**Notes from the NEMSIS Readiness Workshop:**

**9-17-2015 EMSA Head Quarters**

**Summary of Notes**

The session began with a Power Point Review of the pending NEMSIS version 3 changes which are now planned for January 1, 2017. Information on the Power Point presentation is noted below:

**Power Point Presentation**

* Purpose of the move to NEMSIS 3 is to improve data quality, incorporate performance measures more fully, support state data flexibility, and prepare for the nest step of HL7 (Health Level 7) compliance. Tom noted that standardization is critical for data quality, assessment, and exchange of information and it starts with NEMSIS 3. He also noted there is a current bill under consideration which will require ePCRs and not allow paper.
* The NEMSIS web site lists vendors who are either State or Agency (Provider) compliant with NEMSIS v3, or are Seeking NEMSIS 3 compliance. The suggestion is that a LEMSA who is working with a vendor which does not appear on any of the three lists should review their options with their vendor closely since a vendor not on any of the lists now may not make the 1-1-2017 deadline for NEMSIS V3 compliance. There is some discussion at NEMSIS of moving the deadline at 2018. More information will be available on this before the end of the 2015 calendar year.
* The history of the NEMSIS data collection efforts began in 1973 with the Emergency Medical Services System Act and developed more fully after the release of the NHTSA document, “EMS Agenda for the Future”. University of Utah secured the contract to process and maintain NEMSIS for NHTSA through a competitive bidding process and will have to compete again when their initial 10-year contract is up. The data effort now has moved from NEMSIS V2 and is now at NEMSIS version 3.4 and will soon go to 3.4.0. In terms of the data collection in California, it was noted that the CEMSIS document 164 was retired several years ago when NEMSIS 2.2.1 was started. This occurred in July 1, 2013 and became a sort of “restart” for state wide data collection.
* There is an expectation of data quality improvement. For example, NEMSSIS V3 will enhance the opportunity for hospital outcome data which we largely do not get now. In addition, V3 will support national HIE efforts such as the one California is conducting now with the ONC grant.
* Data Quality reflected mandatory and required fields and Null Values and how Null Values for those data elements can reduce data quality.
* Resource information was provided for the LEMSAs to access in order to better understand the NEMSIS data issues and the move the V3. Several NEMSIS URLs were noted and directions provided on how best to access the information.

**Group Discussion**

* **Data Quality:** 
  + **Primary Impression** (PI) was an issue for the group. It was noted that getting the information be complicated if the field staff note it in the narrative and do not code a value in the software. There are about 168 Primary Impressions and the group noted that that is too large a number for the field staff to have to work with on a call. The group suggested that EMSA reduce that number. Tom noted that EMSA has organized a Data Advisory Group whose members were identified by EMSAAC and that this group is working along the same lines to reduce number of PI data elements. Dan Lynch discussed the results of the recent EMSAAC meeting where EMSAAC discussed the usefulness of having a platform common to all the LEMSAs. This will likely be discussed more in the future. The group asked what the process was for NEMSIS reviewing the data. Tom McGinnis noted that NEMSIS does review California’s data because we are such a large part of the national data set. We generate about 3.4 million calls a year and are generally a “one-stop shop” because we represent most of the geography of the country including dessert, mountains, beaches, urban, rural, and many other geographies; because of this, use of California data can inform data quality nationwide. Tom noted that this is why NEMSIS is so interested in does review California data; we can obtain grant support for emergency medicine because about 1/6 of the emergency calls nationwide come from the area of Bakersfield south. North Coast noted that the Core Measures rely largely on PI and that if the PI values are located in the narrative and not the appropriate data element, then data quality is compromised. Tom McGinnis agreed and reiterated that CEMSIS cannot search the narrative to look for appropriate PI values.
  + **Data Submittal** was discussed. One LEMSA wanted to know how EMSA could ensure that the data submitted by them to EMSA was accurately received and accurately transmitted to NEMSIS. Mark Roberts noted that just because data is successfully transmitted from the LEMSA to CEMSIS does not mean that the data is correct; it only means that the submission was successful and was formatted and organized correctly.
  + **Data Confidence** was raised by several LEMSAs who wanted to know how they could know they could have confidence in the data submitted. Mark Roberts noted that we cannot do audits on all the data submitted that perhaps we could do some data samples. NOTE – this may be one of the uses for a Data Use Agreement between the LEMSAs and EMSA.
  + **Data Error Rate** was discussed. Several LEMSAs asked what an acceptable error rate would be for the data. Tom noted that we will likely have to develop this and that other states have rates between 30% - 2%. It was noted that we would need to have one standard data system in place for any error rate to have meaning.
  + **Use of Alternate Data Elements** was discussed as a quality issue. Marin County noted that there are ways to obtain information for specific data elements and that it would help if these were standardized to ensure that data collected by the LEMSAs reflect common values. Specifically, data to indicate injury could be collected thorough multiple means.
* **Data Standardization:** Dan Lynch noted there was support from LEMSA administrators to standardize data within California. Specifically, the LEMSAS are supportive of a standardized data dictionary with a specified data set which would make it clearer to the software vendors stateside what the criteria are for successful applications. They are also supportive of a wider use of drop-downs in the software to increase standardization. Sacramento noted they have a provider which does not want to move to NEMSIS V3. The group discussed the need for the vendors to be able to successfully bill for services and that the software needs to support that. The group also discussed Custom Data Elements and how the LEMSAs may use them. EMSA will not be using custom data elements because of the costs and the long testing process; however, the LEMSAs are free to use custom elements, EMSA just would not accept them. Dan Lynch noted that standardization is an issue with the current data set. This shows up in the Core Measures where the data collection is not the same across all the LEMSAs. He noted that we want to do this transition to NEMSIS V3 correctly and successfully and that data standardization is a big part of the effort.

