Technical Assistance for Health Information Technology and Health Information Exchange in Medicaid and SCHIP

Overview of Technical and Data Standards for Health IT and HIE

Presented by:

John D. Halamka MD, MS – Chair - HITSP, CIO of Harvard Medical School and Beth Israel Deaconess

Funded by the Agency for Healthcare Research and Quality

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Overview

- Welcome
- Before We Begin
- Introductions
- Standards Harmonization in the U.S.
 Presented by John D. Halamka, MD, MS
- Question and Answer
- Closing Remarks



Before we begin...

- The Webinar will be recorded and the link to the recorded session, along with a copy of the presentation slides, will be distributed via email by Wednesday, April 9th.
- Please note all participants will be placed on mute once the presentation begins.
- If you wish to be un-muted, choose the "raise hand" option to notify the host.
- If you have a question during the presentation, please send your question to all participants through the chat. At the end of the presentation, there will be a question and answer period.

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Listserv Registration

- Please register for the listserv to receive announcements about program updates
- □ To register go to http://healthit.ahrq.gov/Medicaid-SCHIP
- □ Click on "Medicaid-SCHIP Fast Facts" on the left-hand side of the screen
- There are two ways to register for the listserv:
 - 1. Click the link "Click here to subscribe to the listserv" which will open a pre-filled email message, enter your name after the text in the body of the message and send.
 - 2. Send an E-mail message to: <u>listserv@list.ahrq.gov</u>.
 On the subject line, type: **Subscribe**.
 In the body of the message type: **sub Medicaid-SCHIP-HIT** and **your full name**. For example: sub Medicaid-SCHIP-HIT John Doe. You will receive a message asking you to confirm your intent to sign up.



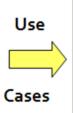
Comments and Recommendations for Future Sessions

Please send your comments and recommendations for future sessions to the project's email address:

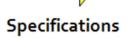
Medicaid-SCHIP-HIT@ahrq.hhs.gov

The National HIT Process

American Health Information Community (AHIC)



Health Information Technology Standards Panel (HITSP) Interoperability



AHIC Recommends --Secretary "Accepts"

Certification Commission on Health Information
Technology

Stark and Anti-kickback

Nationwide Health Information Network

Federal Systems and Healthcare Contracts
(Executive Order 13410)



Verified



Use

Secretary
"Recognizes"
Interoperability
Standards

AHIC Use Case Development "Rounds"

