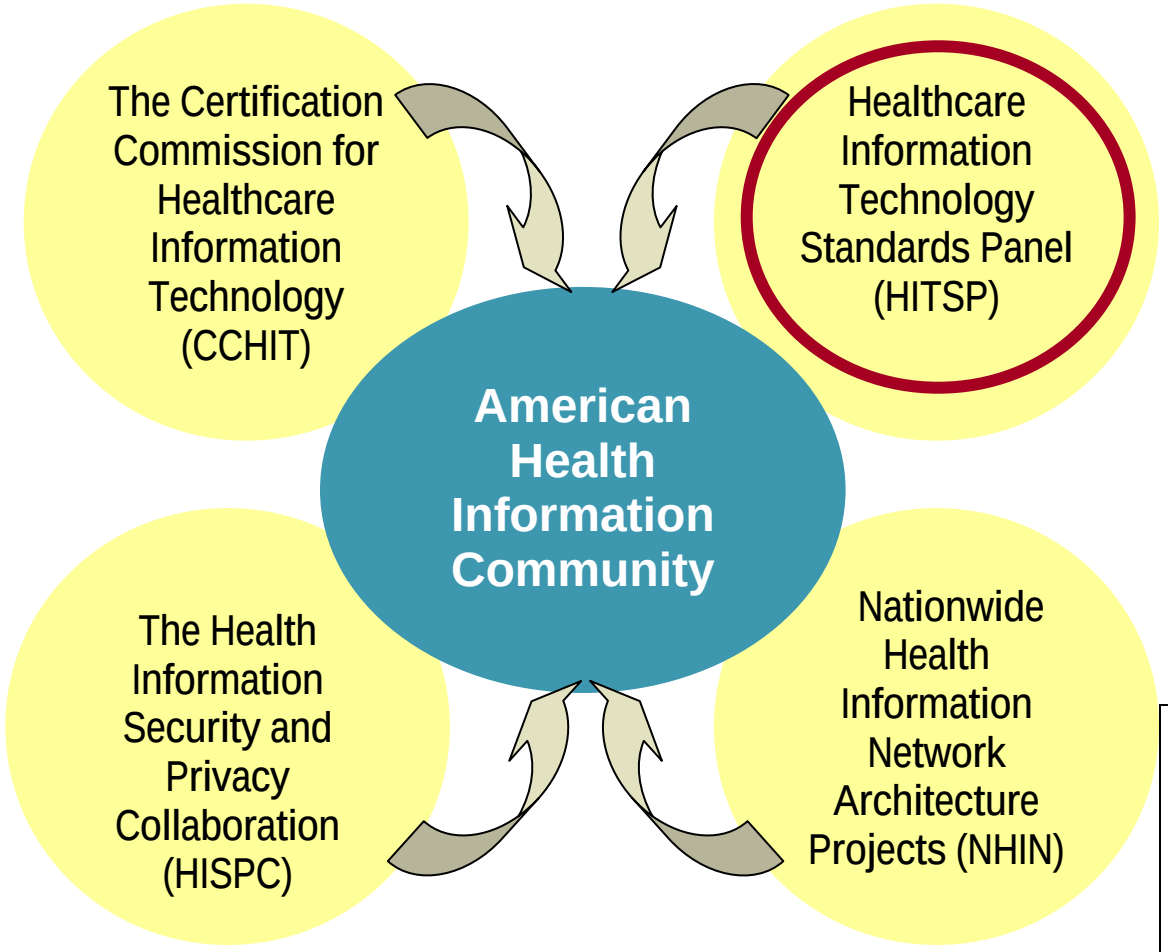
Healthcare Information Technology Standards Panel

2006, 2007 and Beyond

John D. Halamka MD

Chair, HITSP

A public-private "Community" was established to serve as the focal point for America's health information concerns and drive opportunities for increasing interoperability



HITSP includes 249 different member organizations and is administered by a Board of Directors

16 SDOs (6%)
197 Non-SDOs (79%)
19 Govt. bodies (8%)
10 Consumer groups (4%)
7 Project Team and Undeclared (3%)

The Community is a federally-chartered commission and will provide input and recommendations to HHS on how to make health records digital and interoperable, and assure that the privacy and security of those records are protected, in a smooth, market-led way.

