

About Technical Advisory Bulletins

Overview

Technical advisory bulletins are intended to provide additional clarity on national specifications to support the interoperability of immunization information between systems. These documents build on and further clarify specifications in the [HL7 v2.5.1 Implementation Guide \(IG\) for Immunization Messaging, Release 1.5 and Addendum, October 2018](#) (National IG).

Each technical advisory bulletin (TAB) addresses a specific topic related to HL7 v2.5.1 immunization data exchange. The documents are intended to:

- Address immediate questions related to the interpretation and implementation of the HL7 v2.5.1 standard
- Apply the latest HL7 conformance methodology concepts to the National IG
- Provide technical specifications to support data exchange in alignment with the HL7 v2.5.1 standard

These documents are developed through a community-driven process with review and approval by the American Immunization Registry Association (AIRA) [Standards and Interoperability Steering Committee](#) (SISC). TABs are SISC-approved technical resources, and implementers are expected to use them to support consistent implementation of the standards as outlined. These specifications address current issues related to the interoperability of immunization information.

The information outlined in TABs will also inform and support the Centers for Disease Control and Prevention (CDC) in the development of the next version of the National HL7 Implementation Guide for Immunization Messaging.

Intended Use

Implementers SHALL use TABs to support the development and maintenance of HL7 exchange capabilities and interfaces in alignment with national standards. Unless otherwise indicated, organizations SHALL use the TAB specifications to support implementation as indicated, as soon as feasible, working with exchange partners as needed to test and/or confirm changes.

Select TABs provide specifications to support new, optional functionality/capabilities. Organizations MAY choose to support these functionalities/capabilities as required by local and/or federal policy/regulation; if they do so, they SHALL implement in alignment with TAB specifications.

TABs provide the technical specifications to support interoperability of immunization information between systems. Policy decisions and regulatory requirements are outside the scope of these documents.

Conformance Expectations

Conformance

Implementers are expected to use TABs to support the implementation of specifications in conformance with requirements. Conformance expectations are conveyed using SHALL, SHOULD, and MAY verbiage, clarification of usage, and/or technical advisory language. Conformance verbs and their definitions are provided in Table 1; these are drawn from HL7 Version 2 Conformance Methodology, Release 1 (September 2020).

Table 1. Conformance verbs and definitions

Verb	Definition
SHALL	Required to implement. Deviation is not permitted if conformance to the specification is to be claimed.
SHOULD	Recommended to implement.
MAY	Permissible to implement.
MAY NOT	Permissible not to implement.
SHOULD NOT	Recommended not to implement.
SHALL NOT	Required not to implement. Deviation is not permitted if conformance to the specification is to be claimed.

Value set specifications

TABs may also provide additional specifications for value sets, specifically the usage of coded values within value sets. Usage of coded values within a value set was not addressed in the National IG; however, specifying this information is addressed in [HL7 Version 2 Conformance Methodology, Release 1 \(September 2020\)](#). Specifying usage for values defines the scope of the values to be supported, considered for inclusion/exclusion, or excluded in a value set definition, as indicated in Table 2.

Table 2. Coded value usage in value sets

Usage	Name	Conformance
R	Required	The code SHALL be supported.
P	Permitted	None; to be specified locally.
E	Excluded	The code SHALL NOT be supported.

Clarifying usage of value set values within the National IG supports transparency of current exchange practices and supports ease of implementation of new exchange capabilities and/or interfaces.



Local implementation guidance

While these TABs provide clarity on national standards for HL7 exchange, implementers SHALL also review local implementation guides for immunization messaging published by jurisdictional public health agencies. Local implementation guides further constrain national specifications to support interoperability with specific IIS in alignment with jurisdictional laws, policies, and programmatic needs.

For More Information

TABs are developed by AIRA in collaboration with the CDC and the AIRA [Standards and Interoperability Steering Committee](#). For more information or to get involved in this effort, please consider joining SISC and/or reach out to HL7vaxteam@cdc.gov.