



Healthcare Information Technology Standards Panel

Report from the Technical Committees & Tiger Teams

Arlington, VA | January 25, 2010

Presented by:

Joyce Sensmeier MS, RN-BC, CPHIMS, FHIMSS &

HITSP Technical Committee & Tiger Team Co-Chairs



Current Work Items 2009/10

Provider

General Lab Orders

Order Sets

Long Term Care
Assessment

Admin/Finance

Scheduling

Prior-Authorization
in Support of
Treatment, Payment,
& Operations

Consumer

Common Device
Connectivity

Medical Home: Co-
morbidity and Registries

Medication Gaps

Security/Privacy/
Infrastructure

Consumer Preferences
(shared with Consumer)

Common Data Transport

Population

Newborn Screening

Maternal/Child Health

Consumer Adverse
Event Reporting

Quality Measures

Clinical Research

Care Management/
Health Records

Clinical Note Details

Data Architecture



Technical Committee Leadership

□ Population Perspective - 382 members

- Floyd P. Eisenberg, MD, MPH, National Quality Forum
- Eileen Koski, M. Phil, Medco Health Solutions, Inc.
- Anna Orlova, PhD, Public Health Data Standards Consortium

□ Consumer Perspective – 231 members

- Mureen Allen, MD, FACP, ActiveHealth Management
- Charles Parisot, EHR Association
- Scott Robertson, PharmD, Kaiser Permanente



Technical Committee Leadership

□ Provider Perspective – 265 members

- Allen Hobbs, PhD, Kaiser Permanente
- Steve Hufnagel, PhD, DoD/Medical Health System (MHS)
- Mike Lincoln, MD, Department of Veterans Affairs

□ Security, Privacy & Infrastructure Domain - 347 members

- Glen Marshall, Grok-A-Lot, LLC
- John Moehrke, GE Healthcare
- Walter Suarez, MD, Kaiser Permanente



Technical Committee Leadership

□ Care Management and Health Records Domain - 228 members

- Keith Boone, GE Healthcare
- Corey Spears, McKesson Health Solutions
- Greg Alexander, PhD, RN, Alliance for Nursing Informatics

□ Administrative and Financial Domain – 85 members

- Don Bechtel, Siemens Medical Solutions
- Durwin Day, Health Care Service Corporation
- Manick Rajendran, eZe Care LLC



Tiger Team Leadership

❑ Clinical Research – 147 members

- Walter Suarez, MD, Kaiser Permanente

❑ Data Architecture – 159 members

- Keith Boone, GE Healthcare
- Teresa Strickland - National Council for Prescription Drug Programs

❑ Quality Measures – 123 members

- Floyd P. Eisenberg, MD, MPH, National Quality Forum
- Eileen Koski, M. Phil, Medco Health Solutions, Inc.

❑ Consumer Preferences – 142 members

- Walter Suarez, MD, Kaiser Permanente
- Mureen Allen, MD, FACP, ActiveHealth Management

Technical Committee/Tiger Team Membership

914 individuals



The “HITSP Nation”

Powered by 54,730 Hours in 3 years!!

Year	# of Volunteer Hours
2007	12,000
2008	19,000
2009	23,730

**Day Jobs . . .
What's that!!**



HITSP eTown Hall January 22, 2010



HITSP

Healthcare Information Technology Standards Panel



Thank You!!!



Report from the Consumer Perspective Technical Committee

- Year-end Work Summary
 - CPTC deliverables submitted for Panel approval
 - Additional deliverables finalized for 31-Jan-2010



Report from the Consumer Perspective Technical Committee

CPTC Deliverables

- ❑ IS03 – Consumer Empowerment and Access to Clinical Information via Networks
- ❑ IS05 – Consumer Empowerment and Access to Clinical Information via Media
- ❑ IS12 – Patient-Provider Secure Messaging
- ❑ IS77 – Remote Monitoring

Recognized / Panel Approved

- ❑ CAP117 - Communicate Ambulatory and Long Term Care Prescription
- ❑ CAP118 - Communicate Hospital Prescription
- ❑ CAP119 - Communicate Structured Document
- ❑ CAP120 - Communicate Unstructured Document
- ❑ TN905 – Device Connectivity

Submitted for Panel Approval

- ❑ IS98 – Medical Home
- ❑ IS07 – Medication Management (incl. Medication Gaps extension)

Additional Deliverables



Report from the Consumer Perspective Technical Committee

Deliverables Submitted for Panel Approval

HITSP/CAP117 - Communicate Ambulatory and Long Term Care Prescription

- ❑ **Key Capabilities:** Addresses interoperability requirements that support electronic prescribing in the ambulatory and long term care environment. The capability supports:
 - Transmittal of new or modified prescriptions
 - Transmittal of prescription refills and renewals
 - Communication of dispensing status
 - Request for Benefit Eligibility Determination

- ❑ **Selected Standard(s):** Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1; National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Implementation Guide Version 8.1 or 10.1; Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI); Drug Enforcement Administration (DEA) Prescriber Number; National Library of Medicine (NLM) Unified Medical Language System (UMLS) RxNorm