Responsibilities of HITSP

- HITSP is responsible for harmonizing the standards used to exchange health data in the United States
  - The Panel brings together experts from across the health care IT community – from consumers to doctors, nurses, and hospitals; from those who develop healthcare IT products to those who use them; and from the government agencies who monitor the U.S. health care system to those organizations who are actually writing the standards
  - All strategic decisions are made by consensus within the panel
  - A Board of Directors provides governance and administrative guidance
- HITSP submits its recommendations to AHIC

2006 – the First “Turn of the Crank”

- Consumer Empowerment
  - Medications
  - Allergies
  - Demographics
  - Advance Directives
- Electronic Health Records
  - Laboratory including blood banking and microbiology
  - Ordering and results exchange
- Biosurveillance
  - Deidentified registrations
  - Labs
  - Radiology

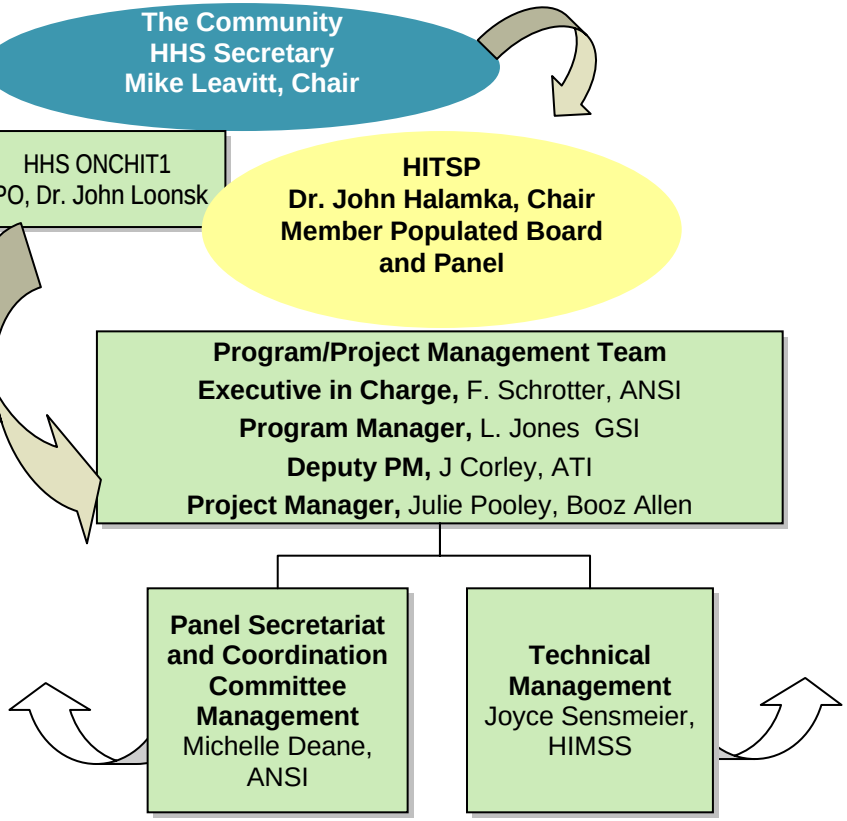
What did we do in 2006?

- Established the HITSP Organization and its committees
- Created the standards harmonization process including all coordinating committee sub-processes
- Harmonized standards for 3 use cases (accepted by Secretary Leavitt) and resolved three controversies along the way
  - To resolve CCR v. CDA, the CCD was successfully balloted
  - To resolve the need for Interim standards we accelerated CCD
  - To resolve HL7 2.4 v. 2.5, ELINICS will be maintained by HL7 and an HL7 2.51 version of ELINICS will be balloted in May
- To align HITSP interoperability specifications with CCHIT functional criteria, the CCHIT/HITSP Joint Working group is establishing a joint timeline for the next 3 years

HITSP Organization

HITSP
Member Populated
Coordination Committees

- Harmonization Readiness
  - Lynne Gilbertson
- Business Plan
  - Steve Lieber
- International Landscape
  - Bill Braithwaite
- CCHIT JWG
  - Jamie Ferguson
- Foundations
  - Bob Dolin & Steve Wagner
- Process Review
  - Lynne Gilbertson & Erik Pupo



