Request for Information – Development of Electronic Prehospital Reporting System for New York State

Purpose

The purpose of this Request for Information (RFI) is to gather information from organizations or vendors with experience in either working with the National Emergency Medical Service Information System (NEMSIS) data set or developing software systems for the collection of an electronic prehospital patient record. The information gathered as a result of this RFI will be used to determine the feasibility, cost and process for issuing a Request for Proposal for the development of an electronic Emergency Medical Services (EMS) data collection system that is compliant with the NEMSIS data set.

Background

Currently, the New York State Prehospital Care Reporting System is primarily a paper based system. During the last several years, three of the 18 New York State EMS regions and 104 ambulance services have implemented programs to collect their data electronically. The current paper Prehospital Care Report (PCR) is a one page form collected in triplicate. The original is maintained in a secure manner by the ambulance service providing the service to the patient; one copy is left at the hospital with the patient to become a part of the patient's medical record. The other copy is collected by the Regional Program Agency (18 in New York State). By contract, the Regional Program Agencies (RPA) must review each PCR to insure that specific data elements are completed by the Prehospital care provider. After screening, the RPA sends the PCRs to the Department's data entry contractor to be keypunched. Currently, 65 data elements are keyed into our dataset. Just over 1.5 million records are collected in New York State annually outside of New York City. It is estimated that there is an additional 1.5 million prehospital medical records generated in New York City for a statewide total of 3-3.5 million records annually statewide.

The National Highway Traffic Safety Administration (NHTSA) has developed a National EMS Information System (NEMSIS) data set. The EMS Dataset is a subset of information describing a complete EMS event. This includes information which is considered important from an EMS system, EMS personnel, and an EMS patient's perspective. The data elements within the EMS dataset provide documentation of the system performance and clinical care. Many data elements are a component of an EMS Medical Record, and the majority of the remaining data elements are important for quality management and performance improvement initiatives. NEMSIS is supported by NHTSA, Health Resources and Services Administration (HRSA), and the Center for Disease Control (CDC) to support each state's efforts to collect, retain, and send data to the national database.

The National Data Set consists of over 400 data elements broken into two separate data elements. The first data set is called the Demographic Dataset and the second, is the

EMS Dataset. The State of New York is considering becoming compliant with the NEMSIS data set which will minimally require collecting the 81 data elements from the National Data set. However the Department and its advisory councils are interested in using the larger data sets to examine the EMS, Trauma and Cardiac systems in New York State. In order to insure the involvement of all ambulance services in the state, integration in NEMSIS may include the development of a platform that would allow all ambulance services to submit their prehospital patient care data electronically. Redesigning the paper form to be NEMSIS compliant is not a viable option.

At present, 3 of the 18 Regional Program Agencies submit all or most of their data electronically. Additionally, a growing number of individual ambulance services also submit their data in an electronic format either directly to the Department or through the RPA. Of the 3 regional submissions, two use commercial software products that are NEMSIS compliant. Currently the Department is only collecting 65 required data elements. The third region is using a locally developed software program funded by the Department. This program has not yet been submitted for compliance testing with the NEMSIS Technical Assistance Center. Of the individual EMS services submitting electronically, most are using commercially available software that is either Gold or Silver compliant with the NEMSIS data set.

Information Required

The New York State Department of Health, Bureau of Emergency Medical Services is seeking to identify the required equipment, software requirements and associated costs (both initial start-up costs and ongoing maintenance costs) for the development and operation of an electronic data collection system that is NEMSIS compliant and would provide real time data for disease and syndromic surveillance. The Department is interested in, but not limited to information considering the following:

- The implementation of an electronic patient care record system at the ambulance service level. This would be specifically intended for small services with low call volumes (<250) annually. This system would have to provide data to the service itself, including the medical director, the regional emergency medical advisory council and the local or regional quality improvement committees through the RPA. The RPA would transmit the data concurrently to the Department
- The implementation of a platform for each region to accept data from different software and hardware systems for use by the regional emergency medical advisory council and the local or regional quality improvement committees through the RPA. The RPA would transmit the data concurrently to the Department
- The implementation of a platform used at the state level to accept data from different software and hardware systems used by the regional and local levels for use by the Department and its advisory councils.
- A system or hardware to allow the data set to be stored or warehoused by the Department.

- Requirements for security, system sustainability, the maintenance of technology and compliance with State and Federal regulations.

The Department is interested in responses from any organization, whether commercial, academic, governmental or not-for-profit that has experience in developing this type of system for any large scale entity of similar size (3-4 million records annually).

Response Documents

Responses should be written documents submitted on paper, via email, or by fax by December 8, 2008 to:

> Steven Sonder, Program Research Specialist III
> Bureau of Emergency Medical Services
> New York State Department of Health
> 433 River Street, Suite 303
> Troy, NY 12180-2299
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Results

Information from the responses to this Request for Information may be used by the Department of Health to develop a Request for Proposals (RFP) or Request for Qualifications (RFQ) for development of the software and/or hardware components of a NEMSIS compliant PCR data collections system, although no guarantee can be made that such a request will be issued. The final decision will depend on overall cost estimates and budgeting concerns.