- ❑ **Used by:**
HITSP/IS07 V:1.1 Medication Management



Report from the Consumer Perspective Technical Committee

Deliverables Submitted for Panel Approval

HITSP/CAP118 - Communicate Hospital Prescription

- ❑ **Key Capabilities:** Addresses interoperability requirements that support electronic prescribing for inpatient orders that can occur within an organization or between organizations. The capability supports the transmittal of a new or modified prescription from a Hospital to an internal or external pharmacy. It also includes the optionality to access formulary and benefit information.
- ❑ **Selected Standard(s):** Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1; Health Level Seven (HL7) Version 2.5/2.5.1 – Pharmacy/Treatment Orders (OMP); National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Implementation Guide Version 8.1 or 10.1; Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI); Drug Enforcement Administration (DEA) Prescriber Number; National Library of Medicine (NLM) Unified Medical Language System (UMLS) RxNorm
- ❑ **Used by:**
HITSP/IS07 V:1.1 Medication Management



Report from the Consumer Perspective Technical Committee

Deliverables Submitted for Panel Approval

HITSP/CAP119 - Communicate Structured Document

- ❑ **Key Capabilities:** addresses interoperability requirements that support the communication of structured health data related to a patient in a context determined by the author of the document. This Capability supports the exchange of all CDA documents. The following are examples of the type of CDA structured data that are supported: • Continuity of Care Document (CCD) • Emergency Department Encounter Summary • Discharge Summary (In-patient encounter and/or episodes of care) • Referral Summary Ambulatory encounter and/or episodes of care • Consultation Notes • History and Physical • Personal Health Device Monitoring Document • Healthcare Associated Infection (HAI) Report Document
- ❑ **Orchestrates:**
 - ❑ Any CDA document using HITSP/C83 - CDA Content Modules
 - ❑ HITSP/SC112 – Healthcare Document Management



Report from the Consumer Perspective Technical Committee

Deliverables Submitted for Panel Approval

HITSP/CAP120 - Communicate Unstructured Document

- ❑ **Key Capabilities:** Addresses interoperability requirements that support the communication of a set of unstructured health data related to a patient in a context set by the source of the document who is attesting to its content. Two types of specific unstructured content are supported, both with a structured CDA header: • PDF-A supporting long-term archival • UTF-8 text
- ❑ **Orchestrates:**
 - ❑ HITSP/C62 – Unstructured Document
 - ❑ HITSP/SC112 – Healthcare Document Management



Report from the Consumer Perspective Technical Committee

Deliverables Submitted for Panel Approval

HITSP/TN905 - Device Connectivity

- ❑ **Objective:** Intended to act as a framing document to provide a high-level perspective on device connectivity requirements, to propose a roadmap for how ONC/HITSP might address these requirements, and to indicate how it might work with other external organizations to resolve standardization gaps. The specific requirements to be addressed in the roadmap pertain to device-related elements in currently available standards-based device connectivity technical specifications leading up to the harmonization requests assigned to HITSP as identified in the Common Device Connectivity (CDC) Extension/Gap from AHIC in December, 2008.
- ❑ **Key Components:** Medical Device Connectivity Topology, Device Intermediary Deployment, Data Timing Characteristics, Device Integration with Clinical Applications, Support for Clinical Decision Support, Highly Integrated Patient-centric Point-of-Care, Regulatory Considerations
- ❑ **Potential Capabilities and Constructs:** Patient-Device Association; Device Data Reporting/Integration with EHRs; Alarm and Alert Communication; Device Semantic Content; Real-time Location Tracking



Report from the Consumer Perspective Technical Committee

Remote Monitoring Device Connectivity

- ❑ **Progress on IS77: Remote Monitoring**

The AHIC Remote Monitoring Use Case resulted in the approval of IS77 in December 2008 with a Gap for harmonizing standards for the transaction between the Home Hub and the Remote Monitoring Management System.
- ❑ IHE Patient Care Devices and Continua were engaged in co-developing a consistent approach that meets, with the same set of standards, the needs of:
 - ❑ Wide-Area Exchange of Home Health Monitoring Device Information
 - ❑ In-Patient Monitoring Device Information
- ❑ **This is a major accomplishment that ensures consistent standards and mixed deployment models in the consumer home (combined home hospitalization and home health)**
- ❑ These profiles and implementation guidelines are scheduled to be formally approved by IHE PCD and Continua later in Q1 2010. The update of IS77 to include the HITSP/T73 Aggregated Device Information Communication construct addressing the aforementioned Gap will be possible for 2Q 2010 (next HITSP work cycle).



Report from the Consumer Perspective Technical Committee

HITSP/IS98 – Medical Home

- ❑ **Key Capabilities:** addresses the interoperability requirements to support the following scenarios: **1.** the ability to manage patient problem lists, and **2.** the ability to perform practice-based, population management, and registry functions for care coordination to support patient needs, clinical decision support, and quality reporting. IS98 leverages the ability for the MH provider to extract and use the problem list from structured documents. In addition, it leverages a number of existing HITSP constructs to facilitate a practice's population view of subsets of patients.
- ❑ **Selected Standard(s):** N/A
- ❑ **References:**

HITSP/CAP119	Communicate Structured Document
HITSP/CAP120	Cummunicate Unstructured Document
HITSP/CAP123	Retrieve Existing Data
HITSP/CAP127	Communicate Lab Results Document
HITSP/CAP128	Communicate Imaging Information
HITSP/CAP129	Communicate Quality Measure Data
HITSP/CAP130	Communicate Quality Measure
HITSP/CAP135	Retrieve and Populate Form
HITSP/CAP143	Manage Consumer Preferences and Consents



Report from the Consumer Perspective Technical Committee

Additional Deliverables

HITSP/IS07 – Medication Management (v2)

