EMS clinicians have long reported that quality documentation is impeded by having to scroll through extensive lists of values to represent a patient interaction.

This clinician “fatigue” can result in improper value selection just to complete the ePCR enough for the initial software validation.

Defined Lists refine the initial list of values to those most often needed and improve the accuracy of documentation by eliminating obscure and frivolous values not developed or intended for prehospital EMS encounters.
The Development of Defined Lists

Process

- 2016: NEMSIS TAC developed “suggested lists” of codes for elements utilizing standards developed by national organizations.
- Lists were organized in a hierarchical fashion, in two-steps (parent and child codes), promoting software developers to utilize code “drill-downs” for ease of use.
- Use of suggested lists was not mandatory and uptake was sporadic.
- 2019: NEMSIS TAC evaluated the codes included in the suggested lists, by comparing them to codes actually submitted in 2018 through mid-2019 (36 million records) and revised the 2016 suggested lists to reflect the most commonly used codes.

Development

- A work-group consisting of the NEMSIS TAC, State EMS Data Managers, and stakeholders participated in the Spring 2020 v3 Implementation meetings to discuss and approve a process to require the use of the 2019 Suggested Lists.
- Of the 22 NEMSIS v3 elements utilizing standardized terminology code sets, nine elements have no associated list but implement defined code patterns to implement lists such as ICD-10-CM, SNOMED-CT, RxNorm, and LOINC*.
- For the remaining 13 elements, suggested value lists become “defined” (i.e., “Required Use”).
  *See https://www.nlm.nih.gov/healthit/index.html for more information on HHS Clinical Terminology Standards.

Implementation

- Refined the suggested list of values to those most often used.
- Defined lists must be presented to the provider at the time of patient care documentation.
- Improve the accuracy of documentation by eliminating obscure, redundant and frivolous values.

Baseline List

Lists are designed to include greater than 90% of needed codes to document a patient encounter. Agencies can build upon these lists, if needed. They are not intended to capture the nuances of localized care from every corner of the nation. For instance, Colorado will need to reflect ski injuries while California documents more surfing injuries.

Type of EMS Event

The codes are selected primarily to reflect a 9-1-1 response. Critical Care and Transport Teams will have lists that are more comprehensive than a typical scene response crew would require.
Elements affected by Defined Lists

**Procedures**
- eProcedures.03 - Procedure
- sConfiguration.03 - Procedures Permitted by the State
- dConfiguration.07 - EMS Agency Procedures

**Medications**
- eMedications.03 - Medication Administered
- sConfiguration.04 - Medications Permitted by the State
- dConfiguration.09 - EMS Agency Medications

**Symptoms**
- eSituation.09 - Primary Symptom
- eSituation.10 - Other Associated Symptoms

**Impressions**
- eSituation.11 - Provider's Primary Impression
- eSituation.12 - Provider’s Secondary Impressions

**Cause of Injury** (eInjury.01)
**Incident Location Types** (eScene.09)

Example of the Hierarchy

This is a sample of Primary and Secondary Impression (eSituation.11 and .12)

<table>
<thead>
<tr>
<th>General classification</th>
<th>More precise description</th>
<th>ICD-10 CODE</th>
<th>ICD-10 DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>Angina (pain related to heart)</td>
<td>120.9</td>
<td>Angina pectoris, unspecified</td>
</tr>
<tr>
<td></td>
<td>Arrhythmia</td>
<td>149.9</td>
<td>Cardiac arrhythmia, unspecified</td>
</tr>
<tr>
<td></td>
<td>Cardiac arrest</td>
<td>146.9</td>
<td>Cardiac arrest, cause unspecified</td>
</tr>
<tr>
<td></td>
<td>Chest pain, NOS</td>
<td>R07.9</td>
<td>Chest pain, unspecified (not angina)</td>
</tr>
<tr>
<td></td>
<td>Myocardial Infarction, NOS</td>
<td>I21</td>
<td>Acute myocardial infarction</td>
</tr>
</tbody>
</table>

How does this impact vendors?

- EMS Software Vendors will be required to **demonstrate** that their software can present the **Defined Lists** during v3.5.0 software compliance testing.
- Software Vendors will also need to demonstrate their process for an agency or state to add a value that is needed for their particular area (Custom Value).
- NEMSIS will **NOT** dictate how a software user interface will present codes, but will validate the ability of EMS software to implement Defined Lists.

How does this impact State/Territory Offices of EMS?

- May require training with agencies and field clinicians.
- Not a required addition to the State Schematron.
- No requirement to modify state validity rules to incorporate Defined Lists.
- **No impact to the new NEMSIS v3.5.0 standard.**

How does impact EMS Clinicians?

- Field software products should have a minimal list with a logical hierarchy to select appropriate values for documenting a patient encounter.

Find more resources about Suggested Lists to Defined Lists at our website: https://nemsis.org/nemsis-101/
https://nemsis.org/technical-resources/version-3/version-3-resources/
Contact Us by email at: nemsis@hsc.utah.edu