2020 NEMSIS v3 Annual Implementation Meeting

Raw Discussion Notes from Breakout Sessions

Day 1: COVID Discussion

What characteristics of the epidemic were not adequately addressed by custom additions?

- Extend ICD-10 to utilize U codes
- More specific impression code that directly pertains to current issue
- Some states averse to using Custom Elements, some poor implementation at State level. Many states chose not to use Custom Elements, and then they had to be removed after adding.
- Put codes into Standard
- States already tracking ILI, did not utilize many of Custom Elements
- Reuse of PPE element was needed, international less relevant, contact tracing, administrative addendum added to collect pt data post-call
- Speed of establishing Custom Elements – have them ready sooner
- Series of different kinds of elements, trial runs for upcoming seasons
- Watch supplies being used, surveillance trends
- Repetitive questions/elements
- Cost of process implementation – cadence of release, grouping, get out ahead, be more agile
- Selection lists became difficult with dev
- Billing overlap with U codes
- Prep time
- List of States implementing Custom Elements would have been helpful

Day 1: COVID Discussion

What characteristics of the epidemic were not adequately addressed by custom additions? (con't)

- ILI Testing – involvement of EMS, vaccination in field (data collection, implementation), vaccine admin date, S/S post vaccine, vaccine Lot # would be needed, consider 2-cycle dosing, documentation for pt education
- ICD-10 Codes for Telemedicine, add appropriate values
- Standardize COVID custom elements
- NFIRS was capturing data as well, double documentation for some
- Importance of putting Custom Elements into the next version or CP to current standard
- Definition for eCustomConfig for geo-related questions – defined as type OTHER but difficult to implement in software
- International questions in relation to regions –specific location as opposed to general areas. Implementation is an issue
- Use of general symptoms over COVID-specific impressions more valuable
- Define documentation for PUIs, inconsistency in criteria for PUI
- Family members with ILI S/S, current immunization status
- Charting is already too complex for field clinicians
- Surveillance delay with waiting for ePCRs to finish/submit
- Region/city: the Cities traveled Custom Element is a GNIS code – only allows for US cities. What about specific international cities that do not fit GNIS.
- Custom Elements designed for states with multiple vendors to facilitate data exchange. When an area uses a custom element and the state doesn't use or accept how is that useful to statewide analysis.

Day 1: COVID Discussion

Could the NEMSIS DEM section be used to address resource-related issues?

- Agencies aren't making DEM changes often, could produce stale data. Agencies just not updating DEM frequently enough.
- Pop-up data in field is an option but would engage field clinician not agency level, agency report could be an option
- Already difficult to keep DEM updated. Already complicated.
- Financial concerns may not be appropriate for field API, staffing may not in field PCR either, does an agency WANT to send financial info up the chain.
- Possible but should is the question. May not be fresh enough for decision making. How would the data be used. Do we already collect other places?
- Only states with mandate for DEM may only find it useful. Chicken-egg –if it's added would more states do DEM.
- Where does the benefit come from – it is a state need?
- Potential for API, or does this require its own dataset
- States would have to implement work flow to get timely and updated DEM. Some states cannot enforce ePCR within 72 hours.
- This set doesn't really fit in the DEM file. Is this too much info specific to an agency as a business.
- Not all states collect DEM files. Field level collection could be skewed based on who is entering data.
- Where does the external COVID Resource Reporting Tool fall into this? This would replace that external tool.

Day 1: COVID Discussion

Could the NEMSIS DEM section be used to address resource-related issues? (con't)

- Administrators don't all support updating DEM regularly. PPE is difficult to track per incident in some software.
- Generic data isn't always actionable. Consider burn rates.
- Where is the benefit to the agency?
- Some issues may apply more to clinicians and some to administrators.
- May be better placed within ePCR data pertaining to exposures. Exposure information may not be available when completing the PCR.
- Duplicate data entry – other areas of data collection.
- Question of real-time application. DEM is not as real-time as needed.
- Other issues such as Drug shortages, mixing pt care and operational data, may benefit from its own dataset.
- ePCR should not be used as supply chain database.
- All changes incur implementation expenses. Data integrity also a concern.
- Use own dataset. May be better suited as more abstract and not as specific to COVID.
- Hospitals have a different system – can current process be leveraged.
- Is NEMSIS the right collection tool?