- ❑ **Key Capabilities:** Describes the information flows, issues and system capabilities that apply to the multiple organizations participating in medication management. It is intended to facilitate access to necessary medication and allergy information for consumers, clinicians, pharmacists, health insurance agencies, inpatient and ambulatory care, etc.
- ❑ **Selected Standard(s):** N/A
- ❑ **References:**

HITSP/CAP117	Communicate Ambulatory and Long Term Care Prescription
HITSP/CAP118	Communicate Hospital Prescription
HITSP/CAP119	Communicate Structured Document
HITSP/CAP120	Communicate Unstructured Document
HITSP/CAP140	Communicate Benefits and Eligibility
HITSP/CAP141	Communicate Referral Authorization
HITSP/CAP143	Manage Consumer Preferences and Consents



Report from the Consumer Perspective Technical Committee

Conclusion

- ❑ Re-organization of constructs to use generalized Capabilities will promote re-use and consistency.
- ❑ Continue to re-use and modify existing constructs where possible to meet new use case requirements and add new constructs where required.
- ❑ Continued inclusion of medical devices information into the home, ambulatory and acute care interoperability use cases
- ❑ Continued expansion and refinement of existing constructs to fill gaps or specific areas of interest.
- ❑ Continue to have a great amount of work and looking for additional members to assist.

HITSP

Quality Tiger Team



Quality Interoperability Specification

- ❑ 3.2 Capability Orchestration
 - ❑ 3.2.2 Implementation variants – 6 options for interoperability architecture
 - ❑ 3.2.2 Constraints updates
- ❑ 4.0 Capability Gaps – updates
 - ❑ 4.1 Standards Overlaps – updates



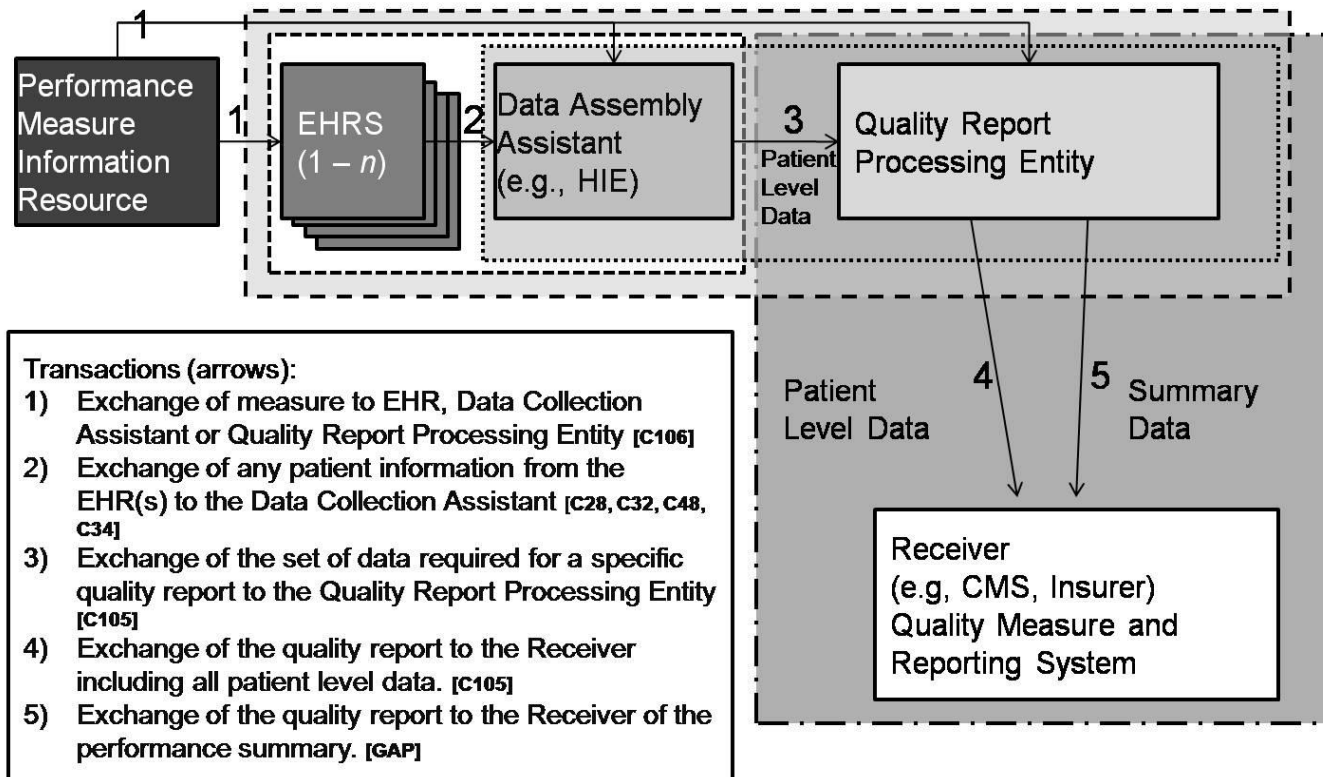
HITSP

Quality Tiger Team



Quality Interoperability Specification

Architecture-neutral interoperability – variants reviewed



HITSP

Quality Tiger Team



NEW Items since last panel review

- ❑ Capability 129: Communicate Quality Measure Data Capability
- ❑ Capability 130: Communicate Quality Measure Specification
- ❑ C105: Patient Level Quality Data Document Using HL7 Quality Reporting Document Architecture
- ❑ C106: Measurement Criteria Document
- ❑ C154: HITSP Data Dictionary

Quality Dictionary Section (Table 2.45)

