Free!
Easy-access tool to test for HL7 v2 conformance

- ✓ EHR and IIS vendor self-testing
- ✓ AIRA Assessment Testing
- ✓ HIMSS/CNI/CDC EHR Certification Testing
- ✓ ONC HIT Certification Testing
- ✓ On-boarding

Better data quality, faster interface development, and reduced costs

Issues and Need

- CDC developed and prescribes use of HL7 v2.5.1 Implementation Guide for Immunization Messaging R1.5 for
  - Submission of immunizations
  - Query and response of immunization records
- Implementers must apply Standard as specified for seamless data exchange

NIST Immunization Test Suite
https://hl7v2-iz-r1.5-testing.nist.gov/

For more details contact:
Robert Snelick
robert.snelick@nist.gov

Advantages

- Implementations that conform to the standard are more likely to interoperate seamlessly upon installation, saving both time and money

Description of NIST HL7 v2 Immunization Test Suite

- Testing checks for non-conformance to Standard
- NIST test tool includes both context-free testing and context-based testing
- Context-free testing provides a simple method for testing message structure and vocabulary
- Context-based testing provides
  - Additional testing capabilities through the means of directed test cases and example messages
  - A powerful mechanism to help implementers understand the intent of the implementation guide via typical real world scenarios

The NIST HL7 v2 testing tool is used by implementers for self-testing, ONC EHR Certification, HIMSS EHR Certification, and AIRA Assessment

6/16/18

NIST
National Institute of Standards and Technology
U.S. Department of Commerce

ITL
INFORMATION TECHNOLOGY LABORATORY

NIST Immunization Test Suite – HL7 v2 Message Testing

Select **HL7 Context-free** from the Menu Bar.

Select conformance Profile.

Load the message into the Message Content window.

Click the Validate button to initiate validation of the message.

View the validation results displayed in the Message Validation Result window.

Click on the **Report** button to view the **Message Validation Report**

Home | 1 SOAP Envelope | 2 ⇄ SOAP Connectivity | 3 ☑ HL7 Context-free | 4 ▦ HL7 Context-based | @About | ▤Documentation | ♣ Hello Guest

Test Execution

Profile Group Type: | Public

Profile Groups: | Immunization 2.5.1 IG Release 1.5

▦Profiles

▾ Immunization 2.5.1 IG R
- ☑ VXU-Z22
- ☑ ACK-Z23
- ☑ QBP-Z34
- ☑ QBP-Z44
- ☑ RSP-Z31
- ☑ RSP-Z32
- ☑ RSP-Z33
- ☑ RSP-Z42

▦Profile: VXU-Z22

◉Validation | ▤Report | ▦Profile Viewer

▦ Message Tree
- ▸ MSH[1]:Message Header R[1,1]
- ▸ PID[1]:Patient Identification R[1,1]
- ▸ PD1[1]:Patient Additional Demographic RE[0,1]
- ▸ NK1[1]:Next of Kin / Associated Parties RE[0,*]
- ▸ ORC[1]:Common Order R[1,1]
- ▾ RXA[1]:Pharmacy/Treatment Administration R[1,1]
  - ▸ RXA[1]-1[1]:Give Sub-ID Counter R[1,1]
  - ▸ RXA[1]-2[1]:Administration Sub-ID Counter R[1,1]
  - ▸ RXA[1]-3[1]:Date/Time Start of Administration R[1,1]
  - ▾ RXA[1]-5[1]:Administered Code R[1,1]
    - ▾ RXA[1]-5[1].1:Identifier R
      - 33332-0010
    - ▸ RXA[1]-5[1].2:Text RE

▣ Message Content | ⟳ 4s ▾ | ◉ Validate | ◉ Load Example | ☞Browse | ⬇Download | ✖Clear

```
1  MSH|^~\&|Test EHR Application|X68||NIST Test Iz Reg|20120701082240-0500|
2  PID|1||D26376273^^^NIST MPI^MR||Snow^Madelynn^Ainsley^^^^L|Lam^Morgan^
3  PD1||||02^Reminder/Recall - any method^HL70215||||A|20120701|201
4  NK1|1|Lam^Morgan^^^^L|MTH^Mother^HL70063|32 Prescott Street Ave^^Warwic
5  ORC|RE||IZ-783274^NDA||||I-23432^Burden^Donna^A^^^^^NIST-AA-1^^^^PRN|
6  RXA|0|1|20120814||33332-0010^Influenza, seasonal, injectable, preservati
7  RXR|C28161^Intramuscular^NCIT|LD^Left Arm^HL70163
8  OBX|1|CE|64994-7^Vaccine funding program eligibility category^LN|1|V05^v
9  OBX|2|CE|30956-7^vaccine type^LN|2|88^Influenza, unspecified formulation
10 OBX|3|TS|29768-9^Date vaccine information statement published^LN|2|20120
11 OBX|4|TS|29769-7^Date vaccine information statement presented^LN|2|20120
```

☑ Message Validation Result | ❶ Help

| 2 Errors | 2 All | 17 Warnings | 21 Alerts | 1 Value Set | 1 Coded Element | ✖ Remove Duplicates | ◉ Report |

☐ Highlight All

Path	Description	Line #
RXA[1]-5[1].1	The value '33332-0010' at location Component RXA-5.1 (Identifier) is not member of the value set NDC_Use or NDC_Sale	6
NK1[1]-3[1].3	Invalid Code System. Expected: 'HL70063'; Found: 'HL70064'	4