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DAY 2

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Day 2: HIPAA & Data Exchange

What additional legal (instructional) documents would be helpful in facilitating bi-directional data exchange?

- Know how opting out for patients will work
- Business agreements might convolute rather than help
- It's not just legal – political, financial, operational barriers
- Need more meeting and educating of hospitals, can't just be solved with documents; clinical staff are scared to give any information to EMS (lacking knowledge of what information can be shared)
- Identify what data would be exchanged and under what circumstances
- Federal government give their stance – it is easy to find an attorney with the opposite stance
- Website with .gov at the end pushing the conversation about sharing data
- Standard for bi-directional data sharing follows a specific standard to show all the laws are being followed
- Case study highlighting benefits to the hospital

Day 2: HIPAA & Data Exchange

What additional legal (instructional) documents would be helpful in facilitating bi-directional data exchange? (con't)

- Facilities don't want to be the ones to go first – a standard would be a great place to start
- Sense of value for sharing the data bi-directionally
- Recognize the other considerations and finding ways to incorporate them all – ensure none of us get it wrong
- Vendor to vendor data exchange document
- Document outlining compliance with a cloud provider vs a brick and mortar provider
- Central data agreement that includes various health information – death records
- Checklist or flow chart to see what data can and cannot be shared – hospital and EMS
- Multiple laws that overlap – research at federal and state level
- When and how to stop sharing – what happens when you need to stop sharing or are there circumstances when you have to share
- How do we share this information with the field level providers in the agencies – checklist of educational material to be covered with HIPAA or SAMSHA trainings

Day 2: Tools for v3.5

Schedule, State Support, Tracking Transition

- Personal attention was successful in the past – agency by agency (virtually and physically)
- Not too aggressive – timeline
- Video from NEMSIS to start educating agencies to give a heads up that the changes are coming – changes that are in the revision
- State information and timelines published on the NEMSIS site – like the map
- More discussion on the timeline – not a lot of input from states
- Implementation burden – eDisposition changes will be disruptive to vendors and agencies
- Timeline for states with heavy customization
- What Schematron does the state accept or use
- Uptick in custom element at a certain percentage – roll into national
- Include in state GIT repo what versions the state is using, when they will stop using them
- Like the fact sheets, code translations
- Custom field catalog shared between states
- US map for 3.4 is helpful, also see in Excel to track
- Weekly emails for state resource updates are helpful
- Make sure any version of Schematron update is reliant on date of the chart – vendor and state sides
- Timeline is too unrealistic – certain set of steps that need to take place (domino effect, not one timeline for everyone)
- If not fulfilling 3.4 but are looking to transition to 3.5 – additional burden to get agencies to submit data (can agencies submit 3.4 and 3.5 to the repo)
- States decide when to go to 3.5

Day 2: Tools for v3.5

Schedule, State Support, Tracking Transition (con't)