- ❑ TN 906: Quality Measures Technical Note

Specification for all 16 measure exemplars completed, including QRDA
(C105)



Capabilities Used in IS06 Update

IS06 Quality

Capabilities

CAP130: Communicate Quality Measure Specification

CAP129: Communicate Quality Measure Data

CAP119: Communicate Structured Document

CAP122: Retrieve Medical Knowledge

CAP138: Retrieve Pseudonym

CAP123: Retrieve Existing Data

CAP135: Retrieve and Populate Form

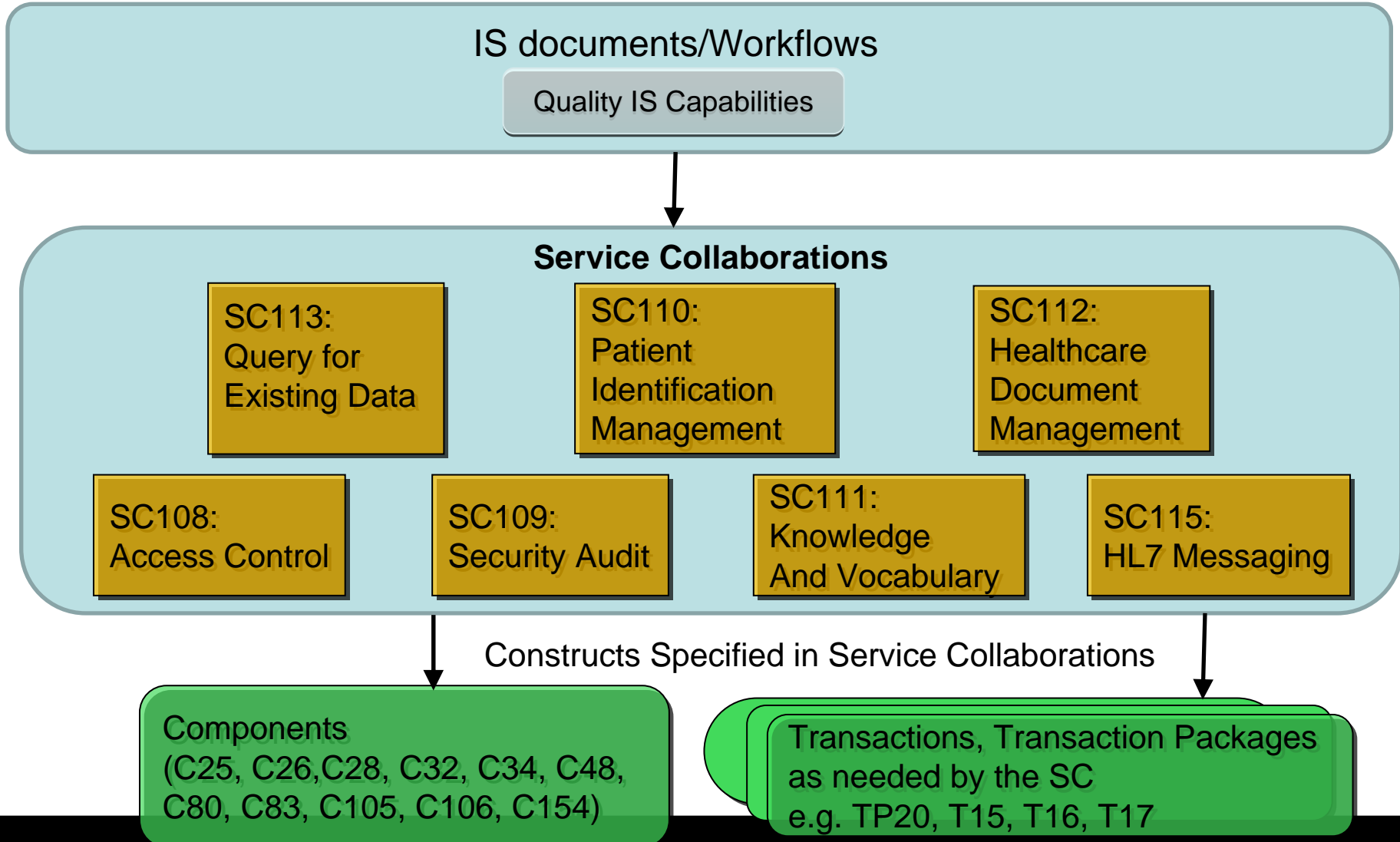
Service Collaboration and Components

Constructs
as needed by the CAP
e.g. C105, SC129, SC130

HITSP

Quality Tiger Team

SPI Service Collaborations in IS06 Update



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Quality Tiger Team



IS06

- Updates and clarifications post-HITSP Panel
 - Clarification of supporting UML diagrams
 - Addition of UML diagram descriptions
 - Clarification of variant diagrams and descriptions

HITSP

Quality Tiger Team



C105 – Patient Level Quality Component Using HL7 Quality Report Document Architecture (QRDA)

January 18, 2010
Version 0.0.4

HITSP Patient Level Quality Data Component Using HL7
Quality Reporting Document Architecture (QRDA)

HITSP/C105

HITSP

Healthcare Information Technology Standards Panel

Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

Population Perspective Technical Committee



Patient Level Quality Data Document Using HL7 Quality Reporting Document Architecture (QRDA)

Component:
Review Copy
20100118 V0.0.4

HITSP

Quality Tiger Team



C106 – Measurement Criteria Component

- References HL7 eMeasure representation of Healthcare Quality Measure Format (HQMF)
 - DSTU status November 4, 2009

