Health Level 7 (HL7) Implementation Guide
Current and Future States

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Why do we need a national IG?

➢ **Immunization related data is exchanged between a wide variety of systems**

  ➢50+ public health jurisdictions

  ➢A multitude of EHR vendors

  ➢A huge number of provider organizations

  ➢Other submitters like pharmacies

➢ **Individualized connections are too much work for everyone**

Where have we been?

- ➢ **IGs have been published by AIRA/CDC**

- ➢ **The first IG came out in 1997 (HL7 v2.3)**

- ➢ **An updated IG using HL7 v2.3.1 came out in 1999**

- ➢ **The last v2.3.1 IG came out in 2006**

- ➢ **Beginning in 2010 a series of IGs using v2.5.1 were published**

Why so many iterations?

➢ **The immunization community has been out in front**

➢ **We are learning as we go**

➢ **Writing a specification is very different than implementing**

➢ **Early versions had some issues**

  ➢Requirements were too loose

  ➢HL7 best practices were broken

  ➢Not all core concepts were supported

The latest and the greatest

- **Release 1.5 (v2.5.1) is the most recent IG and is called out in the 2015 EHR certification and Meaningful Use stage 3 regulations**
  - IG published Nov 2014
  - Addendum published July 2015
- **Systems on both sides are actively implementing this document**
- **Is this the end?**

Release 1.5 clarifications

➢ **AIRA publishes guidance documents to clarify ambiguity in Release 1.5**

➢ **These typically originate with implementer questions**

➢ **Unlike the Release 1.5 addendum, these are not called out in regulations**

➢ **Clarification are likely to get incorporated into new versions of the IG and reflect a vision for the future and a need for implementation advice now**

Published AIRA clarifications

➢ **Guidance for HL7 Acknowledgement Messages to Support Interoperability**

➢ **National Set of Error Codes**

➢ **Guidance for HL7 RSP Messages to Support Interoperability**

➢ **Guidance on Detailed Message Structure and the Use of Specific LOINC Codes**
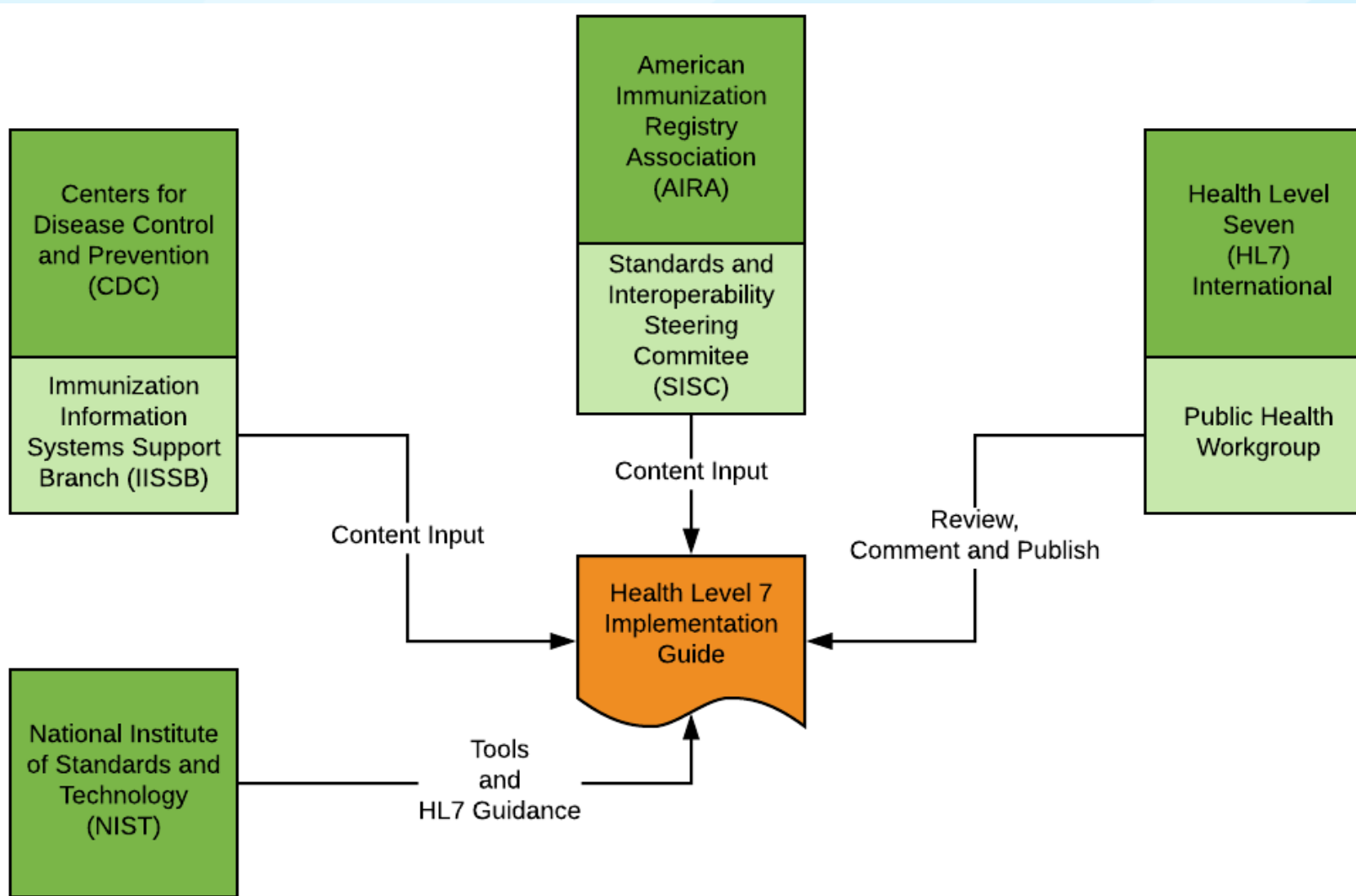
Looking ahead