AHIC Priorities and Use Case Roadmap 2006 2007 Use Cases 2008 Use Cases 2009 and Beyond CE 3.0 Administrative features O 3.1 Clinical decision support AHIC 15.0 Data access/data HITSP 2.0 Secondary uses of data Consumer Consumer Access CE 3.1 Appointment scheduling HITSP 2.1 Clinical research Q 5.0 Clinical decision support control Remote Remote **Empowerment** AHIC 16.0 Data aggregation HITSP 2.2 Clinical trials to Clinical CE 3.2 Demographic profile Q 6.0 Expanded inpatient quality Monitoring Consultation HITSP 2.3 Population health CE 3.3 Editing account profile measures AHIC 17.0 Infrastructure areas **Use Case** Information HITSP 3.0 Quality/control CE 3.4 Insurance eligibility & claims Q 7.0 Expanded ambulatory quality missino CE 3.5 Financial recordkeeping & measures AHIC 17.1 Security, network measurements HITSP 3.1 Consistency across BIO 1.2 Clinical symptomology repositories Registration Remote Structured Access to CF 4 () Reminders (examples) BIO 1.3 Integration with EHRs AHIC 18.0 Vital measurements Medication Monitoring of email HITSP 4.0 Clinical device data Clinical Data CE 4.1 Annual check-ups BIO 1.4 Health alerting (HA)/email AHIC19.0 Text documents AHIC 21.0 Health literacy CE 4.2 Cancer screening-HITSP 4.1 Glucometers History Vital Signs and Reminders Provider HITSP 4.2 Monitors BIO 2.1 Collaborative discussions (multilingual support) mammograms Labs (Glucose) On-line CE 4.3 Cancer screening-BIO 2.2 Web pages AHIC 23.0 Advance directive/living HITSP 4.2 Smart pump Permissions HITSP 5.0 Cross use case work on colonoscopies BIO 3.2 Chemoprophylaxis Consultation PHR Transfer CE 4.4 Immunizations BIO 3.3 Treatment AHIC 24.0 Social/family history security (standards) CE 6.0 Summaries of healthcare BIO 3.4 Isolation/quarantine AHIC 26.0 Medication history HITSP 5.3 Authentication models to support chain of trust data encounters BIO 3.6.2 Disease registry AHIC 27.0 E-prescribing CE 6.1 Dates of services BIO 4.0 Adverse event reporting AHIC 28.0 Standardization of CE 6.3 Procedure codes BIO 4.1 Devices, drugs, biologic device interfaces **Emergency** CE 7.0 Educational information BIO 5.0 Nosocomial infections AHIC 29.0 Care plans/clinical EHR Consultation & Medication Personalized CE 7.1 Evidence based health BIO 5.1 Medication errors flowsheets Responder **Use Case** Transfers of Care Healthcare information BIO 5.1.1 Ordering/ prescribing/ AHIC 30.0 Provider list Management **EHR** CE 8.0 Decision support AHIC 31.0 Adverse events dispensing CE 8.1 Shared decision making BIO 5.1.2 Drug-drug, drug-allergy AHIC 32.0 Nosocomial infections CE 8.2 Communications AHIC 33.0 Clinical data storage for interaction decision support Laboratory Referrals Laboratory On-Site Care Medication BIO 5.1.3 Linkage to FDA surveillance preferences Result CE 9.0 Patient health outcomes structured product labeling AHIC 34.0 Case reporting Problem Lists Genetic / Reconciliation **Emergency Care** CE 9.1 Adverse events AHIC 35.0 Bi-directional database results Reporting **Genomic Data** Transfer of Care **Definitive Care** Ambulatory CE 9.2 Medical errors BIO 10.0 Public health information communications CE 9.3 Patient reported health network (PHIN) can be leveraged AHIC 36.0. Lab results. Family Medical Provider Prescriptions outcomes BIO 14 0 National notifiable disease AHIC 37 0 Anatomic nathology History Contra-CC 3.0 Glucose monitoring Authentication conditions have been identified results AHIC 38.0 Radiology reports CC 4.0 Spirometery AHIC 1.0 Labs, medications. and Authorization indications AHIC 39.0 Social history CC 5.0 Anticoagulation allergies, immunizations CC 7.0 Fall/motion monitoring AHIC 2.0 Secure messaging/online AHIC 40.0 Procedure reports CC 11.0 Lesion assessment consultation AHIC 41 0 Medications CC 12.0 Remote monitoring for AHIC 3.0 Bi-directional AHIC 43.0 Dental chronic conditions communications. AHIC 44.0 Workflow integration CC 13.0 HIT use in specific AHIC 4.0 Adverse event reporting AHIC 45.0 Int'l public health populations AHIC 5.0 Case reporting collaboration Immunizations & AHIC 46.0 Legal liability & CC 15.0 Product and services AHIC 6.0 Clinical decision support Biosurveillance **Public Health** Response certification svstems regulatory barriers Quality CC 16.1 State licensure constraints AHIC 7.0 Identification/ AHIC 47.0 Consumer consent **Use Case** Case Reporting Management CC 18.0 Patient identification for authentication CCHIT authorization and authentication AHIC 8.0 Problem lists CCHIT 1.0 Patient safety Resource EHR 5.0 Clinical/encounter notes AHIC 9.0 Clinical encounter notes CCHIT 2.0 Transfer of care Visit · Case Reporting EHR 6.0 Anatomic pathology AHIC 10.0 Family history/social HITSP 1.1.4 Text reports Hospital Identification Utilization HITSP 1.1.5 Numeric results Measurement and Bidirectional Vaccine EHR 8.0 Radiology reports AHIC 11.0 Vitals signs HITSP 1.1.7 Images Clinical Data EHR 12.0 Machine readable and Reporting Communication AHIC 12.0 Population health/ HITSP 1.2 HIPAA covered entities EHR Data Lab and interoperable conditions HITSP 1.2.1 X12 Claims Clinician EHR 12.1 Encounter notes AHIC 13.0 Minimum data set attachment Radiology Measurement and Adverse Events EHR 12.2 Radiology reports AHIC 14.0 Confidentiality, privacy, EHR 12.3 Lab results & security of patient data Reporting Feedback to