HITSP
Member Populated
Technical Committees

- Care Delivery (including Emergency Responder EHR
  - Jamie Ferguson
  - John Madden, MD
  - Steve Wagner
- Consumer Empowerment
  - Elaine Blechman, PhD
  - Charles Parisot
- Population Health
  - Floyd Eisenberg, MD, MPH
  - Peter Elkin, MD
  - Shaun Grannis
- Cross Technical Committee WG
- Security and Privacy WG

HITSP Officers

- HITSP Chairman Dr. John Halamka, Chief Information Officer, Harvard Medical School
- HITSP Vice Chairman Dr. William Braithwaite, Health Information Policy Consulting
- HITSP Program Manager LeRoy Jones, CISSP
- HITSP Secretariat Michelle Deane, Staff Liaison, American National Standards Institute
- HITSP Project Director, Frances Schrotter, Senior Vice President and Chief Operating Officer, American National Standards Institute

HITSP Technical Committees

- ***Care Delivery*** -- Deploy standardized, widely available, secure solutions for accessing laboratory results and interpretations in a patient-centric manner for clinical care by authorized parties.

- ***Consumer Empowerment*** -- Deploy to targeted populations a pre-populated, consumer-directed and secure electronic registration summary. Deploy a widely available pre-populated medication history linked to the registration summary.

- ***Population Health***-- Transmit essential ambulatory care and emergency department visit, utilization, and lab result data from electronically enabled health care delivery and public health systems in standardized and anonymized format to authorized public health agencies with less than one day lag time.

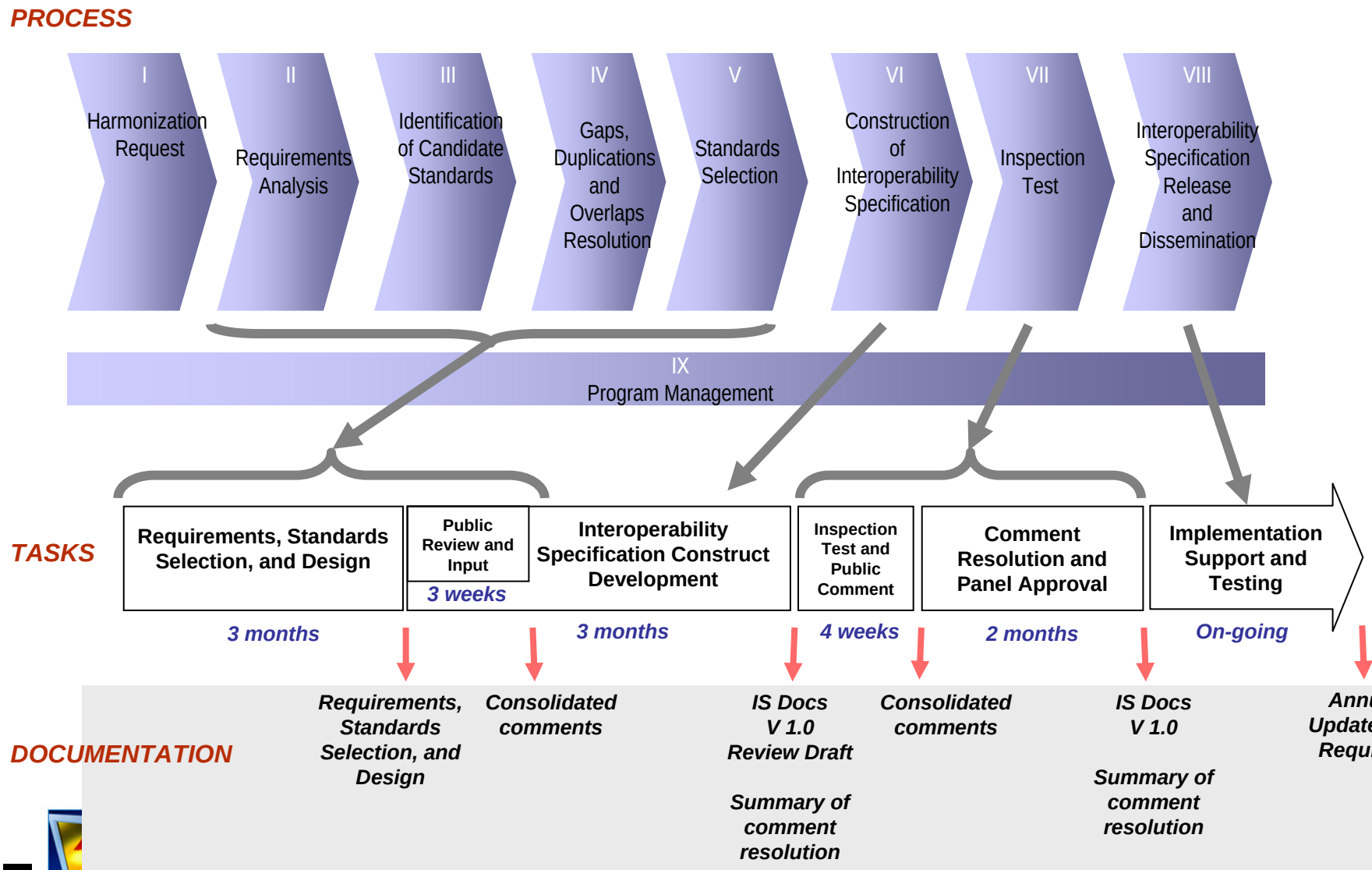
HITSP Technical Committees and Co-chairs