- **While Release 1.5 is being put into widespread use, there are still some issues**
    - Ambiguity on how to organize messages containing different types of data (events, contraindications, immunities, etc)
    - Vaguely defined value sets
    - Confusion regarding similar (but different) query profiles
- **Release 1.5 uses the HL7 standard but it isn't published or endorsed by HL7**

HL7 Release 1.0

- **We are developing Release 1.0 based on v2.8.2 as an HL7 balloted document**
  - Unfortunately, due to HL7/ANSI regulations we can't name it Release 2.0 to avoid confusion
- **There is no expectation that this version will be called out in regulations in the near future**

Who is involved?

Why HL7 ballot the IG?

➢ **An SDO approved specification for future inclusion in regulations**

➢ **A document consistent with other IGs being used by developers and implementers**

➢ **Review by a wider audience prior to publication, decreasing the probability of needing revisions, clarifications and/or addendums after publication**

➢ **Increased transparency in the interoperability community regarding the specification development process**

What is the balloting process?

- **We define the scope of the project and find a sponsor**
  - We are working with the HL7 Public Health work group
  - Standard for Trial Use (STU) document
- **We create the document content**
  - Using new authoring tools and gaining community input
- **The document is available for 1 month for comment**
  - Any HL7 member (including AIRA) can comment
  - The IG was balloted in May 2017

What is the balloting process?

- **We received 173 comment of varying types**
  - Typos, requests for clarification, scope suggestions, etc
- **We also "found" an additional 69 issues**
- **We worked with SISC to review and resolve comments**
  - Was it persuasive? What changes should we make?
- **Suggested dispositions were taken back to the Public Health work group for formal disposition**
- **Approved changes have been applied to the document**

What are some of the changes?

- ➢ **v2.8.2**
  - ➢ Use of OBX segments after the PID
  - ➢ Minor changes in a few fields and data types
- ➢ **Reorganization of the text to emphasize use cases**
  - ➢ Send Immunization Event
  - ➢ Send Demographics Data Only
    - ➢ Definition of a new ADT message
  - ➢ Request History with Forecast
    - ➢ Consolidated the existing Complete History and Evaluated History and Forecast profiles

What are some of the changes?

➢ **Formalization of value sets**

➢ Assigned usages to each value

➢ Indicate which values sets are open or closed, static or dynamic

➢ New value sets

➢ Application errors

➢ Evaluation Reason

➢ Series Status

➢ Use of LOINC codes in different parts of the message

What is not in the document?

- **System requirements for consuming messages**
- **Workflow issues**
  - Baby Names
  - Triggering scenarios (particularly for demographics)
- **Value sets for indications and contraindications**

What happens next?

- **Reballot in September 2018**
  - Gives the community a chance to comment on the significant changes from the first ballot
- **Review and dispose of comments and publish**
- **Collect comments for a period of 1-3 years**
- **Comments are reviewed and addressed in a manner similar to the original balloting period comments**
- **If sufficient comments accumulate we can publish "dot releases" which incorporate non-substantive changes in a whole new document**

Then what happens?

➢ **At the end of the STU comment period or when substantive changes need to be published, a new ballot must occur or the document lapses**

➢ **At the end of the STU period we aim to be ready for a larger update potentially including things such as:**

  ➢ Improved guidance on how to message contraindications, adverse reactions, etc in all profiles

  ➢ Review of message content and use cases relative to new functional guidance and/or core data elements

  ➢ Additional guidance on error handling and acknowledgements

  ➢ Any other topics found during the implementation of Release 1.5

So now what?

- **Continue to implement and use Release 1.5**
  - Let us know where there are ambiguities, holes or errors
- **Work with your trading partners on smoothing out standards**
- **Attend SISC or HL7 meetings when you have questions or want to contribute ideas or contact us directly**
- **Look at the new IG and give us your thoughts**
- **Continue to do what you do to move electronic data exchange forward**