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Health Information Technology (HIT)   
Standards Testing Infrastructure

**HL7 Version 2.6 Implementation Guide:**

**Vital Records Death Reporting,**

**Release 2**

NIST Clarifications and Validation Guidelines

Version 1.0

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**DOCUMENT CHANGE HISTORY**

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# Introduction

This document lists conformance testing issues and associated policies derived by NIST based on a review of the HL7 Version 2.6 Implementation Guide: Vital Records Death Reporting, Release 2, June 2016. The policies listed in section 2.0 of this document are implemented in the NIST validation test tools.

# Validation Policies

## General Policies

| **Policy** |
| --- |
| The NIST test tool will validate optional elements against the HL7 Version 2.6 Base Standard; be aware that unexpected validation results may occur if viral record death reporting messages conformant to local requirements are submitted to the test tool. |
| The NIST validation tool evaluates only testable assertions identified as conformance statements. The tool will not perform validation against any business rules or comments implying requirements in the Implementation Guide. |

## Specific Policies on Issues

| **Issue** | **Policy** |
| --- | --- |
| The Implementation Guide for Vital Records Death Reporting, Release 2, identifies the following business rules. Should they be considered as testable assertions?   1. XDA\_D-6: “US” is the default since most reports will relate to events taking place in the United State 2. ELR-4: This component is required if the field identified in components 1,2, and 3 is a repeating field. 3. XDA\_BP-3: City is valued for birth places within the United States. 4. XDA\_BP-4: City is valued for birth places within the United States. 5. XAD\_BP-3: City is valued for birth places within the United States 6. XAD\_BP-4: City is valued for birth places within the United States. 7. XAD\_BP-6: Country is valued for birth places outside of the United States. 8. PDA-3: Certification of death is inferred if values have been provided for PDA.04 and PDA.05. 9. Observation Identifier **“Death pronouncer details”:** If an identifier cannot be provided because the person is not licensed, the value “NA” should be used in place of the identifier. | The NIST validation tool evaluates only testable assertions identified as conformance statements. The tool will not perform validation against the business rules identified in the Implementation Guide. |
| The Implementation Guide for Vital Records Death Reporting, Release 2, Death Report Observation Identifiers:  The following comments are not captured as conformance statements.   1. **Cause of death**     1. “Observation value maximum length: 120 characters and Death Certifier Observation value maximum length: 20.” 2. **Death Certifier** –    1. **“**The element is required if the death has been certified”. 3. **Cause of Death, Cause of death entity axis code, E-code indicator, Part\line number, Reserved position, Sequence within line.**    1. “This linkage is implemented through the use of observation sub-id” 4. **Death Cause Other Significant Conditions**    1. “Observation value maximum length: 240 characters” 5. **Death certifier (address)**    1. “The element is required if the death has been certified”. 6. **Pregnancy edit flag**    1. The observation only applies to female decedents | NIST general validation policy applies. The NIST validation tool evaluates only testable assertions identified as conformance statements. |
| The Implementation Guide for Vital Records Death Reporting, Release 2 contains various DTM flavors and the format is provided as comments instead of conformance statements. | NIST agreed to considered all DTM flavors comments as testable assertions, therefore the will be considered for validation. |
| The MSH-9 does not include conformance statements to captured the following requirement in the Implementation Guide for Vital Records Death Reporting, Release 2: “For the death report messages, the value will vary” | A recommendation was submitted to expand this requirement as conformance statements. The validation tool will evaluate as follows:  **VR-xx:** The value of MSH-9 (Message Type) SHALL be “ADT^A04^ADT\_A01”  **VR-xx:** The value of MSH-9 (Message Type) SHALL be “ADT^A08^ADT\_A01”  **VR-xx:** The value of MSH-9 (Message Type) SHALL be “ADT^A11^ADT\_A09” |
