The Office of the National Coordinator for Health Information Technology

Health IT Advisory Committee

U.S. Core Data for Interoperability Task Force

Christina Caraballo, co-chair
Terry O'Malley, co-chair

April 4, 2018

Agenda

- Call to Order / Roll Call (5 minutes)
- Overview of meeting (5 minutes)
- Confirm Stage Work (50 minutes)
- Feedback for Final Recommendations (25 minutes)
- Public comment (5 minutes)

Overview of the Meeting: Topics and Goals

- Confirm work and criteria in process stages
  - Do the "Biography of a Data Element" specifications accurately depict the work being undertaken and the progression criteria for their respective stages?
  - Do they need more detail or specificity?
  - Does the overall workflow make sense?
- Discuss additional feedback for inclusion in final recommendations
- Next week's discussion:
  - Review final recommendations to be presented to HITAC

Stage 1 Proposed & Stage 2 In Preparation Status

Purpose of Stage 1 Proposed Status: Provide an unimpeded path to propose data elements for consideration regardless of technical development or broadly demonstrated value

- **How to get in**: Data elements and use proposed by any stakeholder
- **What happens in Stage 1:**
  - Stakeholders submit data elements of value to them
  - Data elements aggregated by use and value to many stakeholders
  - Establish relevance to a government policy priority
  - Estimate net value
- **How to get out:** Demonstrate high net value

Purpose of Stage 2 In Preparation Status: Tightly specify data class to enable the technical work to begin

- **How to get in:** Demonstrate high net value
- **What happens in Stage 2:**
  - Create the data class:
    - Data elements
    - Definitions
    - Reuse of previously specified data elements
  - Propose use cases that engage the stakeholders cited in Stage 1
- **How to get out:** Have clear definition of data class and use cases

Biography of a Data Element through Stage 1 & 2

	Stage 1	Stage 2
Start time in Stage 1	x	
Name of the data class	x	
List of component elements	x	
Name/contact information of Proposer	x	
Value statement of the Proposer	x	
Name/contact information of supportive stakeholder(s)	x	
Value statement(s) of supportive stakeholder(s)	x	
Other data class or classes is this element part of	x	
Net value estimate of each data element by stakeholders	x	
Start time in Stage 2		x
Definition of each element in the proposed data class		x
Specification of each data element		x
Selection of applicable standards		x
Identification of gaps in applicable standards		x
Required use in regulation or quality measurement		x
Substitution of like or similar data elements		x
Harmonization of use in other data classes		x
Revised, re-specified data class		x
Net value estimate of each data element by stakeholders		x

Progression through stages is likely to be linear

However, part or all of a data class may return to an earier stage

Stage 3 Emerging & Stage 4 Candidate Status

Purpose of Stage 3 Emerging Status: Prepare the data class to be tested in production settings and to meet technical requirements essential to interoperability

- **How to get in:** Have clearly defined data class and use cases
- **What happens in Stage 3:**
  - Developmental testing in Dev Days or Connectathon-type events
  - Further refinement and specification of data class based on testing
  - Make progress in resolving gaps in applicable standards and barriers to data collection
  - Reassess value/cost to insure data classes do not proceed without net value
- **How to get out:** Achieve sufficient technical specificity for testing in production settings

Purpose of Stage 4 Candidate Status: Test data class in production and prepare for deployment at scale

- **How to get in:** Achieve sufficient technical specificity for testing in production settings
- **What happens in Stage 4:**
  - Testing and modification to resolve barriers to nationwide implementation
  - In use in at least one commercial system
- **How to get out:** Demonstrate that data class is ready to be deployed at scale

Biography of a Data Element through Stage 3 & 4

	Stage 3	Stage 4
Start time in Stage 3	x	
Trial of data class in limited production setting	x	
Site and duration of testing	x	
Modifications to data class based on testing	x	
Revised, re-specified data class	x	
Retesting of revisions	x	
Site and duration of retesting	x	
Net value estimate of each data element by stakeholders	x	
Start time in Stage 4		x
Trial of data class in commercial production		x
Modifications to data class based on testing		x
Revised, re-specified data class		x
Retesting of revisions		x
Site and duration of retesting		x
Net value estimate of each data element by stakeholders		x

Progression through stages is likely to be linear

However, part or all of a data class may return to an earier stage

Stage 5 USCDI & Stage 6 Adoption Status

How to get into Stage 5 USCDI: Demonstrate that data class is ready to be deployed at scale

- What happens in Stage 5:
  - » Policy levers used to promote widespread adoption
  - » Data class is required for nationwide exchange
  - » QHINs and their Participants required to update their technology to support new USCDI data class

Widespread adoption = "Stage 6"

Biography of a Data Element through Stage 5 & 6

	Stage 5	Stage 6
Start time in Stage 5	x	
Adoption curve at 6 mo	x	
Adoption curve at 12 mo	x	
Adoption curve at 24 mo	x	
Revision required due to lack of progress	x	
Start time in Stage 6		x

