Topic 1: Use Case: Quality Measurement

Data Aggregator Validation Program

Wendy Talbot, MPH
Assistant Vice President, Measure Collection & Audit
National Committee for Quality Assurance

HEDIS® Data Flow
What Problem Are We Trying to Solve?

The Problem:
- Plan-centric HEDIS Audit
  - Decisions not transportable
  - Creates audit burden for aggregators, plans, and auditors
- Non-standard data exchange
  - Continuity of Care documents (CCDs); "interoperable" but not consistently implemented
  - Continuity of Care documents (CCDs); "interoperable" but not consistently implemented
- Non-standard supplemental data (unless validated); nor usable for medical record review
- Increasing need for access to clinical data; "hubs" have proliferated & matured

The Solution:
- Develop program like HEDIS audit for plans, but for clinical data aggregator hubs
- Validate data from ingestion to output

Program Scope

<table>
<thead>
<tr>
<th>PROGRAM GOALS</th>
<th>PROGRAM LIMITATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Accuracy of data ingestion/processing</td>
<td>- Consent arrangements</td>
</tr>
<tr>
<td>- Conformance to NQCA CCO Implementation Guide for standard supplemental data</td>
<td>- Data privacy/security</td>
</tr>
<tr>
<td>- Minimize audit burden on vendors and health plans</td>
<td>- Measure compliance</td>
</tr>
<tr>
<td>- Increase confidence in data for use in value-based purchasing</td>
<td>- Quality metric calculations</td>
</tr>
<tr>
<td></td>
<td>- Medication-related data</td>
</tr>
</tbody>
</table>

Data Flow

Generic Data Aggregator Data Flow
Where are we now?

- Four aggregators have a DAV seal as of February 2021
- Continue focus on data quality to enhance and streamline validation steps
  - Data quality benchmarks to drive primary source verification efforts
- Market research to guide adaptations of the program to cover wider audience
  - Data Aggregators vs. Data Exchangers
- Targeting live DAV launch in Q3 2021
**Application to Primary Source Verification**

- Vanishing Paper
- Reality Today

**CDA in Context of Medical Record**

- **Persistence**: A clinical document continues to exist in an unaltered state, for a time period defined by local and regulatory requirements.
- **Stewardship**: A clinical document is maintained by a person or organization entrusted with its care.
- **Potential for authentication**: A clinical document is an assemblage of information that is intended to be legally authenticated.
- **Wholeness**: Authentication of a clinical document applies to the whole and does not apply to portions of the document without the full context of the document.
- **Human readability**: A clinical document is human readable.

Read more at [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC130066/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC130066/)

**DAV Pilot with Large HIE**

- 400+ C-CDA connections

### Asking Basic Rules

- Data Parsed and Loaded ✓ (>99.9%)
- Patient Valid DOB & Name ✓ (>99.9%)
- Document Names Custodian ✓ (100%)
- Valid Problem Dates ✓ (100%)
- Valid Immunization Dates ✓ (>99.9%)
- Valid Results Dates ✓ (>99.9%)
- Valid Vital Signs Dates ✓ (>99.9%)

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### Opportunities to Improve

- Use of LOINC coding within "results", each dot as facility colored by EHR

1.2% of procedures in procedures section as active or future date

(found to be consolidated to two major EHR vendors)

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### Using Data Gathered in C-CDA Documents

Nance Shatzkin, President, Shatzkin Systems, Inc.
As A Health Information Exchange (HIE)

- Philosophical approach is to ETL for benefit of reporting and analytics
  - Not universal across all HIEs
- Ingest data from hundreds of practices and dozens of EMRs to create complete "virtual health record" on a patient
- Demands that we be flexible to maximize providers we can work with and what we can provide
- Little interest in simple display of CCD/CCD-A
- Support users in direct care and in analytics
  - Normalize data in order to make it easily interpretable
  - How many codes for Discharged-Home
  - Extract data from various formats to a standardized database
  - Less focused on quality measure calculations then on worklists to impact quality measure outcome

