

NEMSIS Version 3 Implementation Meeting

August 20-21, 2018 Silver Baron Lodges, Park City, Utah

Workgroup: Next Generation Schematron Business Rules

Approved Decisions:

- 1. The utilization of Schematron to enable data validation rules will continue as currently envisioned.
- 2. Recommendations should focus on documentation, resources, and technical assistance to help improve the national and state Schematron schemas.

Work Group Questions:

- 1. Not all of the enhancements mentioned in the NEMSIS Schematron Assessment are considered implementable at the current time. Those suggestions that could be addressed are listed below. Are there issues that should be considered when developing an implementation strategy for the following suggested enhancements:
 - a. Changes in Schematron Requirements
 - Modify the NEMSIS compliance certification process for "Receive and Process" systems to include the ability to generate Schematron schemas.
 - ii. NOTES: The Schematron produced by the software should not duplicate the National Schematron.
 - Do we need to require that rules be marked as State/National in software?

Need to publish a feature set, test would be to write a specific set of rules, but the actual technicalities of those rules could differ.

Rules applied should be the relevant rules for when a record was created (eg. Jan rules used for record created in Jan even if submitted later).



R&P vendors seem willing to complete this requirement.

- b. Changes in National Schematron Schemas
 - i. Make constraints more atomic
 - ii. Identify conditional constraints for every national element
 - iii. NOTES: Some would like a list of the assertions at the national level.

No concerns about these two changes.

- c. Changes in Documentation and Resources
 - Integrate national Schematron schema documentation into the NEMSIS data dictionary
 - ii. Create a Schematron rule library
 - iii. Educate states on the purpose of state Schematron schemas
 - iv. Educate states on the impact of validation rules
 - v. Clarify what's in the XSD schema vs what's in the national Schematron schemas
 - vi. NOTES: Some would like to implement rules numbers or ids for the national rules.

List NV/PN/nil rules on EVERY page where elements are affected.

A rule library would be helpful, especially if rules could be tagged (e.g. cardiac arrest, stroke, trauma, etc). Library could include sources other than state Schematron files (e.g. CARES). Some interest in having nationally **recommended** rules?

Some would like help for states to resolve duplicated resources. Having better Schematron, XML training for NEMSIS TAC state and vendor support would help.

Create a best practices document for states/agencies on how to work with agencies to implement a new rule/file.

Require Schematron files to be submitted to the TAC via WS.



In any public release of NEMSIS data need more clear explanation (in layman's terms) what elements & rules contributed to the creation of the dashboard or report.

New proposal: Move some XSD constraints to National Schematron files (e.g. mandatory elements).

- d. Changes in Technical Assistance
 - i. Help states with versioning and change control

NOTES: Create some best practices/resources to assist with this (including examples).

Find some way to implement date ranges on Schematron implementation.

- e. Other Changes
 - Web Services: Define a structure for record-level processing results
 - 1. Is this worth revising...or should we take some concerted time and review the entire National WSDL for needed enhancements?

NOTES: Record level processing result would have a big impact.

Is potential file size and Schematron versioning enough of a concern that we should be directing users to submit only one file at a time? It might be easy to just limit to one record per file.

- ii. Allow systems to receive partial or invalid data
 - 1. In addition to the reasons cited by Josh, Dan Vanorny has also mentioned that the bottleneck associated DEM files might be relieved with some action on this topic.

NOTES: All elements would be optional in XSD, mandatory-ness would be enforced in Schematron.

2. Are there recommendations in the NEMSIS Schematron Assessment document that we are not considering, that we should?



a. NOTES: Promote eResponse.01 matching dAgency.02/01 to ERROR from WARNING.

There is concern about consistency in validation in direct entry vs. WS submissions in state systems.

3. Support for the 2016 version of the ISO Schematron standard (ISO/IEC 19757-3:2016)

Strategy moving forward: Some new ideas that need to be brought up on vendor and state calls.