| There are not conformance statements associated to MSH-21. The Implementation Guide for Vital Records Death Reporting, Release 2 only provides the following requirement in a comment; “The field is used to indicate the Interaction Profile, and Acknowledgement profiles that should be referred to when parsing the message” | NIST agreed to performed validation against the following conformance statements per each profile:     * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**PSDIA04\_v1.0**’ * The value of MSH-21[1] (Message Profile Identifier) Shall be **‘PSDIA08\_V1.0’** * The value of MSH-21[1] (Message Profile Identifier) Shall be **PSDIA11\_V1.0’** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**JDIA04\_V1.0’** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**JDIA08\_V1.0**’ * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**JDIA11\_V1.0’** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**RVCA04\_V1.0’** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**RVCA11\_V1.0’** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**CCODA04\_V1.0** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**CCODA08\_V1.0** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**CCODA11\_V1.0** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**CREIA04\_V1.0** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**CREIA08\_V1.0** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**CREIA11\_V1.0** * The value of MSH-21[1] (Message Profile Identifier) Shall be ‘**ACK\_V1.0’** |
| The EVN-4 values in the “Death Reporting Event Reason” value set exceeds the maximum length defined in the Viral Records Death Reporting Implementation Guide. | The validation tool will accept the values in the “Death Reporting Event Reason” value set. The length requirement is in conformance with the HL7 Standard, but the HL7 standard should not constrained the values defined in a local value set. |
| Segment and Field Description Section - How the cardinality is applied to each profile/use case? For example PID-8 card is [0..1] but it is required for PSDI and optional for CCOD | The profiles are all combined in one table. "RE" are 0..1 and “R” 1..1 |
| The observation identifier’s Conformance Statements, Usage and Conformance Predicates are not supported by the IGAMT profile builder.   |  |  | | --- | --- | | Death pronouncer details | Conformance Statement: OBX.5.13 (Identifier Type Code) shall be valued with one of the following values from the Identifier Type value set (PHVS\_IdentifierType\_CDC): LN or NPI. | | Did death result from injury at work | **Usage**: C(RE/O)  **Predicate:** If OBX.5.1 = “Y” WHERE OBX.3.1 = “71481-6”. | | Injury date | **Usage**: C(RE/O)  **Predicate:** If OBX.5.1 = “Y” WHERE OBX.3.1 = “71481-6”. | | Injury incident description | **Usage**: C(RE/O)  **Predicate:** If OBX.5.1 = “Y” WHERE OBX.3.1 = “71481-6”. | | Injury leading to death associated with transportation event | **Usage**: C(RE/O)  **Predicate:** If OBX.5.1 = “Y” WHERE OBX.3.1 = “71481-6”. | | Injury location | **Usage**: C(RE/O)  **Predicate:** If OBX.5.1 = “Y” WHERE OBX.3.1 = “71481-6”. | | Injury location Narrative | **Usage**: C(RE/O)  **Predicate:** If OBX.5.1 = “Y” WHERE OBX.3.1 = “71481-6”. | | Timing of Recent Pregnancy Related to Death | **Usage**: C(RE/X)  **Predicate:** If PID.8.1 = “F” AND OBX.5.1 > “5” and < “75” WHERE OBX.3.1 = “39016-1” | | Validation support for this type of co-constraints is been evaluated. The NIST tool will not validate these type of requirements. |
| The requirements for the PID-22 bidding are not clear. PID-22 is a CWE element, to which triple are the value sets binded to? | The NIST validation tool will report “Specification Alerts” when validating bindings to these value sets. |
| “S099”,” V890” and “G409” are missing from the value set “PHVS\_CauseOfDeath\_ICD-10\_CDC”. | NIST has added “S099”,” V890” and “G409” to the validation tool”. This issue will be included in the errata to the Implementation Guide |
| “XCN” data type is missing from the value set PHVS\_DeathReportingValueType\_NCHS. | NIST has added 'XCN' to the validation tool”. This issue will be included in the errata to the Implementation Guide. |
| The "Death pronouncer details" Loinc Code '74499-5' is missing from the value set PHVS\_DeathReportObservationIdentifier\_NCHS | NIST has added '74499-5' to validation tool. This issue will be included in the errata to the Implementation Guide. |
| I10PO code system is missing from the value set Coding System HL7 2x (HL70396) | NIST has added ' I10PO’ to validation tool. This issue will be included in the errata to the Implementation Guide. |
| The Viral Records Death Reporting Implementation Guide defines Part\line number with CWE datatype instead of NM which is the appropriate data type. | The NIST validation tool will evaluate using the NM data type. This issue will be included in the errata to the Implementation Guide |