- Vendors have to comply with the states and not NEMSIS timeline
- State have statutes about NEMSIS versions – have to go to new version if not ready
- Agencies will be on software that are not compliant and have to search for a new one – long process (6 months)
- State releases data dictionary with plain English Schematron rules for their state
- What version are the states accepting – may say they are on 3.4 but are also accepting 3.3.4
- Break information into 3.4 and 3.5 on the website – like v2 to v3
- Beta version of what the states are working on
- Push out timeline a little
- States should tell vendors when to meet the requirement
- States can't commit until the window is no longer moving, no additional elements
- Get ET3 released then move to 3.5
- COVID-19 enhancements and ET3 that pushes out vendor timeline
- Change log that is easier to read – expand on data behind the map (transition timeline)
- Training burden all the way down to the agency level – eDisposition
- State testing outside of the TAC determines the timeline – number of agencies and vendors
- The longer on 2 versions, the harder it may be to transition to 3.5
- Best practices for states on how to get information out to their agencies – not be dependent on the vendors (some states to webinars). Something for data managers that they can use
- Change log not so technical so that agencies can understand what's going on
- Document for 3.5 – spreadsheet of what is collected nationally, what is shared publically with all the states listed
- Data dictionary with rules and examples of what wording states can use and copy to provide to their agencies
- States budget years in advance, transition might not be in their budget yet – could be a few years before it is

Day 2: Improving HIE

Decisions, eOutcomes, FHIR, XSD, CCDA R2 D/C

Alerting the hospital to ensure data flows into the ED system

- Consolidated ePRC short form
- Separate application to get the information into the EMR system
- Not everyone can take FHIR
- Make use of the California model - element level data is exchanged
- Need to look at FHIR vs. Core because of the Cures Act that is requiring FHIR use
  - 2022 timeline for change to implementing FHIR
  - What infrastructure is needed, especially in rural areas - need solutions to handle the standards
    - There is more funding for rural areas
- Already decided to only use FHIR
- Need a unified approach to send it to hospitals and get the hospital buy-in
- Easier for vendors to connect to an HIE
- What ethical considerations need to be made with the large amount of data being shared - who accesses and uses the information in the HIE
- HIE connect a thon
  - Working to get adoption for specific use case for EMS vendors to work with CERNER and EPIC - can work with them to help create a standard
  - Andrea Fourquet - IHE USA informatics consultant

Day 2: Improving HIE

Decisions, eOutcomes, FHIR, XSD, CCDA R2 D/C (con't)

- How will HL7 map/align with NEMSIS 3.5
- Consider:
  - FHIR v4 that moves data from ePCR to EHR or HIE
  - HIE vendors are part of a work group
  - Reach out to Juan Esparza to learn more about what he is doing in FL
  - Have this conversation at a state level to brainstorm how to enforce use of this
  - Funding for development and sustainment of this project

Hospital EHR push/pull to EMS record (file)

- A separate document with separate lifecycle makes sense for outcomes
- Get data back to end user (EMS clinicians and agencies), may not need to build a new process if the hospital sends back to the ePCR that then goes to NEMSIS (repeat NEMSIS file back to agency after the outcomes information gets populated)
  - Run into challenges of validation - data quality standards
    - A separate document would allow for data quality standards
- Need some integration with each hospital and same with the hospital back to EMS
  - Need one endpoint at the TAC that all patient outcomes data connect to and the TAC populates the outcomes data and send it back to agencies
    - eOutcomes is a separate document
- Separate document for eOutcomes
  - Reluctance to receive data from a non-EMS provider back into an ePCR - not modify the document originally created by the EMT
    - There is concern from agencies for liability reasons but do need the outcome information but scary to have it in the record - if the original is modified by someone else
      - Maybe include a data source element - not currently an option
  - Could have multiple outcome set because a patient went to multiple doctors
    - Separate document = separate outcomes
- Whitepaper if outcome data is documented from a different crew (legal precedent for outcomes data populated from the hospital instead of the agency)
  - Is it listed in the ePCR or the hospital record and how does that work - there is some legal standing on this already
  - Check with NJ for what they do

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Day 3: ET3

Tools, Support, Timeline, etc.

- Webinar for participants, will there be one for the vendors – would be helpful for the vendors
- Allow vendors to participate in the data submission webinar as well as state data managers
- User meetings specific to vendors
- Build scenario based use cases for the vendors
- Make criteria available for new records vs. resent records
- 48 hours is too narrow of a window to resubmit records
- Telehealth video recording for HIPAA?
- Federal definition for telemedicine?
- Testing everything out with the vendors – TAC will coordinate
- Vendor documentation for the onboarding process
- Jan 2021 start feels aggressive with lack of information available at this time

Day 3: Defined Lists

How can we help States limit additions?/How do we implement analytical roll-ups at the State level?