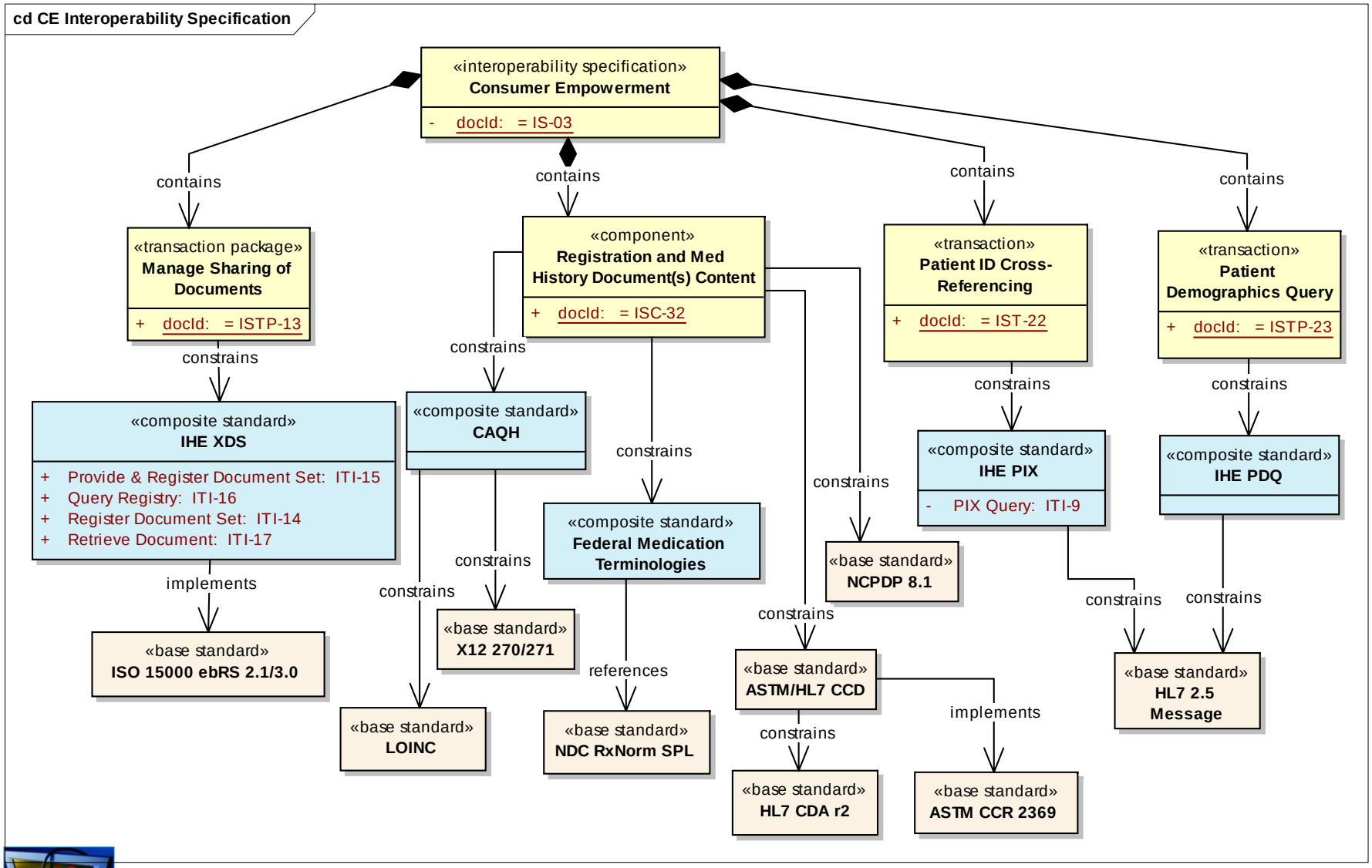
- **HITSP Technical Committee - Care Delivery**
  - James Ferguson, Kaiser Permanente
  - John Madden, MD, SNOMED International
  - Steve Wagner, Department of Veterans Affairs
- **HITSP Technical Committee - Consumer Empowerment**
  - Elaine Blechman, PhD, University of Colorado, Boulder
  - Charles Parisot, GE Healthcare
- **HITSP Technical Committee- Population Health**
  - Floyd Eisenberg, MD, MPH, Siemens Medical Solutions
  - Peter Elkin, MD, Mayo Clinic College of Medicine
  - Shaun Grannis, Department of Family Medicine, Indiana University School of Medicine
- **HITSP Security and Privacy Work Group – Cross TC**
  - All Technical Committee Co-chairs

