



eHealth Exchange™

Enhanced Content Testing Program Launch

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March 6, 2018*



Agenda

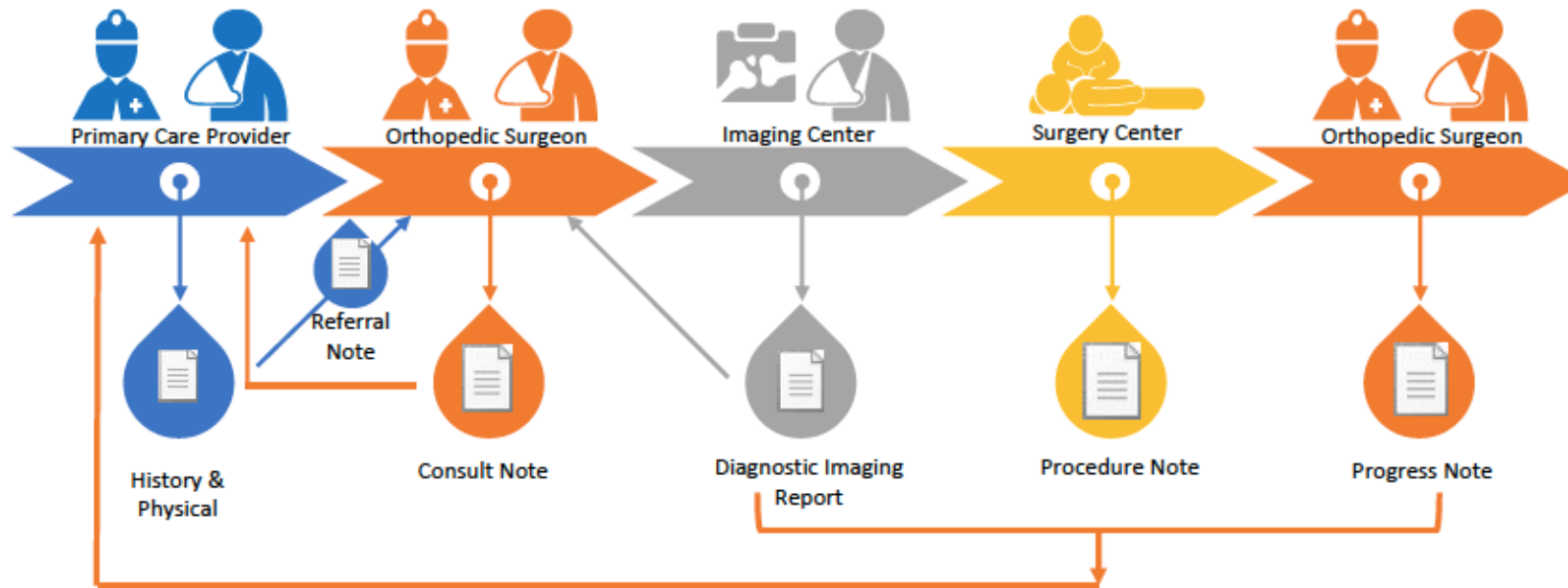
- Background
- New Content Testing Program Details
 - Enhanced Content Testing Documentation Package
 - Content Testing Process
 - Content Testing Tooling
 - Enhanced Content Testing Milestones/Timeline
- Updates for Validation Plan for Qualified Technology Solution
 - QTS to allow for Basic, Intermediate, Advanced levels
- Questions and Discussion

Enhanced Content Testing - Milestones

| Milestone Descriptions | Target Date | Status |
|--|-------------|-----------|
| Present to CC for Review/approval | 11/15/2016 | Completed |
| Participant Input (Post draft to eHealth Exchange Wiki) | 11/15/2016 | Completed |
| Participant Input Informational Call (Review documentation) | 12/02/2016 | Completed |
| 30 day notice to Participants | 12/02/2016 | Completed |
| 30+ day Objection Period Ends | 01/10/2017 | Completed |
| Effective Date | 01/11/2017 | Completed |
| eHealth Exchange Enhanced Content Testing Program Launch | 02/05/2018 | Completed |
| Testing Workgroup Feedback to HL7/ONC | Ongoing | Ongoing |

Use Cases - C-CDA: Exchanging the Patient's Story

- Today, most of the clinical data exchanged by systems leverages **ONLY** the CCD
- Many documents are not created by a human but by a machine on demand when queried. Data should be exchanged using appropriate document types.