- Make national level contain everything – states filter out codes they don't want
- Control the roll-up and map to existing codes that are more relevant to the state
- Provide templates for different types of users – complexity when needed to adjust on the dev side
- Create a working group to determine when and why codes should be added
- Store the actual value and the roll-up value as 2 separate data points
- Allow editing of the basic list that vendors supply
- Meet with agencies and prune down the list of codes
- Roll up needs to be built into reporting at the state level
- 2 different sets – one more general and one more granular
- Labeling of codes
- Indicator based roll-ups – not mutually exclusive roll-ups

Day 3: Defined Lists

How can we help States limit additions?/How do we implement analytical roll-ups at the State level? (con't)

- Can be solved between the default list and the analytical roll up
- Orientation for new clients about the codes/lists
- Shouldn't have to control as tightly if do the roll-up correctly
- More general set of codes for crews to use
- Be as specific as you can on the front end, roll-up is on the reporting side
- Need to maintain flexibility – existing structures continue; QI initiatives that rely on existing structures; rolling up codes in a structure that works at a higher level
- Roll up at the national level, not the state level
- Pathway for EMS agencies to provide insight on the lists
- List come from states, vendors comply
- If any changes needed – do a request with the vendor
- State level – ability to sync the lists that gets passed down to the local level
- Verbiage needs to be more clinical
- Verbiage needs to be less clinical and more user friendly

Day 3: Data Submission Lag

How can we improve timely record completion?/How do we facilitate immediate submission to NEMSIS TAC?

- What is the state requirement for submission; state mandates and requirements
- QA process after record is submitted – how long does that take/what is the work flow
- Schematron rules that are too complex
- Consider a different element than eTimes.03 – maybe 05
- Dedication to submit the data needs to start at the field
- Standards by state are reasonable and include buy in from EMS agencies
- Need for state and local regulatory agencies to create standards
- Efficient ways for agencies to submit records easily
- Target by NEMSIS for timeliness of data reception
- QA and amendment process at the agency level before it goes to the state
- Make flow better – don't show irrelevant fields for the specific call
- Custom required fields – more info for provider to remember and fill out before completing report
- Is the goal of NEMSIS broadened to include surveillance
- Shifts that are 48-72 hours long could delay closing records – anything longer is overtime
- State systems don't process immediately or in a timely manner – customers modify workflow to not be real time/immediate submission to the state

Day 3: Data Submission Lag

How can we improve timely record completion?/How do we facilitate immediate submission to NEMSIS TAC? (con't)

- Incentive at the agency level to get reports closed faster
- Agency workflow with supervisor/QA review – this takes more time; could unreviewed runs go up?
- Timeliness and relaying errors to the medics – how quickly is that being relayed back to get fixed?
- Pushing out Schematron without heads up to agencies – that could cause more errors and increase time
- Streamline update process at repo level – UUID to submit multiple times to the same record and link up correctly
- Relaxing web services to accept incomplete records
- Quality score associated with records that are not well defined – fear of not meeting that when submitting quickly
- State awards/recognition for timely submissions
- Collect and Receive vendors – offer option to send right away and not give option for batch sending
- Identify and quantify where the issues are
- Encourage faster submissions during certain time points – COVID
- Indicate in the dataset when a record is incomplete
- Adding date/time chart was locked on the vendor side between the time the state received it
- States provide digest on number of charts received weekly to help identify any Q sizes or differentials
- Which codes mean you should retry sending later vs a permanent failure code
- Promoting a greater understanding of resubmission for all stakeholders – holding and settling periods
- New target for real-time data collection – formalize a plan
- Sending reports over and over slows the system down