HITSP Cross-coordination Activities

- **HITSP Cross-Technical Committee Coordination**
  - Bob Yencha, Alschuler Associates
- **HITSP Security and Privacy Workgroup Coordination**
  - Johnathan Coleman, Security Risk Solutions, LLC
- **HITSP Emergency Responder-EHR Coordination**
  - Michael Glickman, Computer Network Architects, Inc.

Standards Harmonization Work Plan Tasks




cd CE Interoperability Specification
«interoperability specification»
Consumer Empowerment
- docId: = IS-03
contains
contains
contains
contains
«transaction package»
Manage Sharing of Documents
+ docId: = ISTP-13
«component»
Registration and Med History Document(s) Content
+ docId: = ISC-32
«transaction»
Patient ID Cross-Referencing
+ docId: = IST-22
«transaction»
Patient Demographics Query
+ docId: = ISTP-23
constrains
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«composite standard»
IHE XDS
+ Provide & Register Document Set: ITI-15
+ Query Registry: ITI-16
+ Register Document Set: ITI-14
+ Retrieve Document: ITI-17
«composite standard»
CAQH
«composite standard»
IHE PIX
- PIX Query: ITI-9
«composite standard»
IHE PDQ
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«composite standard»
Federal Medication Terminologies
«base standard»
NCPDP 8.1
implements
«base standard»
ISO 15000 ebRS 2.1/3.0
«base standard»
X12 270/271
«base standard»
LOINC
«base standard»
NDC RxNorm SPL
«base standard»
ASTM/HL7 CCD
«base standard»
HL7 2.5 Message
references
constrains
implements
constrains
«base standard»
HL7 CDA r2
«base standard»
ASTM CCR 2369

HITSP Named Standards
Accredited Standards Committee (ASC) X12 Insurance Subcommittee (X12N) Implementation Guides Version 004010 plus Addenda 004010A1
Accredited Standards Committee (ASC) X12 Standards Release 004010
American Society for Testing and Materials (ASTM) Standard Specification for Continuity of Care Record (CCR): # E2369-05
Council for Affordable Quality Health Care (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase I Operating Rules
Federal Medication Terminologies
Health Level Seven (HL7) Version 3.0 Continuity of Care Document (CCD)
Health Level Seven (HL7) Version 3.0 Clinical Document Architecture (CDA/CDA R2)
Health Level Seven (HL7) Version 2.5
Health Level Seven (HL7) EHR System Functional Model Draft Standard for Trial Use (DSTU)
Integrating the Healthcare Enterprise (IHE) Laboratory Technical Framework Supplement 2006-2007 Revision 1.0
* Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Revision 1.0
Logical Observation Identifiers Names and Codes (LOINC®)
National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Version 8.1