The Challenge of Working with CCDs

- EMRs are ONC-certified but configuration controls are implemented at the local level and providers do not know the impact of decisions made/not made
  - The RULE is that there is always an exception
  - Practice Fusion – 10+ sites of which 2 have Dx only in Problem Section but the others have it as part of the Encounter summary
    - Nobody knows yet why that is... and Practice Fusion is not unique
- We know there are discrepancies between Human Readable and Coded sections!
  - ETL can only parse Coded section but we see the differences upon manual review
  - Encompassing Encounter helps but still not reliable
    - Included in v2.1

What We Look For

- Most common requirement is to find reason for THIS visit
  - Reason for visit on any specific date
- Discrete data elements affiliated with the visit
  - Provider
  - Diagnosis
  - Observations
  - Vital signs
  - Procedures
  - Medications
Currently Use 1 of 4 Flows and Adjust

- Encounter Section
  - Encompassing Encounter
- Full Clinical History
  - No Encompassing Encounter
  - Identify "most recent visit"
- Problem Section
  - Certain sites put Diagnosis in the Problem List rather than Encounter
  - Non-Clinical
    - Human-readable for display
    - No clinical data, patient info

What Would Help

- Greater specificity in technical specification of content so less EMR and provider variability (where to put clinical data)
- Modify certification requirements to ensure standard implementations
  - Use cases establish standard implementation
- Better integrate clinical detail in specifications
- Audit that implementations match certification specs
- Approach FHIR with goal to avoid current challenges of CDA

C-CDA and QRDA

Raychelle Fernandez, Dynamic Health IT
C-CDA 2.1 in the Wild

- With the ONC requirement and easy exchange using Direct Protocol and XDR transfer to HIEs there has been a real push to use C-CDA for Quality Measure Calculation.
- Up until recently DHIT has simply refused to use C-CDA for Quality Measure calculations. Our team knows the required data and can spew it out like it’s their favorite song.
- What changed?
  - EHR Systems only provide the QRDA III to their physicians for Quality reporting.
  - Registries & HIEs need to parse data they are receiving for purposes related to reporting.
  - Clinicians only know their system outputs a C-CDA for each patient and can also provide a batch of CCDs.
  - MIPS Measure becoming more complex.
  - ONC Requirement for even more data to be provided in C-CDA format USCDI (Clinical Notes presents a new problem.)
  - Request for DHIT to start with the C-CDA and then get the data that’s not good in the C-CDA from other sources. HL7 ORU feed? Directly from the Database?

QRDA (Quality Reporting Document Architecture)
The intended standard document format eCQM

- Contains all the required Data elements for calculating Quality Measures
- Standard CDA 2.0
- Required by ONC (c3)
- Accepted by all Reporting Programs with minor Program specific Adjustments
- Recently there have been comments posted to ONC regarding Certification requirements. Requesting for Eligible Providers EHR system to no longer produce the QRDA I (patient level data) since QRDA III (aggregate data) is only needed for MIPS and Medicaid Submission.
- Information Blocking?

C-CDA and needed Quality Data

- Encounters:
  - CCD is a patient-level summary document and as such may not necessarily have individual coded encounter values.
  - Code values in the encounter section may not be as specific as the coded values in section of the C-CDA generally used for non-discrete such as "Plan of Treatment"
C-CDA Cont.

- **Author and DocRef**
  - Header specific data may not be accurate or identifiable:
    - Performer Identifiers tend to be internal system IDs rather than provider NPI
    - Organization ID may not be TIN or Organization NPI
    - EHR Certification ID is not common data in a C-CDA
  - Program Specific Identifiers will need to be added for proper processing and submission.
    - IQR PI GID
    - CEGID
    - POC (Primary Care First)
    - MIPS
    - AGA (Vaccines Registry Submission Program)
    - Joint Commission
    - KSF (Kidney Care First)

**There’s more:**

- **OIDs & Codes**: Quality Measures are tightly constrained as to which OIDs and codes are appropriate to use. Mapping or forcing the correct ICD9 OID is required.