January 18, 2010
Version 0.0.4

HITSP Measurement Criteria Component

HITSP/C106

HITSP

Healthcare Information Technology Standards Panel

Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

Quality Measures Tiger Team



HITSP Measurement Criteria Component
Review Copy
20100118 V0.0.4

HITSP

Quality Tiger Team



TN 906

- 16 're-tooled' measures
 - Venous Thromboembolism (VTE)
 - Stroke (STK)
 - Emergency Department (ED) Throughput

January 16, 2010
Version 0.0.3

HITSP Quality Measures Technical Note ED, VTE, and
Stroke Examples for Implementation of the HITSP Quality
Interoperability Specification

HITSP/TN906

HITSP

Healthcare Information Technology Standards Panel

Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

Quality Measures Tiger Team

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HITSP Quality Tiger Team



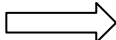
TN 906

- Re-tooling

Data element

Intended meaning with respect to the measure

Work with original measure
developer (steward)

Clinical usage  Chart abstraction



 Electronic clinical record data

Single context (location) 

Standard vocabulary 

CDA chapter
Value set

January 18, 2010
Version 0.0.3

HITSP Quality Measures Technical Note ED, VTE, and
Stroke Examples for Implementation of the HITSP Quality
Interoperability Specification

HITSP/TN906

HITSP

Healthcare Information Technology Standards Panel

Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

Quality Measures Tiger Team

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Quality Tiger Team



TN 906

- Updates and clarifications post-HITSP Panel
 - Section 2.2.1 General Observations – move to introduction
 - Updates to Table 2-17 General Measure Retooling Issues and Recommendations
 - Updates to Table 2-18 Measure Element Changes in Support of Electronic Specification - Specific change log for individual items within the 16 measure exemplars
 - Add Measure flow diagrams from The Joint Commission
 - Updates to eMeasure sample XML

January 18, 2010
Version 0.0.3

HITSP Quality Measures Technical Note ED, VTE, and Stroke Examples for Implementation of the HITSP Quality Interoperability Specification

HITSP/TN906

HITSP
Healthcare Information Technology Standards Panel

Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

Quality Measures Tiger Team

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Report from the Population Perspective Technical Committee

Newborn Screening Use Case - Scenarios

- ❑ *Ordering and Resulting:* This scenario covers initial screening both for Newborn Dried Blood Spot (NDBS) and Early Hearing Detection and Intervention (EHDI) and ends with the reporting of results, either within normal limits, or notification of the need for confirmatory testing if results are outside of normal limits.
- ❑ *Abnormal and Out of Range Results:* This scenario covers the processes in response to an out of range (or abnormal) screening test either from the NDBS or the EHDI.

HITSP

Population Perspective TC



Capabilities Used in IS92

IS92 Newborn Screening

Capabilities

CAP 99 HITSP Communicate Lab Order Message

122 Retrieve Medical Knowledge

CAP 119 Communicate Structured Document

CAP123 - Retrieve Existing Data

CAP 120 Communicate Unstructured Document

CAP135 - Retrieve and Populate Form

CAP 121 Communicate Clinical Referral Request

CAP138 - Retrieve Pseudonym

CAP 126 Communicate Lab Results Message

CAP 127 Communicate Lab Results

CAP 143 Manage Consumer Preference and Consents

CAP 142 Retrieve Communications Recipient

Service Collaboration and Components

Constructs
as needed by the CAP
e.g. C152, C161, C163

Report from the Population Perspective Technical Committee

Newborn Screening IS92

Newborn Bloodspot Testing

- ❑ NBS Lab Order – IS Constrains HITSP/CAP99 Communicate Lab Order Message
 - HITSP/C163 - Laboratory Order
 - Constrained to use Newborn Screening Vocabularies
 - Support for Pediatric Demographics
- ❑ NBS: pre-populate form from Birthing Summary (printing order on the specimen card) - IS Constrains HITSP/CAP135 Retrieve and Populate Form to pre-populate from:
 - HITSP/C161- Antepartum Record
 - HITSP/C152- Labor and Delivery Report
- ❑ Lab Result : HITSP/CAP126 Communicate Lab Results Message, HITSP/CAP 127 Communicate Lab Results
 - IS Constrains HITSP/C126 Communicate Lab Results Message
 - IS Constrains HITSP/C127 Communicate Lab Results
 - Constrained to use Newborn Screening Vocabularies

Report from the Population Perspective Technical Committee

Newborn Screening IS92 – Content (continued)

Hearing Screening

- ❑ Hearing Screening Test Result
 - IS Constrains HITSP/C126 Communicate Lab Results Message
 - IS Constrains HITSP/C127 Communicate Lab Results
 - Constrained to use Newborn Screening Vocabularies
 - Support for Pediatric Demographics

Abnormal Results

- ❑ IS Constrains HITSP/CAP119 Communicate Structured Document
 - CAP 119 Communicate Structured Document
 - Support for Pediatric Demographics
 - Add support for HITSP/C161- Antepartum Record
 - Add support for HITSP/C152- Labor and Delivery Report
 - Constrain to include screening results in newborn follow-up summaries
 - CAP 120 Communicate Unstructured Document
 - CAP 121 Communicate Clinical Referral Request

Report from the Population Perspective Technical Committee

Newborn Screening IS92 – Content (continued)

Abnormal Results

- ❑ CAP 119 Communicate Structured Document
 - Support for Pediatric Demographics
 - Add support for HITSP/C161- Antepartum Record
 - Add support for HITSP/C152- Labor and Delivery Report
 - Constrain to include screening results
 - Support for Notification and Subscription
- ❑ CAP 120 Communicate Unstructured Document
- ❑ CAP 121 Communicate Clinical Referral Request

