

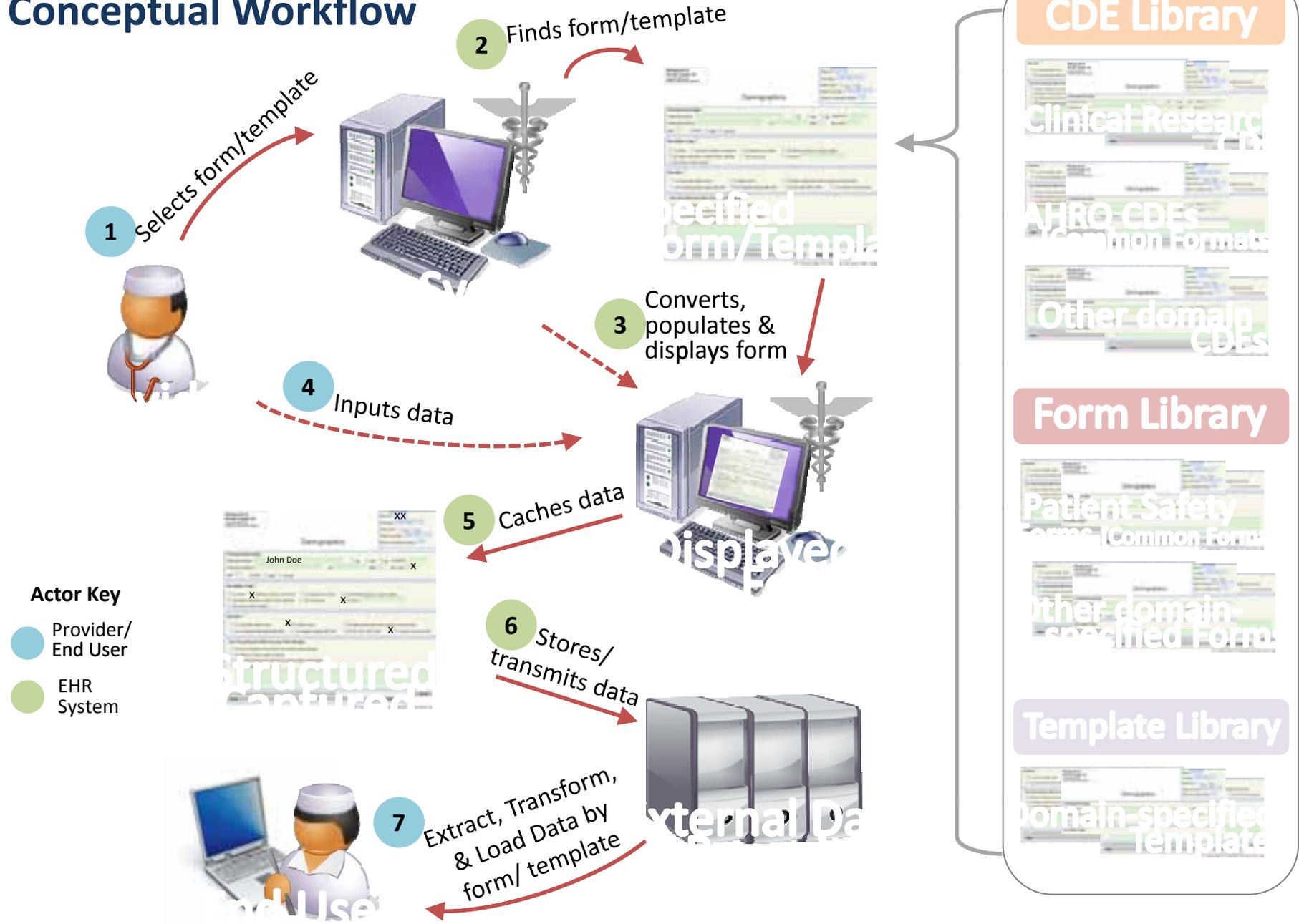
National Committee on Vital and Health Statistics Hearing