- **Result Codes** are entered using various lab system or internal system codes versus Standards Codes. “HBA1C” is the actual code for the test rather than any of the actual LOINC codes required by the measure.

- **Payer data** proved especially tricky to extract. External reports need to be provided outside of the CCD even though CDA has over 80 data element that could be included in a C-CDA document.

- **Categorizing** the payer data into the 4 categories required for QRDAIII proved to be tricky.

- **There is no representation of all the “used bys” for sections.** And when there is it’s rarely populated in the C-CDA. For example, Dispensed medication.

**Break until 11:15 am**

- **Fun fact:** Only 3½ attendees store their Tupperware with lids on!
  - The half answer, “Both, depending on the container and whether I have one or many of that size”
  - We will return at 11:15 am ET for a group discussion on quality measures.

- **Remember if you lose a sock in the dryer, it comes back as a Tupperware lid that doesn’t fit any of your containers!”**
Group Discussion

Lunch Break until 12:45 pm

- Please return by 12:45 when Ask the ONC with Matt Rahn

Fun Fact: Only 1 attendee puts on the jelly first!

Other fun comments:
- I don't make PB&J sandwiches
- Skip the jelly
- First jar on one bread side and second jar on other toasted side
- Sometimes I just have Peanut Butter and honey

This line will remain open for the duration of the break

Matt Rahn, ONC
Al Taylor, ONC

Topic 2: Ask the ONC
USCDI, Scorecard, and Ask ONC?
Matt Rahn, Deputy Director, Standards Division, Office of Technology
Al Taylor, MD, Medical Informatics Officer, Office of Technology
March 24, 2021

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The materials contained in this presentation are based on the provisions contained in 45 C.F.R. Parts 170 and 171. While every effort has been made to ensure the accuracy of this restatement of those provisions, this presentation is not a legal document. The official program requirements are contained in the relevant laws and regulations. Please note that other Federal, state and local laws may also apply.

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Please Note:

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Agenda

- US Core Data for Interoperability Overview
- Certification Resources
- C-CDA Scorecard
- Ask ONC?
How does USCDI relate to ONC’s Health IT Certification Program?

USCDI is a required component for following 2015 Edition Cures Update Certification Criteria:
- Standardized API for patient and population services (§170.315(g)(10))
- Transitions of care (§170.315(b)(2))
- Clinical information reconciliation and incorporation (§170.315(b)(2))
- View, download, and transmit to 3rd party (§170.315(b)(3))
- Transmission to public health agencies - electronic case reporting (§170.315(f)(5))
- Consolidated CDA creation performance (§170.315(g)(6))
- Application access - all data request (§170.315(g)(9))

Update to USCDI by December 31, 2022 (replacing Common Clinical Data Set)
USCDI Version Update Process

2020 | 2021 | 2022

USCDI v1 Final | USCDI v1 Draft | USCDI v1 Final | USCDI v1 Draft | USCDI v1 Final | USCDI v1 Draft

Submission | Review Period - v2 | Submission | Review Period - v2 | Submission | Review Period - v2

USCDI v2 Final | USCDI v2 Draft | USCDI v2 Final | USCDI v2 Draft | USCDI v2 Final | USCDI v2 Draft

Upcoming Deadlines

- Provide feedback on Draft USCDI V2 by April 15th
- USCDI V2 published in July
- Open Comment period for USCDI version 3 - ongoing; cutoff in early September
- Standards Version Advancement Process (SVAP) – August - October