Guidelines and Education

- ❑ CAP 122 Retrieve Medical Knowledge

Public Health Research

- ❑ C164 Anonymize Newborn Screening Data

Report from the Population Perspective Technical Committee

Maternal and Child Health – IS91 (Wave 2)

Interoperability Specification submitted to HITSP staff for technical & editorial review in preparation for public comments

Public Health Case Reporting – IS11 (Wave 3)

Updated Interoperability Specification including support for Consumer Adverse Event Reporting submitted to HITSP staff for technical & editorial review in preparation for public comments



Report from the Clinical Research Tiger Team

Value Case

- Workgroup developed initial draft detailed value case and extensions (Nov 2008 – Feb 2009)
- Draft value case posted for public comment in March 2009
- Detailed value case completed by end of April, 2009; value case submitted HITSP for development of interoperability specifications
- Document describes three value scenarios:

Use of Electronic Health Records in Clinical Research: Core
Research Data Element Exchange
Detailed Use Case
April 23rd, 2009

Scenario Name	Scenario Description
Protocol-driven Sponsored Research	This scenario describes six processes that result in submission of clinical data to a sponsoring agency as dictated by a sponsor's protocol. It contains most of the data elements of interest
Registry Reporting	This scenario varies only slightly from the Sponsored Research Scenario, and describes the exchange of clinical data with a research registry or other related databases
Research Network	This third scenario, in which data originate in a networked environment, merely changes the mode of origination.



Report from the Clinical Research Tiger Team

- ❑ Tiger Team work started May 14, 2009
 - ❑ Created under the sponsorship and oversight of the Population Perspective Technical Committee
 - ❑ To address to Clinical Research Use/Value Case presented to HITSP
 - ❑ Membership: 100+ joined the TT representing provider organizations, research institutions, federal/state public health government, national research associations and vendors; added a large number of new members to HITSP
- ❑ Requirements Analysis completed (May-July, 2009)
 - ❑ Incorporated new HITSP Framework concepts of Capabilities and Service Collaborations
 - ❑ Identified need for two additional constructs specific to Clinical Research, plus updates to selected existing constructs



Report from the Clinical Research Tiger Team

- ❑ Published RDSS for public comment (August, 2009)
 - ❑ Prepared a draft Clinical Research Interoperability Specification and two Clinical Research Constructs (September-October, 2010)
- ❑ Prepared a draft Clinical Research Interoperability Specification and two Clinical Research Constructs (September-October, 2010)
 - ❑ HITSP/IS158 – Clinical Research Interoperability Specification
 - ❑ HITSP/C151 – Clinical Research Document Component Construct
 - ❑ HITSP/C156 – Clinical Research Workflow Component Construct
 - ❑ IS utilizes four main capabilities:
 - ❑ HITSP/CAP127 – Communicate Lab Results Document
 - ❑ HITSP/CAP128 – Communicate Imaging Information
 - ❑ HITSP/CAP135 – Retrieve and Populate Form
 - ❑ HITSP/CAP143 – Manage Consumer Preference and Consents



Report from the Clinical Research Tiger Team

- ❑ Published IS and supporting Constructs for public comment (November-December, 2009)
 - ❑ Received 35 comments; completed resolution/disposition of comments by December 20; harmonized terminology used in the IS and Constructs and refined the use of capabilities in the IS
 - ❑ Completed HITSP Inspection Testing Process (December 4, 2009)
 - ❑ Offered a HITSP Webinar on Clinical Research IS/Constructs, in coordination with HITSP ECO (November 19, 2009)
- ❑ Completed HITSP Inspectors Testing Process (December, 2009)
- ❑ Completed internal editorial and quality review prior to publication (January, 2010)
- ❑ Published final documents for Panel approval (January 18, 2010)



IS Scope and Overview

- ❑ US realm only
- ❑ Spans two industries, healthcare and clinical research, and incorporates standards from healthcare (HL7 and IHE) and research (CDISC).
- ❑ Leverages the current players in the clinical research industry such as Electronic Data Capture (EDC) systems and research registries
- ❑ Provides ability to communicate information about particular study participants: eligibility information, results, and case report form data





IS Scope and Overview

- ❑ Allows the exchange of a core dataset of pseudonymized or anonymized information from the EHR to a research system for use in clinical research
- ❑ Supports privacy and security needs
- ❑ Covers core areas including:
 - Description of scenarios
 - Definition of Information Exchanges Requirements
 - Identification/Naming of System
 - Description and Orchestration of Capabilities Used
 - Identification of Constructs Needed
 - Identification of Gaps

Component 151 – Clinical Research Document



- ❑ Describes the content and format to be used for pre-population data within the Retrieve Form Transaction (Cap 135)
- ❑ Supports a standard set of data in the HL7 Continuity of Care Document (CCD) format which the RFD Form Filler provides for use in Clinical Research
- ❑ Provides the ability to convert this output into a standard case report form (Standard CRF) based on the Clinical Data Acquisition Standards Harmonization (CDASH) specification and the Operational Data Modal (ODN) of Clinical Data Interchange Standards Consortium (CDISC).

