

## Aeromedical Task Force – Group II

### Standardized Data Elements and Reporting

Based on the details of agreements with local EMS agencies or LEMSA policies, aeromedical providers generate patient care records and patient care data in a wide variety of formats for review at the LEMSA level. The lack of standardization of data and specific requirements of each LEMSA can create challenges, in particular for provider agencies that cover multiple LEMSAs.

Given that one of the main purposes of data collection is quality improvement, the “multiple format/multiple requirement” environment diverts energy and resources that could and should be going toward QI into the more basic needs to format and report to meet local standards.

As well, lack of standard data prevents pooling of data. One of the results of this has been painfully obvious throughout the many meetings of the Aeromedical Task Force – no one can actually describe the simplest measures of our overall aeromedical activity in the state – how many flights, for what reasons, from what origins to what destinations. From a medical context we have no sense of what is being done in the field or how much is being done.

With the advent of a standardized statewide EMS data set (CEMSIS), there is an opportunity to create uniformity, simplify reporting to local agencies, and allow the potential to enhance QI and data analysis for both providers and local agencies. The intended path of data in CEMSIS is via provision of data from providers to LEMSAs, who in turn will pass data to the state. While the state data reporting requirements are not yet in practice, it does not make sense that there be dual data systems to cover state and local requirements. Most EMS providers (ground and air) likely do not currently adhere to national data standards (NEMSIS), and most certainly do not adhere yet to the new state requirements. As all of our providers move to comply with state and national data standards, we have an opportunity to align air providers in a way that will serve the purposes of all stakeholders.

In review of both the CEMSIS and NEMSIS data standards, it is clear that most data elements have been developed with ground transport in mind, though most are adaptable to air transport. Our subcommittee reviewed CEMSIS and its applicability to air transport. We also looked (though not exhaustively) at a number of current reports that air providers submit to LEMSAs and felt that the CEMSIS data standards fall short of what local agencies would desire. We also found some CEMSIS data elements that are not applicable to air providers. Out of this review we have created a list of data elements that we believe could be potentially adopted by local EMS agencies to fulfill their requirements. Where we have added elements, we have attempted to adhere to NEMSIS as much as possible, though several we suggest are found in neither standard data set.

There are some areas in which there are challenges with standardized reporting. Given the myriad of utilization standards across the state, it becomes difficult to gather pooled data that will be meaningful across jurisdictions. We have developed a list of “reasons for utilization” that reflect (to the extent possible) the NAEMSP Guidelines for Air Medical Dispatch. Dispatch and

ultimate utilization of air resources are separate issues, but it would be our desire that we attempt to develop a list that would be usable for all LEMSA's.

Documentation of the interface with other local agencies (e.g. which agency made the request for response and which agencies are on scene) may also be a challenge to describe in a statewide data set – maintenance of a large standard list would be problematic and likely need frequent change. A generic list (e.g. dispatch, fire agency, etc.), would be manageable yet perhaps less functional. This information could also be related in a narrative format.

Beyond data elements, we believe that there are many other standards for the content of patient care records that should be documented and be available for LEMSA review. However, this content either does not lend itself to be put in a data format (e.g. narrative elements) or is information that has limited or no applicability from a data standpoint (e.g. past medical history, patient medications, allergies). We believe that LEMSAs should have access to an entire record (by either electronic or paper means) in a reasonable time frame and that eventually all records should be retrievable in an electronic format.

Attached is a list of what we believe are appropriate aeromedical data elements (from CEMSIS, NEMSIS, and a few in neither set) along with a list of CEMSIS data elements that we believe are not applicable for aeromedical providers. We also list other content that is appropriate for a patient care record. From these data elements, we believe most current reports LEMSA request will be able to be created.

In no way do we believe this is a definitive work, but could serve as the basis for further discussion and refinement in order to reach a standard that all participants could accept.

The list does not include all data element definitions (CEMSIS or NEMSIS). The CEMSIS data elements are available at:

[http://www.emsa.cahwnet.gov/def\\_comm/2007120507EAtt3DataStandards.doc](http://www.emsa.cahwnet.gov/def_comm/2007120507EAtt3DataStandards.doc)

NEMSIS data elements are available on the NEMSIS website at:

<http://www.nemsis.org/softwareDevelopers/downloads/datasetDictionaries.html>