Real World Testing

- Standards Version Advancement Process (SVAP)
  - A health IT developer with health IT certified to §170.315(b), (c)(1) through (3), (e)(1), (f), (g)(7) through (10), and/or (h) is permitted to update its certified health IT criteria to newer versions of standards that have been incorporated by reference in §170.299 if the newer version of the standard(s) has been approved for use in the ONC Health IT Certification Program by the National Coordinator.
  - A health IT developer seeking to have its health IT certified to §170.315(b), (c)(1) through (3), (e)(1), (f), (g)(7) through (10), and/or (h) may certify to a newer version of any adopted standard(s) without first obtaining certification to the standard(s) and implementation specifications that have been incorporated by reference in §170.299 if the newer version of the standard(s) has been approved for use in the ONC Health IT Certification Program by the National Coordinator.

- Real World Testing Fact Sheet


- Real World Testing CGG

https://www.healthit.gov/collections/cygreal-world-testing
C-CDA Scorecard 2.0

How does C-CDA Scorecard get updated?
- Updates the last Monday of every month (sometimes in between updates if major errors) based on updates to C-CDA Validator
- New rules created by HL7 and Informato Guide released

One-Click Scorecard

Download availability

ONC Support Long Term

How can you provide input?

Resources

USCDI:
- Access and comment on the USCDI, including the Draft USCDI v1: [https://www.healthit.gov/uscdi](https://www.healthit.gov/uscdi)
- Submit to the ONC New Data Element and Class (ONDEC) Submission System: [https://www.healthit.gov/ondc](https://www.healthit.gov/ondc)

C-CDA Scorecard:
- [https://ccda.healthit.gov/scorecard/](https://ccda.healthit.gov/scorecard/)
- Github: [https://github.com/ONC-HealthIT/ccda-scorcard](https://github.com/ONC-HealthIT/ccda-scorecard)

- Sign up for and also view previous alerts for healthcare stakeholders that include updates about ONC health IT standards initiatives
ASK ONC!!!!

Break time!

• Come back by 1:45 to hear updates from Gay Dolin on USCDIv2 comments from SDWG
• Fun Fact: Perforated toilet paper was first patented in 1871, then re-patented in roll-form in 1891

Gay Dolin, Namaste Consulting

Topic 3: USCDI V2
Draft USCDI V2

What we are doing today:
- SDWG Convened a task force to review USCDI V2 Draft for its implications for C-CDA
  - Documents Here (HL7 Confluence): USCDI CDA Related Topics
- Goals:
  - Review Task Force Discussions
  - Encourage similar or additional comments to be submitted by you or your organization
  - Get your opinion on the task force discussions

USCDI Draft V2 and C-CDA

Summary of Discussions
2021-MAR

Discussions Focused On:
- Problems - Data of Diagnosis and Date of Resolution
- Diagnostic Imaging - Narrative vs Report
- Encounter Information - Encounter Diagnosis, etc.
- Care Team

- Deadlines:
  - Submit to HL7 Policy Advisory Committee (PAC): March 19, 2021 (This Friday)
  - Submit to ONC: April 15, 2021
Date of Diagnosis and Date of Resolution

- General Conclusions:
  - Need to bring in 2 more dateTime elements IF Date of Diagnosis and Resolution are brought in:
    - Onset Date
    - Recorded Date
  - Note: For Onset, diagnosis and resolution date systems SHALL allow recording of past dates
  - Need to provide more precise definitions for each dateTime element
  - Need to provide guidance on how C-CDA can represent all
    - The committee feels

Comments to Submit/Take-aways

- Submit precise definitions and examples for:
  - Diagnosis Date
  - Resolution Date
  - Onset Date

- SDWG needs to provide guidance for representing:
  - Diagnosis and diagnosis date
  - Onset date of (problem/finding/symptom)
  - Recorded Date
  - How?: C-CDA Examples Task Force/Companion Guide updates

Diagnosis Dates - Additional Notes

- In Example task force / Companion Guide
  - Consider if current modeling can handle
    - Or do we need extensions?
    - What about existing documents and the rest of same
    - How will recipients know that the new guidance has been adhered to?
  - Is a new/additional template ID needed?