Tom McGinnis noted that the intent is to move toward standardization is quickly as possible and that at some point, this would be a benefit to the LEMSAs because EMSA would be able to pull the Core Measures data from CEMSIS and not have to ask the LEMSA to develop those data. The goal is to “plug and play”.

* **Data Reports:** The group discussed the need for the LEMSAs to receive data back from EMSA. While it is correct that the LEMSAs can run their own data from their system as they need, the consensus amongst the group was there is a benefit for them to receive data back from EMSA confirming what was submitted. This is similar to the issue brought up under Data Submittals where running reports for the LEMSAs may be the best way to confirm to the LMESA that their data were accurately received and accurately transmitted to NEMSIS.

Tom McGinnis asked what the LEMSAs would like to see in a report back to them; the LEMSAs said it was hard to say and that they would like to discuss this more with EMSA. Some thoughts were:

* + IV success rates
  + airway success rates
  + false positive data
  + outlier data, or
  + comparison data

The LEMSAs noted that they had always expected data to be available to them which would allow them to compare themselves to other LEMSAs or other areas in the state. Tom McGinnis noted that that was in fact the initial intent with the current software now in use at EMSA, but that with only about ½ of the LEMSAs reporting data to EMSA, it was not possible to return back meaningful comparison data. Merced County noted that it is hard to know what data they want but that looking at aggregate data would be a good place to start in terms of seeing what data elements seem to have inconsistent data. For example if one county /LEMSA is intubating differently than anther, the values will reflect this. Dan Lynch reiterated this and noted that reviewing statewide information would be useful. EMSA shared that there are two annual reports currently under development for EMS and Trauma data which would provide solid statewide aggregate data. Kathy Bissell noted that when the reports have been finalized they will be released. She noted that since the reports are still in development, if there are data elements that LEMSAs want to see in an aggregate report, to please let her know.

* **Data Consultants and Data Validation:** North Coastnoted that it would be good to find a way to better validate the data. It was suggested that EMSA focus on the outcome data and determine data quality based on that review. Another suggestion was that a consultant be hired to determine the quality of the data which is now being entered into CEMSIS and reported to NEMSIS. Tom McGinnis noted that while other state had done consultant contracts in the past, there are now relatively few people who understand the NEMSIS V3 system well enough to generate meaningful results for this.

One LEMSA suggested that EMSA develop reports for each LEMSA so that the data accuracy for each LEMSA can be determined. Tom McGinnis pointed out that the Data Unit is in the process of finalizing some reports and we can look at those as a first step in data accuracy.

Marin County noted that any data to be submitted by the LEMSAs to EMSA /CEMSIS should have value to the LEMSAs. CEMSIS has shown that we can collect the data but the LEMSAs never receive anything back; the data cycle ends with the submission to CEMSIS.

* **Data Fields:** Marin Countyasked for how many fields we actually want to collect data. Do we have a clear reason to collect the data? Does NEMSIS have a clear reason to collect the data?
* **Data Sets** were discussed. Mark Roberts pointed out that when data is submitted, the first portion of data to be submitted is the demographic data which contain a wide variety of personal information on provider staff such as social security numbers, address, etc. The group decided to discuss this more at a later data since it appears much of these data are already contained by EMSA in Licensing and Certification and submittal of that information to NEMSIS may not be a big deal.
* **Data Use** was also discussed. Several LEMSAs wanted to know how they could be sure of the uses EMSA would make of the data. Tom McGinnis noted that EMSA has developed a Data Use Agreement (DUA) which is in the process of final review and is expected to be finalized soon.

**Comments from Mark Roberts**

* **Data Archive Access:** Mark notedthe LEMSAs can access the archives on the NEMSIS web site to see the crosswalk for the NEMSIS v2 and v3 data elements. He reminded the group that the URLS are on the Power Point slides on the last page.
* **Software:** Mark noted that NRIFS software typically used by Fire Stations differs somewhat from software typically used by private providers. He reiterated that testing needs to be done for each version of NEMSIS, so that if a vendor is approved as compliant with NEMSIS 3.3 they would still need to be approved and certified as compliant for 3.3.4.
* **AB 1219:** If this bill is signed by the governor, it may impact local provider software.
* **Stroke and STEMI:** The next big project will involve and Stroke and STEMI and will be supported by a grant from the California Dept of Public Health which will use 1:1 match data between pre-hospital and hospital data. San Mateo County indicted interest in this since they often have problems getting stroke from the hospitals because of HIPAA regulations.
* **Data Submittal Schedules:** Several LEMSAs askedMark how frequently data would need to be submitted; Mark noted thatdata are now being submitted on a variety of schedules but that when we move to NEMSIS V3 the submittals will be closer to “real time”.
* **Data Acceptance:** Mark notedthat data from non-compliant sources will not be accepted after V3 deadline. He did note, however, that data will continue to be accepted from V2 if the data is for a period of time before the deadline, for example, he noted that some LEMSAs submit their data quarterly or even annually so if LEMSAs submit their V2 data for a period prior to 1-1-2017, then the data will be accepted. Mark said he expects there to be a period of perhaps two years where LEMSAs may have to maintain two systems, V2 and V3.
* **HIE:** Mark noted that as an example, ICEMA currently has an HIE integration contract with EMSA and this HIE effort will connect records through an HIE hub. The LEMSAs were happy to hear this since it improves the data because it will include hospital data.