<http://www.himss.org/library/c-cda-documents-building-blocks-meaningful-exchange>

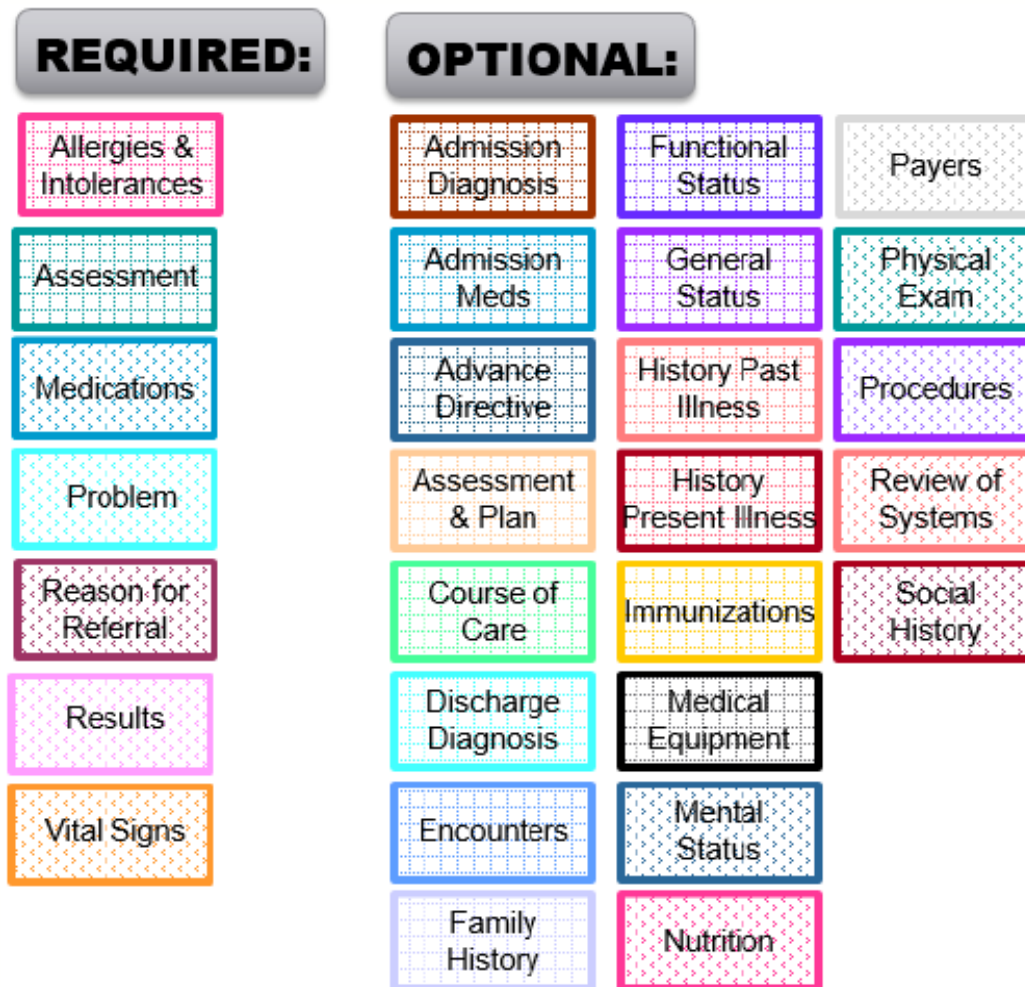
Why is using the right type of document important?

- Each CDA Document is designed to address a specific purpose
 - Use Cases should be reviewed to determine appropriate documents for use to support optimal patient care
 - Documents need to fit the situation
 - Share information that is relevant and pertinent
- Establish the right context for the information being shared
 - Information about multiple encounters
 - Information about a single encounter
 - Information about a service(s) within an encounter
 - Information that is related to a specific order
 - Patient generated information vs. Clinician or System generated data

