EMS Core Content*, *National EMS Scope of Practice Model*, *National EMS Education Standards* and common national certification and education program accreditation organizations, each of which is referenced in the pivotal publication *National EMS Education Agenda for the Future: a Systems Approach*.⁸⁻¹² (Diagram 1)

To date, in the United States there has been no systematic assessment of the cognitive foundation of knowledge or the psychomotor skills performed by EMS personnel operating in the MIH setting that has been published in peer review journals.^{13,14} Nor has there been an assessment of the education requirements necessary to address the cognitive foundation of knowledge and psychomotor skills for MIH that has been published in the peer-reviewed literature.¹⁰⁻¹²

Reputable curricula have been developed for specific MIH initiatives; however, these are proprietary and are specific to the scope of a particular MIH initiative.^{13,14}

EMS medical directors would benefit from standardization of education, credentialing, treatment, and data collection because EMS providers operate under their delegated authority and quality assurance programs and data analysis are an integral element of EMS physician oversight.

EMS educators would benefit from national standards for scope of practice and education because it would provide a foundational basis for the education methodology and improve access to relevant curricula for instruction.

EMS regulators would benefit from standardization as this facilitates credentialing of EMS professionals and EMS educators and helps to ensure consistency in practice across communities.

Payors of EMS service would benefit from standardization as this facilitates evaluation of benefits for consumers.^{2,3,19-22}

All sectors – the public, the payor, the regulator, the educator, the medical director, and the provider – would benefit from a standardized data dictionary. Access to reliable statistics on patient outcomes and data useful for creating performance and outcome benchmarks are vital, particularly since MIH has not yet been rigorously evaluated.

Finally, because the National Highway Traffic Safety Administration (NHTSA) has committed to updating the *EMS Agenda for the Future: a Systems Approach* and the *National EMS Scope of Practice Model*, a timely opportunity exists to incorporate MIH into the various national standards documents.

Crosswalk with other standards documents or past recommendations

- EMS Agenda for the Future
- EMS Education Agenda for the Future: a Systems Approach
- National EMS Core Content
- National EMS Scope of Practice Model
- National EMS Education Standards

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National EMS Advisory Council (NEMSAC) Final Advisory on Community Paramedicine

Analysis

The use of standards in healthcare is well established. The public-at-large, as well as EMS stakeholders, have benefitted from the structured approach to EMS enabled by the *EMS Education Agenda for the Future: A Systems Approach* and its accompanying resources which are the *National EMS Core Content*, *National EMS Scope of Practice Model*, and the *National EMS Education Standards*.⁵⁻⁷

Standardization of EMS is not meant to prevent variation in practice. Its purpose is to establish the base capability of a certified EMS provider, and to facilitate the physician-to-EMS provider delegation of practice necessary to meet the unique needs of each community.

This systems approach begins with an assessment of the activities of EMS providers in the work environment in the form of a practice analysis. From the practice analysis, the core content and competencies for each level of certification are identified which determines a scope of practice. Finally, the framework of didactic and practical educational requirements are identified which serve as the foundation for education standards.

When this systems system approach was implemented between 1996 and 2002, the Emergency Medical Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, and Paramedic levels were included. There was extensive discussion about whether the community paramedic level was needed, but consensus determined that it was not appropriate at that time.

Educators, medical directors, payors and regulators benefited from the development, contents, and application of the *National EMS Core Content*, the *National EMS Scope of Practice Model*, and the *National EMS Education Standards* documents.⁴⁻⁶

This systems approach has not been applied to MIH programs. Without a thorough understanding of the practice of MIH gained by a practice analysis, the medical direction, policy formulation, insurance, payment, education, and regulatory sectors are unable to adequately guide, prepare, assess, reimburse, and license EMS providers who are medical care providers within in these programs.

More importantly, without national standards, it is very difficult to assess the risk/reward to the public from an MIH initiative. There is significant evidence that standardization improves the quality of care and reduces the likelihood of medical error^{4,6,7}.

The performance of a practice analysis on CPs functioning in a MIH program would allow for a similar assessment process for core content, scope of practice, and education standards. The results of this practice analysis will assist stakeholders, the public, and EMS providers to achieve their mutual goal of quality and cost-effective out-of-hospital patient care.

Nearly every state has approved or is contemplating the approval of a MIH program. To ensure the public benefits from important MIH initiatives nationwide, a structured approach is necessary to identify whether the existing scope of practice and education standards are appropriate, a practice analysis of MIH initiatives is vital.

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Committee Conclusions

- EMS providers, educators, medical directors, regulators and payers are accustomed to a standard-based model;
- Standards have been proven to improve the quality of care and reduce medical errors;
- MIH is a new healthcare delivery model being offered in communities across the United States and EMS providers are working in a new environment with diverse goals;
- There are no national standards for the education, credentialing, and evaluation of CP operating in a MIH program.
- Without national standards, the ability to describe the risk/benefit of MIH is problematic;
- A practice analysis of CP activities in MIH programs is necessary to determine whether CP requires its own scope of practice, education standards, and credentialing.
- Because the NHTSA has committed to updating important national standards documents, the time is right to conduct this practice analysis.

Recommended Actions/Strategies:

- **National Highway Traffic Safety Administration**
 - As soon as possible, contract with an appropriate organization to:
 - Evaluate existing practice analyses of CPs working in MIH initiatives;
 - Conduct a representative assessment of existing MIH initiatives to develop a practice analysis of the CP; and
 - Publish the results of the practice analysis in a peer-reviewed journal.
 - Move forward with efforts to contract with an appropriate organization to review the existing *National EMS Scope of Practice Model* document
 - Begin the project with the EMR, then EMT, then Advanced EMT, and finally the Paramedic to create sufficient time for the CP practice analysis to be completed.
 - If the practice analysis suggests that the CP has a different scope of practice from the Paramedic, those findings will be referred to the contractor assigned to this task.
 - The National EMS Advisory Council recommends that the Federal Interagency Committee on EMS (FICEMS) leverages the considerable independent work that has been done throughout the nation on the development of CP/MIH data sets through the organization and facilitation of a national MIH data collection summit. The intent of the summit would be to bring stakeholders together to facilitate the initiation of a practice and data analysis that leads to a national standardized CP/MIH data dictionary that is compatible with the National EMS Information System (NEMSIS).

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