Round 1

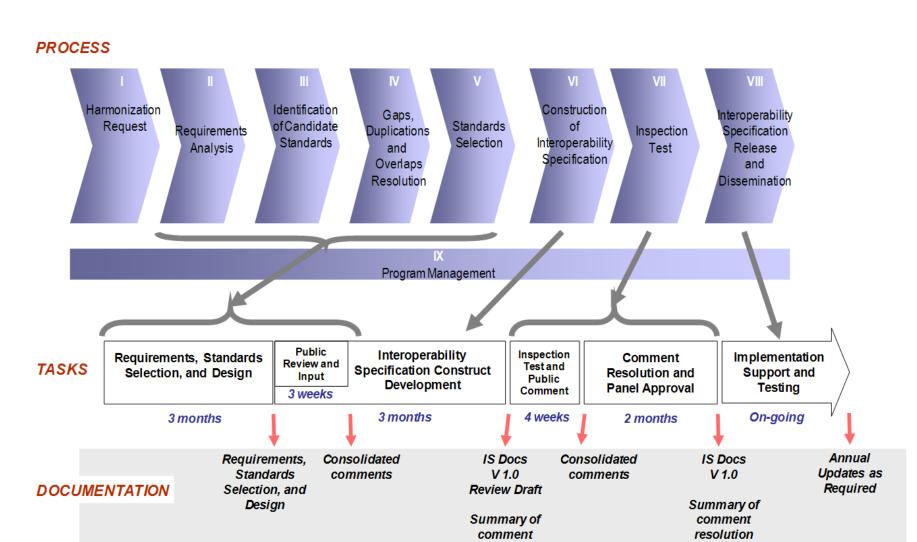
Round 2

Clinicians

Round 3

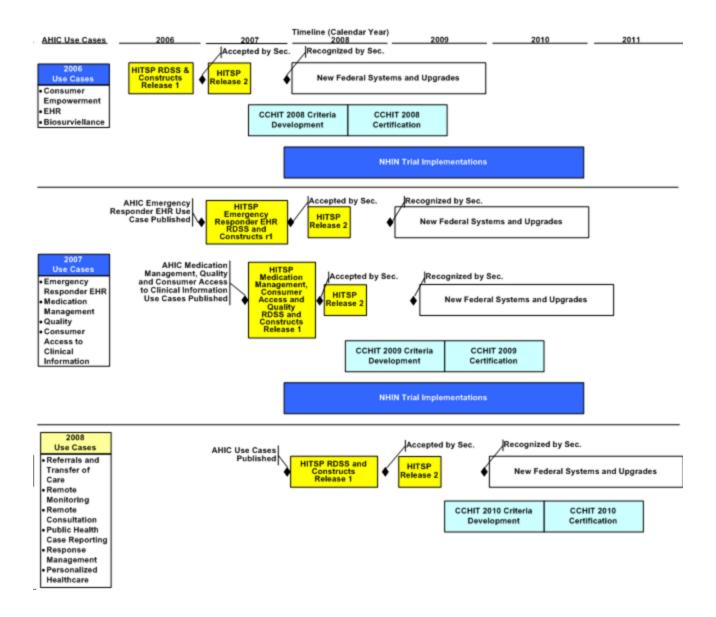
Round 4

Standards Harmonization Work Plan Tasks



resolution

Overall Timeline



Technical Committee Use Cases Rounds 1 & 2

•EHR - Lab Reporting -- Deploy standardized, widely available, secure solutions for accessing laboratory results and interpretations in a patient-centric manner for clinical care by authorized parties.