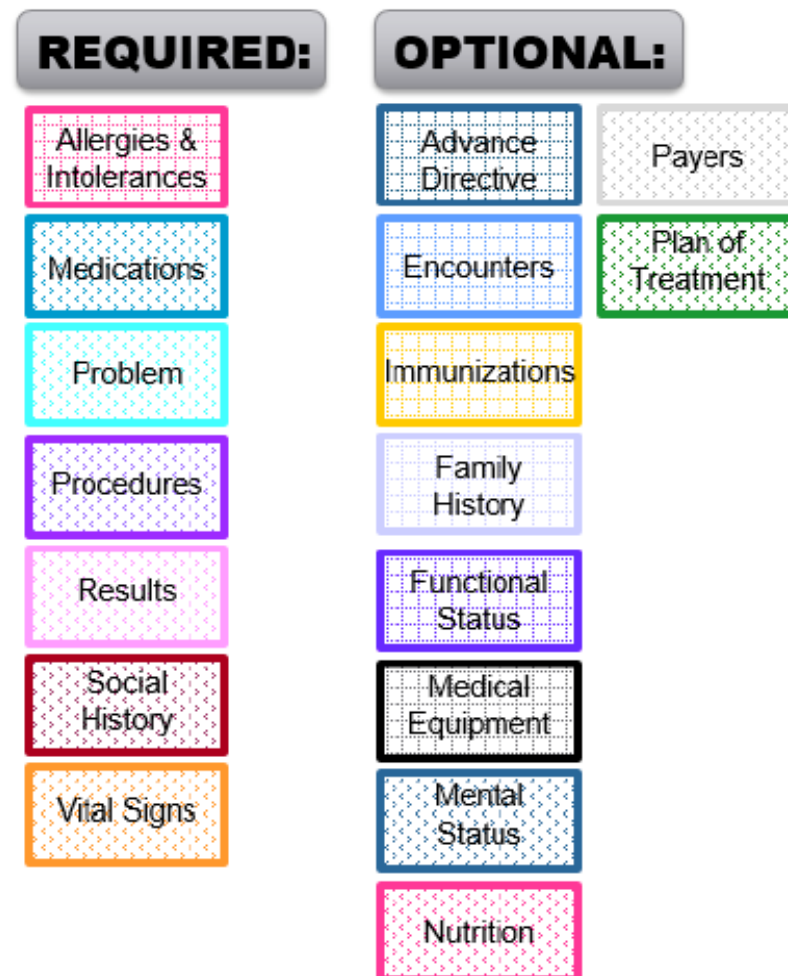
| | | | | | | | |
|---------------------------|----------------------------------|----------------------|-------------------------|--------------------------|------------------------|---------------------------|--------------------------|
| | Admission Diagnosis | Admission Meds | Advance Directive | Allergies & Intolerances | Anesthesia | Assessment & Plan | |
| Assessment | Chief Complaint Reason for Visit | Chief Complaint | Complications | Course of Care | DICOM Object Catalog | Discharge Diagnosis | Discharge Diet |
| Discharge Medications | Encounters | Family History | Fetus Subject Context | Findings | Functional Status | General Status | Goals |
| Health Concerns | Health Status Eval/Outcomes | History Past Illness | History Present Illness | Hospital Consultations | Hospital Course | Hosp. Disch. Instructions | Hosp. Disch. Physical |
| Hosp. Disch. Studies Sum. | Immunizations | Implants | Instructions | Interventions | Medical (Gen) History | Medical Equipment | Medications Administered |
| Medications | Mental Status | Nutrition | Objective | Observer Context | Operative Note Fluids | Op Note Surgical Proc. | Payers |
| Physical Exam | Plan of Treatment | Planned Procedure | Postoperative Diagnosis | Postprocedure Diagnosis | Preoperative Diagnosis | Problem | Procedure Description |
| Procedure Disposition | Procedure Est. Blood Loss | Procedure Findings | Procedure Implants | Procedure Indications | Procedure Specimens | Procedures | Reason for Referral |
| Reason for Visit | Results | Review of Systems | Social History | Subjective | Surgery Description | Surgical Drains | Vital Signs |

<http://www.himss.org/library/c-cda-documents-building-blocks-meaningful-exchange>

Transfer Summary



CCD



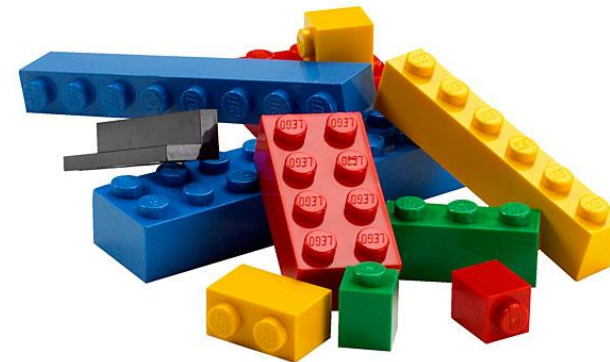
C-CDA R1.1 (9 Types) and R2.1 Document Types (12 Total)