2007 – The second turn of the crank

- Privacy and Security standards
- Emergency Responder
- Personal Health Records
- Medication Management
- Quality

Consumer Access to Clinical Information

C Extension of existing Consumer Empowerment use case	**Consumer Access to Clinical Information** Consumers will benefit from the ability to access important healthcare data stored within their electronic health record to assist them in making decisions regarding care and healthy lifestyles. Accessible information could include registration information, medications history, lab results, current and previous health conditions, allergies, summaries of healthcare encounters and diagnoses. Consumers would be able to incorporate this information from their EHRs into Personal Health Records and share the information with designated individuals as needed. The PHR should describe medical terminology into layman's terms for the consumer. PHRs should be portable between vendors, so consumers can transfer the information as required. *AHIC Priority Areas* CE 1.0 Lab results as needed by patient CE 2.0 List of conditions and allergies CE 2.1 Health Problems CE 2.2 Medication Allergies CE 2.3 Allergies CE 6.2 Diagnosis codes AHIC 25.0 PHR portability methods *Workgroup Issues* CE 11.0 Limited pre-populated clinical data & limited patient access CE 13.0 Connectivity between physician offices, PHR's and pharmacies CE 12.0 Minimal interoperability or portability CE 10.0 PHR not integrated with workflow CE 14.0 State laws regarding labs CE 15.0 Policies for consumer entered data

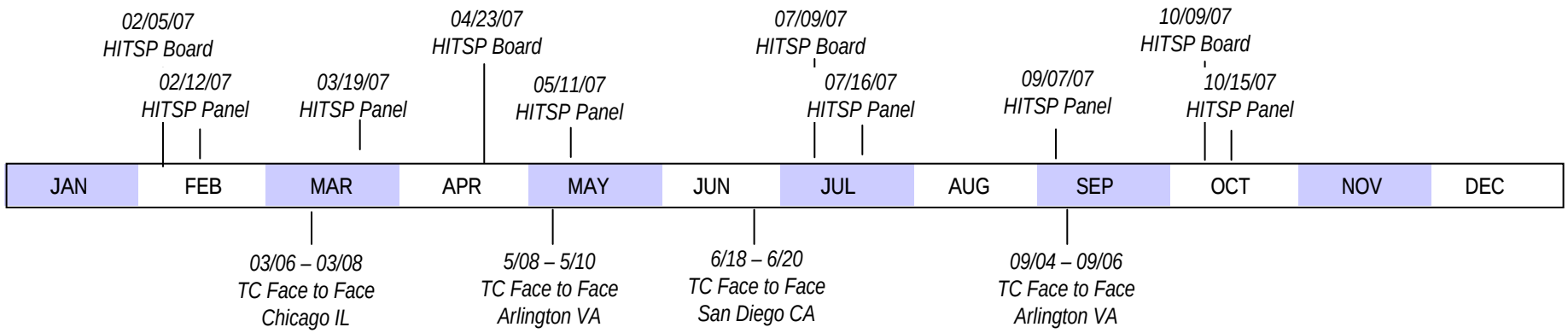
Medications Management

A	New Use Case	**Medications Management** Consumers and providers would both benefit from electronic prescribing of medications, which would include transmittal of prescriptions to pharmacies by clinicians. Providers would be able to receive real-time feedback regarding potential adverse interactions and verify medication compliance by the consumer. Pharmacy Benefits Management entities would be able to interact with providers and consumers during the medications prescribing and fulfillment activities. Consumers would also be able to request prescription refills, view their prescription histories, verify insurance eligibility and coverage, view formulary information and incorporate all of this information into their Personal Health Records. *AHIC Priority Areas* CC 8.0 Monitoring of Medications EHR 2.0 Pharmacy/Allergy CCHIT 3.0 Medication management CCHIT 3.1 Outpatient prescription writing and transmission to pharmacies CCHIT 3.2 Ordering CCHIT 3.3 Clinical decision support CCHIT 3.4 Transmission CCHIT 3.5 Dispensing CCHIT 3.6 Administering CCHIT 3.7 Reconciliation *Workgroup Issues* EHR 11.0 Pharmacy/medication interoperability EHR 14.0 Need for confidentiality, privacy and security