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November 12, 2013

Agenda

- S&I Framework Initiatives
 - Structured Data Capture
 - Data Access Framework
 - HeD
- MU Transactional Standards

Structured Data Capture Conceptual Workflow

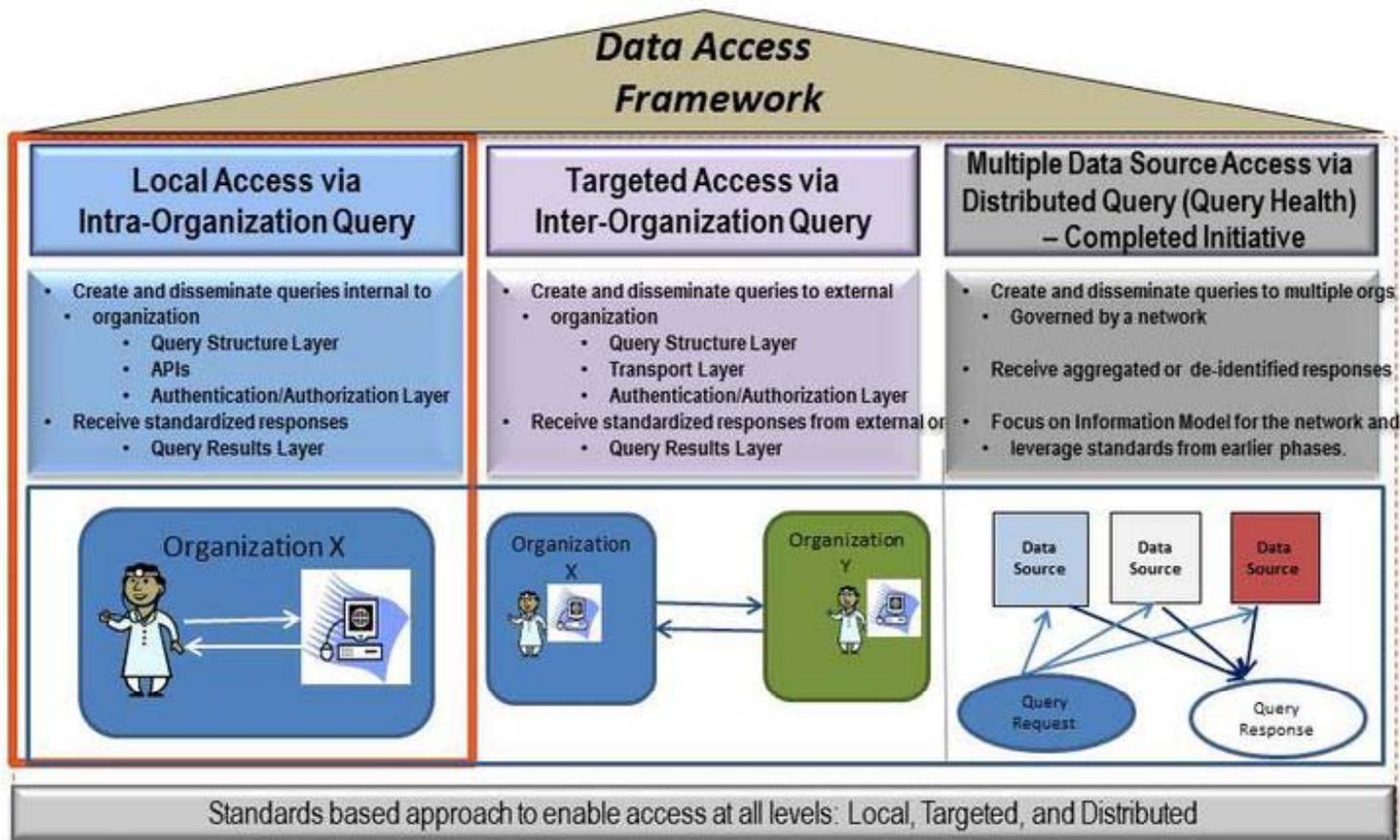


Structured Data Capture Data Architecture

Infrastructure will consist of **four** new standards that will enable EHRs to capture and store structured data:

1. Standard for the CDEs that will be used to fill the specified forms or templates
2. Standard for the structure or design of the form or template (container)
3. Standard for how EHRs interact with the form or template
4. Standard to auto-populate form or template

- Standards will facilitate the collection of data so that any researcher, clinical trial sponsor, reporting and/or oversight entity can access and interpret the data in electronic format
- Will leverage existing standards such as XML and CDISC Retrieve Form for Data Capture (RFD)



Note: An organization can be a hospital that is part of larger organization and can also include HIEs, RIOs, other types of organizations etc.

- Transport Layer—establishing a protocol for getting patient data from one place to another. Transport needs could include getting pathology results from a hospital lab to the office of a treating physician or getting immunization records from a clinic to a public health agency.

Candidate standards include: HTTP, SMTP, Direct, RESTful (IHE mHealth), SOAP (IHE SOAP), MU2 ModSpec RTM

- Security Layer—ensuring that patient data will only be accessible to authorized parties.

Candidate standards include: TLS+SAML, TLS+OAuth2, S/MIME

- Query Structure—making sure the “question” being asked is phrased appropriately for the data to answer it. “Questions” could include “what were the pathology results of this patient’s last test” and “how many immunizations has this clinic provided each month in the past year.”

Candidate standards include: ebRIM/ebRS, HL7 FHIR, HL7 HQMF

- Query Results—appropriately formatting the “answer” to the question posed. Pathology results may need to conform to clinical document architecture, while an answer about immunization counts could be presented as a simple bar graph.

Candidate standards include: C-CDA; HL7 v2.5.1; QRDA I, II, III

- Data Model to Support Queries—information models that define concepts used in clinical care.

Query Health Pilots

Pilot	Focus	RI Queries	RI Policy Layer	Data Sources	Kickoff
NYC & NYS Depts. of Public Health	Diabetes (NYC) Hypertension (NYS)	i2b2	PMN	RHIOs EHR Vendor	May 2012
FDA Mini-Sentinel	Use of clinical data sources for FDA questions	PMN	PMN	i2b2/Beth Israel	June 2012
CDC	National / regional: - Disease syndromes - Situation awareness	i2b2	PMN	Bio-Sense 2	July 2012
Mass. Dept. of Public Health	Diabetes	PMN	PMN	MDPHNet	July 2012
CQM	Quality Measures	hQuery	PMN	EHR Vendor	August 2012

Conceptual Use Case Diagram: CDS Guidance Service Diagram (Use Case 2)



CDS Guidance Requestor



CDS Guidance Supplier

Out of Scope

- Workflow Integration
- User Presentation
- Direct Interaction with the User
- How the Guidance Integrator will utilize the information
- Deciding what guidance is subscribed to

CDS Request
(*patient data + context*)

CDS Guidance
(*guidance + service structure*)

Out of Scope

- Authoring, Creation and Maintenance of Clinical Decision Support Knowledge
- Internal Intervention Format of CDS services supplier

In Scope

- Interface Definitions for Sending Patient Data & CDS Guidance
 - Patient Data Input to Service
 - Format of the CDS Guidance (output from CDS service)
 - Requirements to Support Service Transactions, Transport & Security

Meaningful Use & Interoperability

- Where we need to be:
 - Send Conservatively
 - Receive Liberally

- Where we are:
 - Send Conservatively
 - Receive even more conservatively

Steps to Address

- Updated Implementation Guides
 - Consensus on RE Fields (so they can be part of MU Certification)
 - Consensus on handling RE Fields when jurisdiction may not want data (ignore)
- Optional certification of receiving systems