C-CDA R1.0/R1.1

- Consultation Note
- Continuity of Care Document (CCD)
- Diagnostic Imaging Report
- Discharge Summary
- History and Physical
- Operative Note
- Procedure Note
- Progress Note
- Unstructured Document

New as of C-CDA R2.0/R2.1

- Care Plan
- Referral Note
- Transfer Summary



Industry-wide Content Pain Points



Optionality:

More than one way to do things and inconsistent implementations across vendors



Terminology:

Inconsistent terminology usage



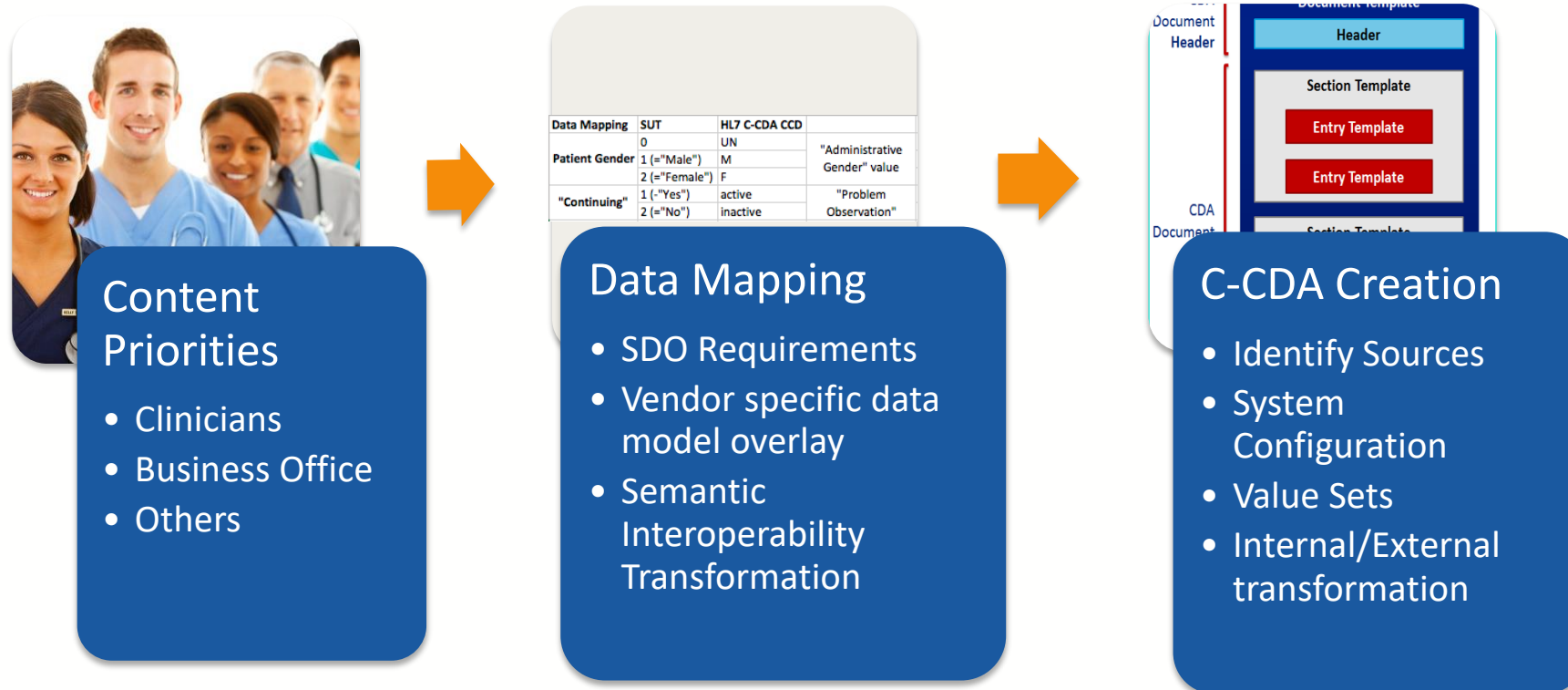
Specification Ambiguity



Complexity:

The C-CDA standard is difficult to understand and consume and is lacking in clearly documented examples