- Emergency Responder EHR -- Covers the use of the ER-EHR from the perspective of on-site care providers and emergency care clinicians. Definitive care clinicians involved in the care and treatment of emergency incident victims, medical examiner/fatality managers investigating cause of death, and public health practitioners using information contained in the ER-EHR, are included because of their interactions with the other portions of this use case.
- **Medication Management** Focuses on patient medication and allergies information exchange, and the sharing of that information between consumers, clinicians (in multiple sites and settings of care), pharmacists, and organizations that provide health insurance and pharmacy benefits.

Technical Committee Use Cases Rounds 1 & 2

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

 Consumer Access to Clinical Data – Includes three scenarios which describe highlights of the processes, roles and information exchanges which could enable a consumer's access to clinical information via a personal health record (PHR). The three scenarios are: Consumers receive and access clinical information; Consumers create provider lists and establish provider access permissions; and Consumers transfer PHR information.

Technical Committee Use Cases Rounds 1 & 2

•Biosurveillance -- 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.

 Quality -- Depicts two scenarios related to quality measurement, feedback and reporting with respect to a patient's encounter with the healthcare delivery system: quality measurement of 1) hospitalbased care and 2) care provided by clinicians.

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Technical Committee Use Cases Round 2

Security, Privacy and Infrastructure

- Identification of Core Set of Constructs -- A core set of Privacy and Security constructs identified from all use cases; constructs reviewed and validated/modified upon receipt of new use cases
- Incorporation of Constructs into Other Technical Committee
 Documents Privacy and security constructs are incorporated into
 the documents created by the other TCs to address interoperability
 in their respective use cases

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Interoperability Standards

- Many "named standards" suggested
 - Round #1 over 700
 - Round #2 over 200
- •HITSP harmonizes to minimum necessary "named standards"
 - Round #1: 30 targeted, 2 outstanding
 - Round #2: 20 initial with some overlap with round #1
- •HITSP identifies "constructs" to specify "named standards" transactions and use as well as composite standards in implementation guidance
- Interoperability standards (named standards and constructs) are accepted, implementation tested, and then recognized

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HITSP 2008 Plan

March 2008 Publication

- Medication Management v1.0
- Versions 3.0 of IS01 and IS02 Updates to reference security and privacy constructs

2008 Use Cases -- Round #3

- Patient Provider Secure Messenger
- Personalized Healthcare
- Public Health Case Reporting
- Immunization and Response Management
- Remote Monitoring
- Consultations and Transfers of Care

Use Cases Year 3

- Consultations and Transfers of Care -- The exchange of information between clinicians, particularly between requesting clinicians and consulting clinicians, to support consultations such as specialty services and second opinions.
- Immunizations and Response Management The ability to communicate a subset of relevant information about needs for medication and prophylaxis resources, about resource availability, about their administration and about the status of treated and immunized populations.
- Personalized Healthcare The exchange of genomic/genetic test information, family health history and the use of analytical tools in the electronic health record (EHR) to support clinical decision-making.

Use Cases Year 3

- Public Health Case Reporting Leveraging electronic clinical information to address population health data requirements.
- Patient-Provider Secure Messaging -- Patients consult with their healthcare clinicians remotely using common computer technologies readily available in home and other settings.
- Remote Monitoring Focuses on the exchange of physiological and other measurements from remote monitoring devices in three candidate workflows: Measurement and Communication, Monitoring and Coordination, and Clinical Management.

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Additional Goals for 2008

- Education and Communication
- Implementation in vendor systems, home built systems and HIEs
- Participation in the NHIN trials
- Further Alignment with CCHIT
- Reorganizing our Technical Committees to ensure scalability
- Reuse of our components to accelerate our work



Summary

 HITSP has become a trusted convener to harmonize standards

It will complete 3 rounds of harmonization during this administration

The future use cases will come from AHIC 2.0 and we look forward to our next round of work



Project Information

Please send comments and recommendations to: Medicaid-SCHIP-HIT@ahrq.hhs.gov

or Call Toll-free:

1-866-253-1627

Medicaid-SCHIP-HIT@ahrq.hhs.gov http://healthit.ahrq.gov