- A note about 'recordedDate' as a new USCDI data element: this data element was not submitted to USCDI v2 as a candidate for addition
- Recommendation: In USCDI v2 add text that states that though recorded date (system recorded date) is often currently the only date available, the desire is to move to the clinically relevant dates of:
  - Diagnosis Date
  - Resolution Date

- Provenance – should capture recorded date (and is USCDI v1 Data element)
- PLEASE SEE WORD DOCUMENT "DIAGNOSIS RELATED DATES"
DIAGNOSTIC IMAGING – NARRATIVE VS REPORT

- General Conclusions:
  - In USCDI V1 only narrative was required
  - V2 adds Narrative and Report as separate Data elements
  - Confusion among USCDI V2 readers as clinically and from standards perspective both elements will be in a single report
  - Report and Narrative should be collapsed into 1 data element
  - New Data element needs precise definition
  - Current submitted definition focuses entirely on LOINC
  - Discrete imaging data is "more than just LOINC"
  - C-CDA Diagnostic Imaging Report is:
    - Not highly used
    - Likely outdated
    - Contains highly detailed DICOM Object Catalogue requirements and terminology issues

- General Conclusions – cont.
  - In Diagnostic Imaging the result and the report are the same
  - It is unclear in Report what is meant by Discrete Data
    - LOINC codes and result values?
      - Always quantifiable?
      - Conclusion – text explanation?
      - Conclusion – "normal" "abnormal" etc
    - Does discrete data also mean radiologic data that may or may not be useful to primary clinician
      - SOP Instance Observation
      - Referenced frames observation
    - We did not talk about Diagnostic Imaging Order

COMMENTS TO SUBMIT/TAKE-AWAYS

- Submit recommendation that Diagnostic Imaging Narrative and Report be collapsed into single data element
- Provide precise definition for this collapsed data element
  - Provide precise definition for what “discrete data” means within this context
    - LOINC codes and result values?
      - Always quantifiable?
      - Conclusion – text explanation?
      - Conclusion or encoded interpretation – "normal" "abnormal"?
    - Does discrete data also mean radiologic data that may or may not be useful to primary clinician
      - SOP Instance Observation
      - Referenced frames observation
**DI Report vs Narrative Additional Notes**

- Narrative SHALL be present
  - Includes impression narrative
- Structured Data Elements?
  - Procedure Performed (LOINC)
- What is the workflow around this?
  - From a certification perspective who is the report generator?
  - A general EHR won't be creating a rad report
  - EHRs do not create this report
  - CCD summary (for example) might state have an observation — but reference out to the rad report
  - A general EHR won't be creating a rad report
  - A general EHR won't be creating a rad report
  - Are RIS certified by ONC?
  - Encoded Observation/procedure within an encounter or summary document will reference out to the actual report

**Encounter Information**

- General Conclusions:
  - Clarity is needed wrt:
    - Encounter Diagnosis
    - Reason for Visit
    - Chief Complaint
    - Principle Diagnosis
    - Primary Diagnosis
- Comment:
  - Even if just adding "encounter diagnosis" — need definition for all of the above terms
  - The task force feels CMS should provide these definitions

**Care Team**

- Need to recognize that all care givers are not formal health professionals and will not have an NPI
- This needs to be asserted in the Care Team Data class
- Security and access info concerns:
  - Security as it exists today and from a standards perspective for role based "Access control" is set up as if all the Care team is part of one enterprise
  - If we want to bring in community/family care giver and multi providers, access issue need to be resolved
- Security and access wrt Care Team Suggestion/comment:
  - Significant changes are needed within clinical applications, paradigm shifts and standards guidance
Thanks for your input!!!

Snack time!

- Return by 2:45 to learn about Closed-Loop Referral and Cross-Community Testing Collaboration
- Fun fact: The average American eats over 4 pounds of potato chips each year!

