National EMS Advisory Council

Committee Reporting Template – Discussion 1

DRAFT

August 16, 2016

Committee: Data Integration and Technology Subcommittee

Title: Standardized Training for Local Data Managers to Ensure High-Quality Data

Issue Synopsis: The impact of the care provided to patients by emergency medical services (EMS) professionals extends far beyond the arrival and transfer of care at the emergency department. Emergency medical responders (EMRs), emergency medical technicians (EMTs), advanced EMTs (AEMTs), and Paramedics complete hundreds of hours of specialized training. The EMS quality assurance and quality improvement officers who are charged with using data to improve performance complete additional and more advanced education. However, there is no organized and comprehensive training program available to educate the staff assigned to these duties on the proper mechanics of quality data collection. Given that all of the data we rely upon to make important operations, financial, and clinical decisions are collected at the local level, it has become obvious that this is a serious deficiency in our professional training system. EMS professionals who are charged with the responsibility of overseeing the capture of quality data must be given the proper education and training to perform these duties.

> *A. Problem Statement: As with disasters, all data is local. It is collected at the agency level and filters its way up to the state and national level. The data managers for the EMS agency provide the only reliable quality control. The mechanics that are involved behind data capture, quality, and submission are complicated and require a level of technical education that is not currently provided in any EMS training or management program. Processes such as software coding and mapping, extensible markup language (XML) structure, and extract, transform, and load (ETL) processes are currently learned on the job with little to no technical support and without formal training. EMS agencies are in need of education and training that provides a solid foundation of technical and operational knowledge to oversee the data management process.*

> *B. Resources/references related to the issue:*

> > *1. NEMSAC Advisory Council, Committee of Medical Oversight and Research,*
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> > *NEMSIS: Achieving its Full Potential for Advancing Healthcare, January 30, 2013*

> > *2. Health Information Exchange Issue Brief: National Emergency Medical Services*
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> > *Use Cases, May 13, 2014*

> *C. Crosswalk with other standards documents or past recommendations:*

> > *1. NEMSAC Advisory Council, Committee of Medical Oversight and Research,*
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> > *NEMSIS: Achieving its Full Potential for Advancing Healthcare, January 30, 2013*

> > *2. Health Information Exchange Issue Brief: National Emergency Medical Services*

D. Analysis: System administrators, administrative medical directors, and other stakeholders are using the data acquired by EMS professionals from patient encounters to make important evidenced-based decisions that impact patient care and service delivery. There are many processes that move data from the field, through the agency, and into the state and national data systems to ultimately link with other important data bases. There are several points in this data acquisition and submission process that can cause an outright failure or poor data to be collected.

In most EMS agencies, the task of data management is assigned to individuals who tend to have many other responsibilities. Frequently, these individuals tend to be the busiest people within the organization. Most of these people come into the position from the field and have little to none of the technical education required to perform their oversight duties. Most do not have the time or resources to self-educate and, as a result, data quality suffers.

A current lack of quality data, unified reporting, and the potential number of avoidable errors based upon non-standardized systems is the underlying tenet framing this issue. The data EMS crews enter into their patient care report to document the time line of the event, the patient's condition, and the interventions provided to treat the patient has become extremely important. This information is being aggregated to determine benchmarks, build an education and training curriculum, identify trends, discover weaknesses, research new treatments, identify cost-saving and grant opportunities, identify best practices for patient care and outcomes, and, most importantly, to define and strengthen our systems of care. There are many intertwined factors involved in the process of data collection. A failure to manage any one of these will result in poor quality data or even a failure to capture and transfer this important information to key stakeholders. Data collection has become a central and vital to EMS, and quality data at every level is essential to improve the care we provide.

E. Committee conclusion

Due to the important and increasing demand to obtain quality data to improve and strengthen EMS and our systems of care, the NEMSAC Subcommittee on Data Integration and Technology recommends that the FICEMS support the development of a certified data management training program with a core curriculum that includes, but is not limited to, the mechanisms and best practices of data collection and utilization as well as data distribution, integration, and performance improvement processes.

Recommended Actions/Strategies:

The National EMS Advisory Council recommends that FICEMS work with it partner agencies to develop a standardized data managers training course to ensure high quality EMS data capture.