National Pre-Hospital & Hospital Data Integration Listening Session Summit

Office of EMS, National Highway Traffic Safety Administration

NEMSIS TAC
NHTSA’s National EMS Information System

- **Documentation standard** for local EMS patient care reports
- **Data element dictionary** for point of care collection
- **Compliance testing** for ePCR software
- Facilitation of **interoperability and exchange standards**
- Collection of select data into the **National EMS Database** from every EMS activation
  - Online National EMS Database for research and surveillance
THE PORTABILITY OF DATA - the NEMSIS STANDARD.

Patient Care Report Software

Agency A’s Software

Agency B’s Software

Agency C’s Software

Medical Device

911 Center

The State Database

Trauma Registry XML Transfer - In Progress (near Future)

National Database

NEMSIS

ems.gov
States and Territories Submitting to the National EMS Database
# National Public-Release Research Dataset

<table>
<thead>
<tr>
<th>Year</th>
<th>Reporting States</th>
<th>Reporting Agencies</th>
<th>Number of Events</th>
<th>Treated and Transported 911 Response</th>
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</thead>
<tbody>
<tr>
<td>2009</td>
<td>26</td>
<td>1,673</td>
<td>5,767,090</td>
<td>3,367,668</td>
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<td>2010</td>
<td>31</td>
<td>3,529</td>
<td>9,874,748</td>
<td>4,874,061</td>
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<td>2011</td>
<td>35</td>
<td>5,395</td>
<td>14,371,941</td>
<td>7,701,605</td>
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<td>2012</td>
<td>43</td>
<td>6,415</td>
<td>19,831,189</td>
<td>10,733,925</td>
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<td>2013</td>
<td>45</td>
<td>8,183</td>
<td>23,897,212</td>
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<td>2014</td>
<td>48</td>
<td>8,785</td>
<td>25,835,729</td>
<td>13,769,286</td>
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<td>2015</td>
<td>49</td>
<td>10,137</td>
<td>30,206,450</td>
<td>15,729,516</td>
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<td>2016</td>
<td>49</td>
<td>9,993</td>
<td>29,919,652</td>
<td>15,361,777</td>
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<td>2017</td>
<td>35</td>
<td>4,016</td>
<td>7,907,829</td>
<td>4,233,046</td>
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<td>2018</td>
<td>43</td>
<td>9,599</td>
<td>22,532,890</td>
<td>10,675,178</td>
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</tbody>
</table>

1 Number of reporting states and territories of the United States.
2 Only including the events that are 911 calls, treated and Transported by EMS.

# 2019: 31,650,132 (as of 1/27/2020)
Ensure Data Quality
NEMSIS Support of HIE

1. Patient Care Report (fwd)

2. Trip Report

3. Patient Outcome Report

4. EMS Incident Report

5. NEMSIS Dataset

Hospital

Vehicle

Agency

State
HL7 Implementation Guide for CDA®
Release 2 – Level 3:
Emergency Medical Services; Patient Care Report, Release 1 – US Realm

June 2014

Sponsored by:
Clinical Interoperability Work Group
Structured Documents Work Group
Plan for NEMSIS Version 3.5.0

• Problem
  – ANSI approved guide is a “one-off” that hospitals did not want to implement.

• Course Correction
  – Manipulate the CMS approved CCD to contain NEMSIS elements
    • Can support Level-1 and level-3 implementations
  – Utilize the CMS Unstructured Document as a “wrapper” for a PDF
  – Utilize HL7 V2 implementation
HL7 CDA® R2 Implementation Guide: Emergency Medical Services Hospital Outcomes Report, Release 1
January 2016

HL7 Normative Ballot

Sponsored by:
Clinical Interoperability Work Group
Emergency Care Work Group
Structured Documents Work Group
Plan for NEMSIS Version 3.5.0

• Problem
  – HL7 ballot defeated - was a “one-off” that hospitals did not want to build to.

• Course Correction
  – Develop implementation guide for selected Patient Discharge Summary elements…and vendors standardize translation to NEMSIS
  – Develop in FHIR with vendor translation
  – Use existing “query-based” models (CareQuailty)
Beyond Health Level 7

• Harmonization with other Standards
  – Justice Domain
  – EDXL-TEP
  – NIEM

• Facilitate Standards
  – CAD
  – Medical Devices
  – AACN (VEDS)

• Introduce Modules
  – Air Medical
  – Critical Care
  – Community Paramedicine/Mobile Integrated Healthcare
Questions?

nemsis.org