James Grue, OD, Grue Consultation
Lisa Nelson, MaxMD

Topic 4: Use Case: Closed-Loop Referral Cross-Community Testing Collaboration
Cross-community testing

- Looking for ways to connect across multiple CDA communities to leverage common objectives—all pull together for a greater impact
- HL7, IHE, DirectTrust, Commonwell, Carequality
- One unifying focus - a use case
- Different testing opportunities

About the use case

- Improving communication across a dispersed care team
- Closed-loop referrals
- Gathering clinical data that can be used to evaluate outcomes, create a learning health system
- Better patient engagement, better care outcomes

Changes in Foveal Avascular Zone in Early Diabetic Retinopathy

- The earliest measurable microvascular changes in the body
Changes can be measured and quantitated

- The changes can be measured and quantitated.
- Size of the foveal avascular zone: 0.228 mm²
- Vascular density: PRML: 1.801
- These changes are present 2 or more years before the appearance of visible retinopathy in many cases
- The amount of change is related to the level of diabetes control
Role of Clinical Outcome Registries

- Analyze the relationship to the appearance of OCT-A findings to the time of development of visible retinopathy.
- Since the microvascular changes are occurring in other organs in the body:
  - Analyzing the predictive value based on HbA1c levels of developing other diabetic complications such as:
    - Peripheral neuropathies
    - Kidney damage
    - Skin conditions
    - Etc.
- Although the OCT-A is completed in the eye care office, sharing the results has implications for many other aspects of diabetes management that is important to the primary care physician and the rest of the team.

IHE Connectathon report out

- 4 Implementers Tested: NextGen, Epic, Meditech, Qvera
- Each produced Referral Note to initiate the referral
- Each produced CCD as the outcome results report
  - All agreed to work toward a Consultation Note as a better option
  - Both a CCD and the final Progress or Consultation Note would be ideal
- Spec allows for lots of optionality
- Handout shows key content expectations for potential Referral Note and close-the-loop documents Rubric Rules
- XDM metadata, V2 Message, CDA Document → All necessary?

Test your Referral Note knowledge
Proposed Rubric Rules for Referral Notes

- Header – service event
- Header – encompassing encounter
- Reason for Referral Section
- Care Plan Section

Who is covering what?

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<tr>
<th>Area of Testing Focus, Review and Expectation Setting</th>
<th>IHE</th>
<th>HL7</th>
<th>DT</th>
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<td>Content processing, data reuse</td>
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<td>?</td>
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What should be the focus for Real World Testing?

Break time!

- At 3:45 pm ET, return to hear the latest CDA and C-CDA roadmap updates!
- Risk is the most popular game for today’s attendees.
- Fun Fact: According to Guinness World Records, in 2019 the world’s best selling board game ever is Monopoly.
Re-Envisioning HL7

- September 2020, the Re-envisioning HL7 effort was introduced to the Membership, including the Core Five Principles that serve as anchors to the strategy and next steps.

**Core Five Principles**

1. **Focus**: The future of HL7 is significantly dependent upon the ongoing development and adoption of HL7 FHIR. Thus, we must direct our primary efforts to focus on FHIR, though we will continue to support essential maintenance updates for other active standards.

2. **Global Relevance**: 2020 has demonstrated the imperative for global health data interoperability. HL7 FHIR adoption is critical to achieving that goal. Driving further adoption requires that we embrace our global community and move beyond our traditional stakeholders and approaches.

3. **Agility**: Moving quickly and decisively is the hallmark of a modern standards organization. HL7 must keep pace with the needs of a rapidly evolving industry. The future HL7 must be as nimble and agile as the industry it serves.

4. **Sustainability**: Current funding is insufficient to adequately address the current and future needs of the organization, such as advancing FHIR, achieving global relevance, and reaching a larger community. HL7 needs to maximize existing funding sources and identify new sources to advance our vision and mission.