January 18, 2010
Version 0.0.2

HITSP Clinical Research Document Component

HITSP/C151

HITSP
Healthcare Information Technology Standards Panel

Submitted to:
Healthcare Information Technology Standards Panel

Submitted by:
Care Management and Health Records Domain Technical Committee

 HITSP Clinical Research Document Component
Review Copy
20100118 V0.0.2

Component 156 – Clinical Research Workflow



- ❑ Purpose of Clinical Research Workflow is to support a standard set of data specific to research usage, as found in CDISC CDASH standard
- ❑ Describes the Clinical Data Acquisition Standards Harmonization (CDASH) data elements and common identifier variables that pertain to the research-specific workflow.
- ❑ Describes the data elements that allow the RFD system roles Form Filler and Form Manager to identify what needs to be done.
- ❑ Reader must refer to HITSP/C154 – HITSP Data Dictionary for a mapping of the CDISC CDASH data





Capabilities Used in the IS

- ❑ HITSP/CAP127 – Communicate Lab Results Document
 - Communicates a set of structured laboratory results
- ❑ HITSP/CAP128 – Communicate Imaging Information
 - Communicates a set of imaging results
- ❑ HITSP/CAP135 – Retrieve and Populate Form
 - supports pre-population of information from the clinical or laboratory information systems to avoid manual re-entry
- ❑ HITSP/CAP143 – Manage Consumer Preference and Consents
 - Used to capture a patient or consumer agreement to one or more privacy policies



Identified Gap

- ❑ The data sent from the EHR to the EDC must conform to the protocol. Currently there is a gap in the ability to redact the CCD to conform to the protocol-required data as specified in the case report form

- ❑ Resolution:
 - A new IHE profile called Redaction Services has been accepted for inclusion in the Quality, Research, and Public Health (QRPH) domain



Report from the Provider Perspective Technical Committee

□ 2009 Work Items

- CAP99 – Communicate Lab Order Message Capability, up for approval
- CAP95 – Communicate Order Sets
- Extension to IS09 – Consultations and Transfers of Care to incorporate Long Term Care Assessments.



Report from the Provider Perspective Technical Committee – CAP99

In Scope for CAP99

- Sending and receiving HL7 laboratory order, control and status messages
- Orders may be from an inpatient or outpatient setting
- Provides a robust General Laboratory Order Capability between an Order Placer and an Order Filler



Report from the Provider Perspective Technical Committee – CAP99

□ Out of scope

- Robust treatment of repeating orders and the ability to discontinue these orders
- Capabilities of an Order Management System
- Communicating thresholds for discontinuing a repeating order
- Rules that govern when a Filler can discontinue a repeating order without a request
- Tests on non-human specimens (E.g. Environmental testing, animal testing, etc)
- Workflows within the laboratory



Report from the Provider Perspective Technical Committee – CAP99

□ System Roles

- Order Placer: The application requesting a laboratory service or laboratory observation
- Order Filler: The application providing a laboratory service or laboratory observation
- Surveillance: The application receiving a select subset of laboratory orders that pertain to public health surveillance
- Payer: The application that provides eligibility and authorization verification



Report from the Provider Perspective Technical Committee – CAP99

Information Exchanges

Information Exchange Identifier	Exchange Action	Exchange Content
A	Send	Laboratory Order
B	Request and Respond	Catalogue of Orders
C	Request and Respond	Patient Health Plan Eligibility Verification Data
D	Request and Respond	Query and Response for Supporting Information
E	Send	Pseudonymized Laboratory order



Report from the Provider Perspective Technical Committee – CAP99

□ Gaps

- HL7v2.5.1 currently supports only Order Placer to Order Filler Cancel Request. Cancel request from Filler to Placer is required for the Long Term Care setting.
- HL7 2.5.1 does not have enough information for copy-to provider to be specified.
- There is no Implementation Guide Query if catalogue is updated. The construct for sending a Laboratory Catalogue of Orders does not yet exist within HITSP
- Sending supporting information within the HL7 message is currently supported; however a separate query for supporting information is also needed



Report from the Provider Perspective Technical Committee – CAP99

□ Gaps

- After the order is placed and additional information is deemed necessary, the lab needs to be able to request additional supporting information for the order. Currently this is handled by telephone or email. HITSP will need to create a construct or Implementation Guide to fill this Gap
- There is currently no Pseudonymization construct for sending laboratory orders to public health.

□ Overlaps

- There are multiple standards and types of laboratory catalogues.



Report from the Provider Perspective Technical Committee

□ Provider TC Documents

- IS01 – Electronic Health Records Laboratory Results Reporting
- IS04 – Emergency Responder
- IS08 – Personalized Healthcare
- IS09 – Consultation and Transfers of Care
- CAP126 – Communicate Lab Results Message
- CAP127 – Communicate Lab Results Document
- CAP99 – Communicate Lab Order Message
- CAP95 – Communicate Order Sets

Report from the Security, Privacy & Infrastructure Domain Technical Committee



1. Review of Products for Action by Panel

- Service Collaborations – SC108, SC110, SC111, SC112, SC113, SC114, SC115, SC116
- Capabilities – CAP 143
- Constructs – T23, T31, T33, TP13, TP20, TP22, TP50
- Technical Note – TN900

2. New Work Products

- Common Data Transport - TN907
- Consumer Preferences – Draft RDSS (in partnership with Consumer Perspective TC)

SPI TC Report

Service Collaborations



❑ SC 108 – Access Control

- Editorial cleanup: The interface name “Request Access Control Decision” was not used consistently, and represented C19 and T17 in the same way done in other SC.
- Sequence Tables and Sequence Diagrams updated for consistency and accuracy