Process for Creating Consistent & Robust HL7 C-CDAs



Enhanced Content Testing Documentation Package

- **Website Page for New Program:**
 - <http://sequoiaproject.org/ehealth-exchange/testing-overview/content-testing/>
- **Wiki Page for Current Documentation**
 - <http://ehealth-exchange-testing.wikispaces.com/Documentation+for+Content+Testing+Program>
 - [2018-02-05-Content-Testing-Package.zip](#)
 - [eHealth Exchange Content Testing Guide 2018 Version 1.0](#)
 - [Content Testing Tools User Guide 2018 Version 1.0](#)
 - RECEIVE Test Files – **VENDORS ONLY** – not required for Participants
 - [MU_HITSP_C32C83_4Sections_RobustEntries_NoErrors.xml](#)
 - [170.315_b5_ccds_amb_ccd_r11_sample2_v1.xml](#)
 - [170.315_b5_ccds_amb_ccd_r21_sample1_v1.xml](#)



Validated Product Vendors – Required Testing

- All current Validated vendors will be required to test in 12 months from February 5, 2018
 - Create Test Cases (Using Vendor Supplied Test Data – No PHI please)
 - Receive Test Cases (HITSP C32, R1.1 and R2.1 Documents)
- New Vendors seeking Product Validation will be required to provide one or more content samples as follows:
 - All Vendors will be required to provide samples for testing for each version of HL7 specification they support (HITSP C32, HL7 C-CDA R1.1 or R2.1)
 - All Vendors will be required to provide samples of each document type they support for their customers on an ongoing basis as new documents are added (CCD, Discharge Summary, Progress Note, etc.)

Participant Content Testing Requirements

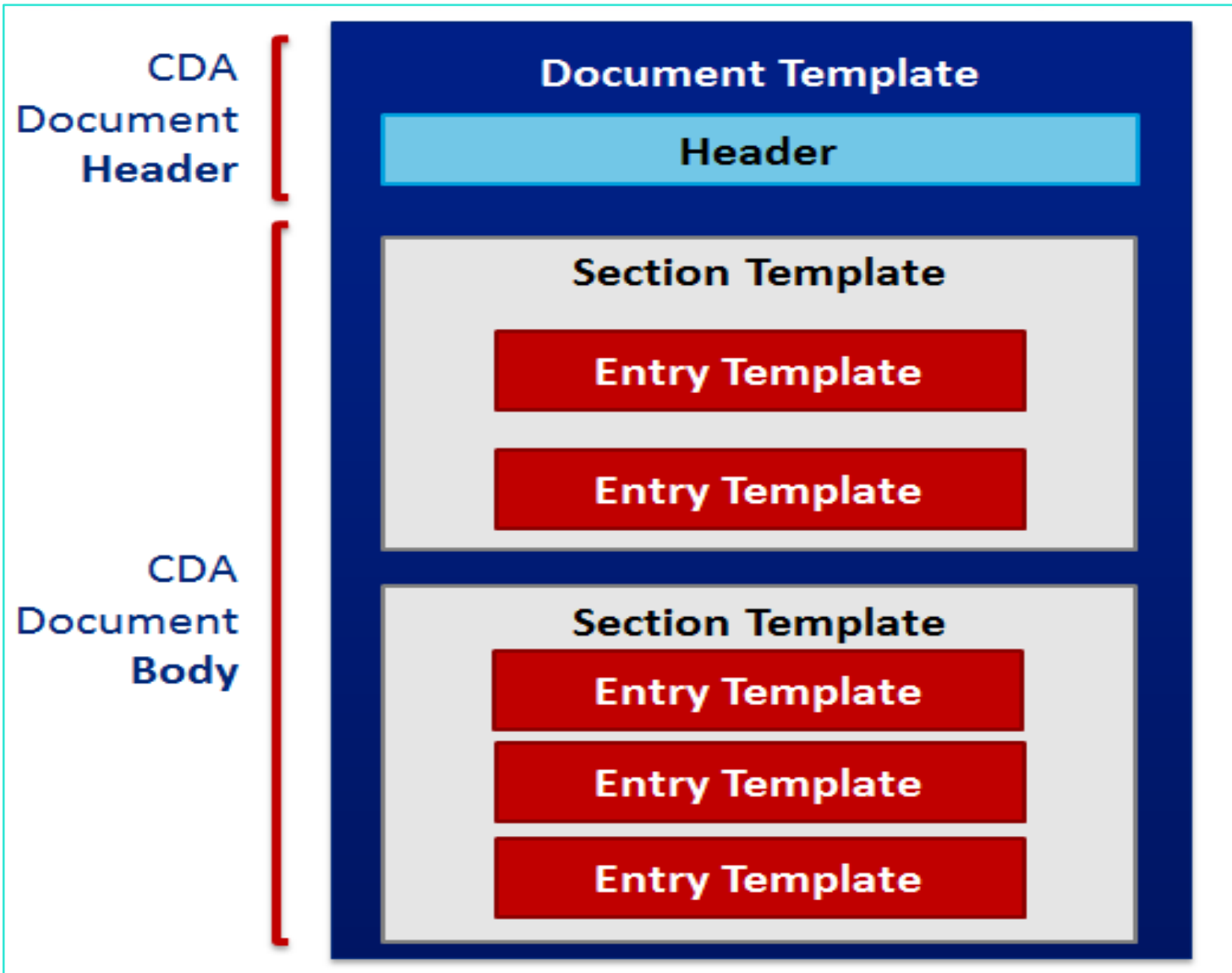
- All current Participants will be required to test within 12 months from February 5, 2018
 - Create Test Cases (Using Participant specified Test Data – no PHI)
- New Participants seeking to onboard will be required to provide one or more content samples from each Document Source in their community:
 - All Document Sources will be required to provide samples for testing for each version of HL7 specification they support (HITSP C32, C-CDA R1.1 or HL7 C-CDA R2.1)
 - All Document Sources will be required to provide samples of each document type they support in production on an ongoing basis resulting in continuous testing (CCD, Discharge Summary, Progress Note, etc.)

