

I modified a little homework I had already been doing for our local agency that concerns the state data set, what we as a local agency would like to see additionally above and beyond the state dataset, and have added what data elements others agencies have been requesting in report formats to come up with a list for us to review. I apologize because I can't remember if it was Graham or Bob that was going to serve on our little sub-subcommittee as far as data goes.

What I have done on an Excel spreadsheet is to list the state (CEMSIS) data points, remark upon whether I think they are applicable to air transport, and added my own comments about some of these. I think some are excessive (perhaps even for ground agencies to report) and some are not terribly applicable to helicopter transport. However, in my area we almost always have ground responders first at the scene (except for the rare CHP case or other rescue helicopter in a park) and we do almost 100% trauma from the field perspective. So things I may think are not applicable may actually be so to you in other areas of the state.

Out of that CEMSIS list of 109 data points, there are 11 that I believe are simply not applicable for air providers. Some are data points that are reported by LEMSA's or dispatch, or ground agencies but not air providers. I also challenge the value of another 10 data points (marked as ?) in terms of applicability to air providers.

Beyond the CEMSIS data points, as a local agency I of course would like the kitchen sink, but I think realistically much of the detail we want in a PCR is not something we need in "data" reporting. What we do want is access to the PCR and a way to link it to the data (via an identification number) so we can pull up the PCR to look at cases that may "fall out" (or in the case of some agencies, they may scrutinize every one).

However, there are a few data points that CEMSIS has left out that actually are important in terms of trying to understand the data in general and to potentially understand a specific call. I have those outlined in pale yellow on the spreadsheet. The state data set does not identify the time of a vital sign, procedure, or medication, and does not tie the performance of these to an individual. I do not fully understand how you are to report these if you have multiple vitals, multiple instances of the same drug, etc. without having date/time fields. I think this is a deficit in the state data set. Not that they want to know the times, but it makes data reporting to them somewhat confusing. These are the NEMSIS data points for times and crew member ID that correspond.

Additionally the state asks for a last name but not first. We would want both, of course. The incident address (for air purposes) is going to be the scene or rendezvous site. I think that can be important in local review and understanding of an incident. These two are also NEMSIS data points. Lastly there are tube confirmation (initial and destination) data points that are NEMSIS that I believe might be of value.

Aside from these eight NEMSIS data points, there are several other NEMSIS-type data points that I certainly believe are part of every PCR and should be accessible to a local agency, but I question the value of trying to put them into a specific data format. Those would be the past history, medications, allergies, physical examination findings and narrative. I list these only because I think the PCR's should have this and the PCR could be considered its own data element (as a whole).

Lastly, I looked at some reports and QI studies from several agencies (Nor-Cal, Orange, Coastal Valleys, Monterey, and North Coast as well as some detail from CALSTAR's QI plan) to see if there are data points critical to what people are actually looking at now that may be reasonable to include as well (despite not being in CEMSIS or NEMSIS). In particular, I know that there are a couple of data points that are not gathered by our air providers now (CALSTAR and REACH) uniformly but help in terms of trying to understand a response, and are specific to aeromedical agencies. One would be the time of arrival overhead (compared to time of arrival on ground), and the other would be the time of arrival with patient in the ED. Currently we get a "transfer of care to ED" time point (not in any data set) that probably includes all the nursing time for billing purposes but doesn't indicate what time the hospital actually received the patient.

With aeromedical resources, there can be a significant difference in time of landing to time in ED and I think that's one that may be worth tracking.

As well, from a specialty standpoint, NEMSIS and CEMSIS don't have specific data points for STEMI. I don't fully understand the many roles aeromedical may play in chest pain - whether 12-leads are done at all or with any frequency, but I do know that resources are used to transport patients who have identified STEMI's by ground personnel. So I wonder if a 12-lead result data point would be of value. In our agency, we pretty much say STEMI (yes/no) as our data point.

From a trauma standpoint, some agencies did have various requirements in terms of whether patients met trauma criteria or not. Obviously those criteria vary by agency, which really throws a wrench into a standardized data system or the meaning of data beyond any particular agency. In our agency, we use ground responders data to figure out whether the air utilization was appropriate, but perhaps that is not what occurs elsewhere when aeromedical may be the first in and may make decisions about trauma destination or not. I really do not know how other systems work with this, how significant this is, and how to solve this from a data standpoint without perhaps some wider view of this.

And very lastly, I put in for discussion a data point on indication for advanced airway - consistent with the NAEMSP guidelines. We don't have that in our data set, but if there is an area that agencies focus on more (other than utilization) it is airway management. So that's in there for discussion.

I will also attach the CEMSIS data set and the NEMSIS data dictionary. I know these are kind of confusing in ways, and there's way too much info in the NEMSIS than we would ever want.

So that is my first take on this data set. From the original 109 the state has listed, 11 appear non-applicable and 10 have questionable applicability. I have suggested potentially 14 others, not all of which may end up on the final list, and obviously there is room for others to suggest other additions or subtractions. Ray wanted to try to keep it to 10 additional ones, and I came close. Let me know if you have any questions. I am quite familiar with the NEMSIS data set, but not with any of the underlying technology (XML format, etc.) so I don't really know any technical info. I'll bet even you guys aren't the "propeller heads" on this stuff.

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