Progression through stages is likely to be linear

However, part or all of a data class may return to an earier stage

Biography of a Data Element

Biography of a Data Element	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Start time in Stage 1	x					
Name of the data class	x					
List of component elements	x					
Name/contact information of Proposer	x					
Value statement of the proposer	x					
Name/contact information of supportive stakeholders	x					
Value statement(s) of supportive stakeholder(s)	x					
Other data class or classes is this element part of	x					
Net value estimate of each data element by stakeolders	x					
Start time in Stage 2		x				
Definition of each element in the proposed data class		x				
Specification of each data element		x				
Selection of applicable standards		x				
Identification of gaps in appliable standards		x				
Required use in regulation or quality measurement		x				
Substitution of like or similar data elements		x				
Haarmonization of use in other data classes		x				
Revised, re-specified data class		x				
Net value estimate of each data element by stakeolders		x				
Start time in Stage 3			x			
Trial of data class in limited production setting			x			
Site and duration or testing			x			
Modifications to data class based on testing			x			
Revised, re-specified data class			x			
Retesting of revisions			x			
Site and duration of retesting			x			
Net value estimate of each data element by stakeolders			x			
Start time in Stage 4				x		
Trial of data class in commercial production				x		
Modifications to data class based on testing				x		
Revised, re-specified data class				x		
Retesting of revisions				x		
Site and duration of retesting				x		
Net value estimate of each data element by stakeolders				x		
Start time in Stage 5					x	
Adoption curve at 6 mo					x	
Adoption curve at 12 mo					x	
Adoption curve at 24 mo					x	
Revision required due to lackof progress					x	
Start time in Stage 6						x

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U.S. Core Data for Interoperability Task Force

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Appendix

USCDI Task Force Membership

First Name	Last Name	Organization
Co-Chairs		
Christina	Caraballo	Get Real Health
Terry	O'Malley	Massachusetts General Hospital
Members		
Nancy	Beavin	Humana
Rich	Elmore	Allscripts
Valerie	Grey	New York eHealth Collaborative
Leslie	Hall	Healthwise
Rob	Havsay	HIMSS
Laura	Heermann-Langford	Intermountain Healthcare
Eric	Helfin	Sequoia Project
Ken	Kawamoto	University of Utah Health
Steven	Lane	Sutter Health
Clem	McDonald	National Library of Medicine
Kim	Nolen	Pfizer
Brett	Oliver	Baptist Health
Mike	Perretta	Docket
Dan	Vreeman	Regenstrief Institute, Inc

U.S. Core Data for Interoperability (USCDI) Charge

- **Overarching Charge**: Review and provide feedback on the U.S. Core Data for Interoperability (USCDI) structure and process.
- **Specific Charge:** Provide recommendations on the following:
  - Mechanisms/approaches to receive stakeholder feedback regarding data class priorities;
  - The proposed categories to which data classes would be promoted and objective characteristics for promotion;
  - How the USCDI would be expanded and by how much; and
  - Any factors associated with the frequency with which it would be published.

General Terminology

- Stakeholder – anyone with a vested interest in the USCDI
- Candidate Status – Data class has achieved technical level such that it can be tested in production settings
- Emerging Status – Data class has been defined and its future applications demonstrated
- USCDI Status – Data class is fully ready to be implemented in real-life settings
- Normative – Parts of a standard that specify what implementers should conform to
- Provenance – describes metadata, or extra information about data, that can help answer questions such as when and who created the data.
- Data element – single item with specific definition
- Data set – a group of data elements combined by a single stakeholder to serve a specific purpose
- Data class – a group of data elements that serve one or more purposes for more than one stakeholder
- Net value – equals value minus cost where the scale can be any type of cost or value (time, money, safety, quality, burden, etc.)
- Aggregate value – the combined net value derived by all stakeholders from implementing a specific data class

Prioritization Criteria

Characteristics of the Data Class

- Important to a high priority domain
- Based on TEP, Standards body type of review, real time consensus e.g. ISA
- Ease of standardization
- Currently being collected
- Mature standards exist
- Standards exist and are in production use
- High value to many domains
- Captured within current workflows
- "Capturability“
- Viewed as a critical need by someone
- Value to future workflows

Characteristics of the Stakeholder

- Provider/Clinician
- Consumer/Individual/Family
- Payer/Insurance
- Regulator
- Contributes to a valued health outcome
- Researcher
- Public health

Characteristics of the Data Management Process

- Cost
- Availability

Characteristics of the Domain

- High volume
- High cost
- High failure rate
- Cuts across other domains/broad applicability

Characteristics of the Subject Population

- High risk
- High utilizers
- Policy Priority

Workplan

Meeting Date	Potential Discussion Items
February 21, 2018	~~• Discuss USCDI Task Force charge scope and feedback~~
February 28, 2018	~~• Proposed categories to which data classes would be promoted~~
March 7, 2018	~~• Mechanisms and approaches to receive stakeholder feedback regarding data classes and elements~~
March 14, 2018	~~• Objective characteristics for data class promotion~~ ~~• Prepare Draft Recommendations for HITAC review~~
March 21, 2018	~~• **Draft recommendations shared with HITAC committee**~~ ~~• Continued discussion on objective characteristics~~
March 28, 2018	~~• How the USCDI would be expanded and by how much~~ ~~• Frequency of USCDI publication and associated factors~~
April 4, 2018	• Confirm Stage Criteria • Feedback for Final Recommendations
April 11, 2018	• Update and refine recommendations
April 17, 2018	• Finalize recommendations
April 18, 2018	• **Present recommendations to full HITAC Committee**

Reference Materials

- ONC draft USCDI document – “Draft U.S. Core Data for Interoperability and Proposed Expansion Process” (January 5, 2018)
- White paper by Dixie Baker, et al, “Evaluating and classifying the readiness of technology specifications for national standardization.”
- Health IT Standards Committee recommendation letter incorporating Standards & Interoperability Task Force recommendations (March 26, 2015)