Content Testing Tooling

IHE**GAZELLE**
eHealth test framework
for interoperability

ART DÉCOR/GAZELLE OBJECTS CHECKER

- Hosted by IHE Services as part of the IHE International Scheme Testing
- Tooling was piloted in April 2015 and is ISO 17025 Compliant for Conformity Assessment
- Covers only the HITSP C32/CCD, HL7 C-CDA CCD R1.1 and R2.1 versions
- Found to report on warnings and errors not found by other testing tooling (<https://gazelle.ihe.net/cda/cda-basic-req.pdf>)
- More information on the tooling can be found in Appendix B of the [eHealth Exchange Content Testing Guide 2018 v1.0](#)



Content Testing Survey/Application

- [eHealth Exchange Content Testing Survey / Application](#) form
- **Required** to gain access to tooling
- One form per organization identifying all users to be added for testing
 - Name, email, phone
- Asks for all source systems expected to be tested
- Asks for additional details useful for trading partners to know
 - Some details may be published in the eHealth Exchange Directory in the future

Process to Report Questions, Issue, Defects

- Email one question/issue/defect per email to
 - testing@sequoiaproject.org
 - Provide as much information as possible including:
 - Screenshots
 - Testing Permanent Link with Issue
 - Reference details for specification questions/issues

Value Sets

<https://vsac.nlm.nih.gov/>

Requires UMLS license/account

NIH Value Set Authority Center
U.S. National Library of Medicine

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Warning: VSAC Collaboration Tool will be unavailable from 7:00 A.M. until 1:00 P.M. (ET) on Saturday, 02/03/2018.

The VSAC is a repository and authoring tool for public value sets created by external programs. Value sets are lists of codes and corresponding terms, from NLM-hosted standard clinical vocabularies (such as SNOMED CT®, RxNorm, and Interchangeable Clinical Terminology (ICT) and interoperable health information exchange. The VSAC does not create value set content. The VSAC also provides the National Library of Medicine (NLM), in collaboration with the Office of the Assistant Secretary for Health (ASHP) and the Centers for Medicare & Medicaid Services (CMS) electronic Clinical Quality Measures (eCQM) and the National Library of Medicine (NLM), in collaboration with the Office of the Assistant Secretary for Health (ASHP).

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Programs

All Value Sets
Explore the entire VSAC repository of published value sets. Search by value set name, object identifier (OID), codes, terms and purpose. Filter by release program, steward, and code systems.
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CMS Hybrid Value Sets
Core Clinical Data Elements and Hybrid Measures use a set of core clinical data elements, clinical variables from electronic health records (EHRs), that are routinely collected and can be feasibly extracted for use in risk-adjusted hospital-level hybrid outcome measures. [Learn More](#)
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Create a Program Release

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Questions? testing@sequoiaproject.org