

Content Structure and Data Representation



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Content Structure and Data Representation

This implementation guide uses existing standards and specifications to enable the sharing of clinical content and minimal workflow information for the closed-loop referral use case.

6.1 XDM Metadata Requirements

The [XDR and XDM for Direct Messaging Specification](#) and [IHE IT Infrastructure Technical Framework](#) collectively provide the 360x baseline set of expectations in regards to the metadata requirements. This applies for all payloads produced throughout the lifecycle of a referral. This baseline starts with, but is not limited to, the minimal metadata definition as reflected in the following tables. While the information below serves as the comprehensive list of attributes, the use of these will vary based on the context of the payload being delivered. Instances in which the context impacts the origin or consumption expectations of the attributes, supplemental information will be provided in the payload specific sections. Please note the areas marked with an "*" as they require values to be populated beyond the minimal metadata definition or conflict with the aforementioned specifications.

6.1.1 XDM Base Data Types

The following XDM data types represent a single value, and can be referenced directly from within a field in a given attribute, or they can be components of a complex data type. When viewing the attribute descriptions below, the expansion stops at a base data type.

6.1.2 Submission Set Requirements

6.1.3 Document Entry Requirements

6.2 C-CDA Clinical Document Requirements

360x requires a C-CDA be transmitted at minimum with the referral request and with the referral closure, according to the HL7 C-CDA R2.1 implementation guide.

Data and Section requirements for 360x: 360X requires a valid C-CDA per HL7 C-CDA R2.1 IG and, therefore, the section conventions that that IG defines take precedence. The only requirement that 360X levies on the referral request and the request closure documents beyond the HL7 C-CDA R2.1 IG is that:

- Every referral request must have a non-null reason for referral section (R)
- Every closure of a request must have a non-null response to the question asked in the reason for referral and the recommendation is to include that content in the Results section.

Data and Section information: We have provided Appendix B for document types and sections in support of your development to 360X and comparison of it to any development toward the ONC 2015 Edition specifications. This is for information only. Three document types are reviewed:

- Referral Note
- Consultation Note
- Summarization of Episode CCD

For the Referral note, 3 columns are provided:

1. Summary of requirements for data/sections per HL7 C-CDA R2.1 IG
2. Summary of requirements for data/sections per HL7 C-CDA R2.1 IG as augmented by ONC 2015 Edition CCDS
3. Summary of requirements for data/sections per HL7 C-CDA R2.1 IG as augmented by the American Medical Association (AMA).

We suggest that the ONC CCDS and the AMA inputs be used to consider best practices for implementation of this document type (or any alternative document type) for 360X implementation that also meets the program requirements that utilize the ONC 2015 Edition specifications as well as clinician input from the AMA for usability.

For the Consultation note, only two columns are provided; HL7 IG and AMA input, since the ONC 2015 Edition does not define a Consultation Note as a required document template.

Since the ONC 2015 Edition also requires the general Summarization of Episode Note CCD, that could also be augmented with the 360X reason for referral, and this might be a highly used document in context of the programs that use these specifications, we've provided a summary of those requirements. Note that the SOEN CCD is summarized only in the case of HL7 C-CDA R2.1 IG with the ONC CCDS as that will be the likely incarnation of this document.

The clinically relevant content is following the Consolidated Clinical Document Architecture (C-CDA) specification. The following structures describe the most commonly used components of the base C-CDA specification.

6.2.1 Document Templates

((Take the spreadsheets and pull out the tables, similar to V2))

6.2.2 Section and Entry Templates

((Take the spreadsheets and pull out the tables, similar to V2))

6.3 HL7 Version 2.x Messages

The complete specification for the HL7 Version 2.x messages is in Appendix C. The following is a summary of the messages used in the various transactions. This section contains the required content according to this implementation guide. It is intended as a summary reference.

Proposal (Hans Buitendijk): Change MSH-4 and MSH-6 optional; pre-adopt MSH-22 and MSH-23 where MSH-22 is R and MSH-23 is RE. This will allow distinction between physical facility vs. organization where we know organization to send the request/etc., but not the facility.

6.3.1 Base Data Types

The following data types represent a single value, and can be referenced directly from within a field in a given segment, or they can be components of a complex data type. When viewing the message and segment descriptions below, the expansion stops at a base data type.

6.3.2 Message OMG^O19_OMG_O19

6.3.3 Message OSU^O51^OSU_O51

6.3.4 Message SIU^S12^SIU_S12

6.3.5 Message SIU^S26^SIU_S12