5. **Community**: We must inspire our membership and expand our reach and engagement of broader communities to support the development and implementation of HL7 standards.

Overview: Re-Envisioning HL7 International Initiative

- 15 Board Recommendations
- 12 Task Groups
- 5 Bold Principles

[https://confluence.hl7.org/display/RH](https://confluence.hl7.org/display/RH)
HL7 Commitment to CDA

Recent activities demonstrating this commitment:
- International Patient Summary (IPS)
- New C-CDA on-line navigation Tool
- 2021 Annual Value Set Update
- CDA IG Web Publishing Pilot

HL7 CDA Management Announcement on the Future of the CDA Standard

- Many have asked about the future of CDA given the HL7 re-envisioning ‘Focus’ principle's emphasis on FHIR. The purpose of this announcement is to reaffirm that HL7 is committed to supporting the CDA implementer community. That means continued development and maintenance of CDA implementation guides based on CDA R2.0, and preparation of a roadmap of planned activities to address CDA convergence with FHIR. The CDA Management Group continues to support critical CDA projects such as the International Patient Summary (IPS) and pharmacy templates. HL7 also has recently introduced a new Online Navigation tool for C-CDA R2.1 that makes the existing implementation guide and companion guide easily accessible and searchable from the web. Part of the roadmap to FHIR includes developing a new web publication approach for publishing CDA implementation guides with FHIR Tooling.

- The CDA Management Group will be sharing additional details about the CDA Roadmap as it develops in the coming months.

https://confluence.hl7.org/display/CDA/CMG+Announcements

C-CDA R2.1 Roadmap: 3 Distinct Streams

Stream 1 - Explorers - build new platform
- New web platform using FHIR Publisher (Sean/Grahame/Lindsey)
- Requires UI review for CDA navigability

Stream 2 - Prepare for new platform
- Errata Resolution + Planning + Prep for new platform + Processes (queue up scope that needs to be applied) (Russ/Lisa/Gay/Brett)

Stream 3 - Alternative Navigation Tool (temporary)
- Get C-CDA documentation on web as soon as possible (John/Brett/Lisa)
- Based on Trifolia workbench which produced June 2019 PDF
C-CDA R2.1 Roadmap

C-CDA JIRA Dashboard

https://jira.hl7.org/secure/Dashboard.jspa?selectPageId=12104

C-CDA Web IG Pilot

https://build.fhir.org/ig/HL7/cda-ccda-2.2/index.html
CDA core specification over time…

- CDA R1 was created in 2000 – initial release of CDA, structured header with narrative content
- CDA R2 was created in 2005 – updated to support both narrative & structured content in the body of the document.
  - IPS and CDA-R2.1 are built on
  - Millions are exchanged daily worldwide
- CDA R2.1 was published as a normative standard in 2019

Backwards Compatibility

- Within a major version or family of HL7 interoperability standards, including DSTUs, wire-backwards compatibility of successive dot versions and releases is a goal.

  HL7 Board Motion approved Sept. 11, 2012

CDA R2.1 Wire-backwards Compatibility

- Out of the box, the CDA R2.1 schema is compatible with the CDA R2 documents.
  - All the old attributes are still present.
  - All new attributes are “optional”.
- XSLT transforms can be created to transform:
  - CDA R2 document w/ extensions* into CDA R2.1 native documents.
  - CDA R2.1 documents into CDA R2 w/ extensions* based on existing implementation guides.

  * Note: Possible because SDTC extension namespace maps to RIM attributes
Summary of CDA R2.1 Model Changes

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<td>Increase cardinality (..*)</td>
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<td>Changed data types</td>
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</tbody>
</table>

Feedback regarding planned use of CDA R2.1

"None of us is as smart as all of us." Ken Blanchard
Continue the conversation with our community on Zulip at
https://chat.fhir.org/#narrow/stream/179311-C-DCA/