Quality

A	Extension of existing Biosurveillance use case	**Quality** Providers would benefit from the collection and dissemination of healthcare quality data such as HQA quality indicators for inpatient care and AQA quality indicators for ambulatory care, particularly if this information can be integrated into EHR systems within the provider's workflows. Clinicians could benefit from receiving realtime or near-realtime feedback regarding relevant quality indicators and contra-indications for specific patients. Additionally, quality data across multiple providers and entities could be aggregated for the purpose of public reporting. *AHIC Priority Areas* Q 1.0 Inpatient Quality Measures (core set) Q 2.0 Ambulatory measures (core set) Q 3.0 Clinicians have access to feedback (self-assessment) Q 4.0 Public reporting *Workgroup Issues* Q 8.0 Lack of data and technical standards and clinical documentation Q 9.0 Data sharing rights and responsibilities Q 10.0 Data security and privacy – policies for secondary use

HITSP 2007 Timeline



Activity 1 – Version 2.0 of Existing EHR, CE, BIO ISs

Implementation Support and Testing
(includes minor document updates)

On-going Support

EHR, CE and BIO v 2.0

Activity 2 – On-going Work for Existing EHR, CE, BIO ISs (e.g. Security and Privacy)
Activity 3 – New Emergency Responder EHR Use Case

S&P and EHR-ER v 1.0, EHR, CE, and BIO v M.m

Requirements, Standards Selection, and Design
01/19 – 04/12

Public Input
04/13 – 05/03

IS Construct Development
04/13 – 07/19

Inspect Test and Public Comment
07/20 – 08/16

Comment Resolution and Panel Approval
08/17 – 10/15

Implementation Support and Testing
(with annual updates as required)

Activity 4 –New Use Cases from AHIC

Detail Schedule to be Established Upon Review of the Use Cases

Version 1.0 of the Security and Privacy Constructs and Emergency Responder EHR IS

Activity	Date
Requirements and Design	Now – April 12
TC Face to Face in Chicago to document Requirements, Standards Selection, and Design (RSSD)	March 6 – 8
March 19 Panel Meeting to review progress	March 19
TC approves RSSD	April 6
Project Team Editorial Review and Publication	April 9 - 12
Public Review and Input on the RSSD	April 13 – May 3
TCs Construct Development and Comment Disposition	April 13 – July 19
TC Face to Face in Arlington to triage comments and continue IS development	May 8 - 10
May 11 Panel Meeting to review summary of comments received and status of IS development	May 11
TC Face to Face in San Diego to continue IS development	June 18 - 20
July 16 Panel Meeting to review summary of comment disposition and draft IS docs	July 16

Continued on next page

Version 1.0 of the Security and Privacy Constructs and Emergency Responder EHR IS

Activity	Date
Inspection Test and Public Comment	July 20 – August 16
Comment Resolution and Re-publication	August 17 – October 8
TC Disposition Comments and Update Documents	August 17 – September 21
TC Face to Face in Arlington to complete comment resolution and update documents	September 4 - 6
September 7 Panel Meeting to review progress of comment resolution	September 7
Project Team Editorial Review, Audit, and Re-publication	September 24 – October 5
Release 5 days in advance of Panel meeting	October 8
October 15 Panel Meeting to Approve ISs	October 15

Summary

- Over the past year, HITSP has become an established, trusted organization with a multi-stakeholder, open, transparent process for standards harmonization
- In 2007, we will complete 4 additional uses cases
- In 2008, we expect an additional 3-4 uses cases
- Our Foundations Committee will work on the medium to long term alignment of standards organizations and their work products in parallel with the Use Case work of the entire panel

Contact Information

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