❑ SC 110 – Patient Identification Management

- Added Service side interface: “Respond To Patient Management Identification”
- Minor editorial corrections to sequence diagrams and sequence tables



SPI TC Report

General Document Updates

- ❑ Generalized SCs to make applicable to all ISs, not just EHR-Centric IS developed under the 90-day ARRA Tiger Team period
- ❑ New Template for Constructs and Capabilities
- ❑ Editorial Changes from Public Comment and IRT review
- ❑ Updated informative references and standard version numbers

SPI TC Report

Service Collaborations



- SC 111 – Knowledge and Vocabulary
 - Several editorial changes and corrections
 - Edited several figures updated and corrected for consistency and readability
 - Clarification text added to indicate that for all pre-Conditions, the secure communications channel should be selected and implemented if local risk analysis deems it necessary

SPI TC Report

Service Collaborations



- SC 112 – Healthcare Document Management Data Service
 - Added the following Interfaces:
 - Subscribe to Documents in Share
 - Notify of Documents in Share
 - Catalog Documents in Share
 - Locate Documents in Community
 - Minor editorial corrections and clarification text
 - Updated Topology Diagram and Sequence Diagrams and Tables where needed

SPI TC Report

Service Collaborations



- ❑ SC 113 – Query for Existing Data Service
 - Completed a few minor editorial updates
- ❑ SC 114 – Administrative Transport for Health Plan Service
 - Minor editorial updates to the diagrams to correct typographical errors and ensure consistency with sequence tables
- ❑ SC 115 – HL7 Messaging
 - Editorial updates to text and diagrams to explain Generic HL7 Message Sender and Message Receiver, correct footnotes, correct titles of diagrams
- ❑ SC 116 – Emergency Message Distribution
 - Editorial fixes to the diagrams to reflect the sequence given in the tables

SPI TC Report

Capabilities



- CAP143 – Manage Consumer Preferences and Consent
 - Update to reflect HITSP Capability Template Version 2.3
 - Minor correction to Figure 2-1 (Information Exchange between System Roles)
 - Table 2-2 added the appropriate definitions for System Roles
 - Other minor editorial changes to add clarity

SPI TC Report

Constructs



- ❑ T23 – Patient Demographics Query
 - Updates to conform to new HITSP Transactions Template

- ❑ T31 – Document Reliable Interchange
 - Editorial changes, updated references to IHE-ITI rev 6.0 or later, and updated reference to IHE-ITI Trial Supplement Cross-enterprise Document Reliable Interchange (XDR) Version 4.0
 - Informative reference standards were removed from section 2.3.3 as they did not reflect the underlying standards as specified in the selected IHE profile.
 - The descriptive text in the Selected Standard Table 2-11 was updated.
 - Changes to conform to the HITSP Transaction Template Version 2.7

SPI TC Report

Constructs



- ❑ T33 – Transfer of Documents on Media
 - The document has been updated to reflect HITSP Transaction template version 2.7
 - Section 2.3.2 – Selected Standards: Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 changed to Revision 6.0 or later.

- ❑ TP13 – Manage Sharing of Documents
 - Deprecated XDS.a to be consistent with IHE Deprecation
 - Updated Section 2.1.2.3 to explain how nonrepudiation of origin is achieved at moderate level assurance with the Document Integrity Option
 - Updated 2.3.2 to remove trial-implementation supplements as they are now formally incorporated into IHE ITI TF Version 6.0
 - Updated to include DSUB Option
 - Closed Gap 2.1.2.5.1 through a reference to HITSP/C80

SPI TC Report

Constructs



□ TP20 – Access Control

- Included Figure 2-2 Component Relations in Access Control Interfaces illustrating Access Control interfaces
- Adopted American Society for Testing and Materials ASTM International #E1986 -98 (2009) Standard Guide for Information Access Privileges to Health Information
- Updated Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 to R2-2009, Release 2, October 2009 pending ANSI acceptance

SPI TC Report

Constructs



- ❑ TP20 – Access Control (cont.)
 - Updated to the HITSP Transaction Package Template Version 2.7
 - OASIS eXtensible Access Control Markup Language (XACML), February 2005, was incorrectly published as both a selected standard and an informative reference. It is a previously selected standard, and should not have been published as an informative reference. The listing in the informative reference table has been removed
 - XSPA-SAML was selected as a normative standard, and should have been placed in the “selected standards” table, but was incorrectly added to the “informative reference” standard table in the November release.
 - XSPA-XACML was listed as an informative reference standard

SPI TC Report

Constructs



- TP20 – Access Control (cont.)
 - Added explanatory text regarding SOAP and HITSP/TN907 to Section 2.1
 - “Service Consumer” was changed to “Service User” throughout document
 - Minor edits to improve clarity in pre-conditions and corrections to text throughout document

SPI TC Report

Constructs



- TP22 – Patient ID Cross-Referencing
 - Document modified to incorporate guidance from TN903 (Data Architecture Technical Note)
 - Updated all references to latest IHE ITF Version 6.0 and 2009 Supplement
 - Updated data flows, construct constraints and made additional minor editorial changes and corrections
 - Updated several PIDs to reflect changes in HITSP C80
 - Reformatted to meet new HITSP Construct Template
- TP50 – Retrieve Form for Data Capture
 - Update to latest version of IHE RFD Supplement – August 2009
 - Removal of IHE ITI-TF Revision 4.0 from Informative Reference Standards
 - Other minor editorial updates, corrections and reformatting to meet new HITSP Construct Template

SPI TC Report

Constructs



- ❑ C164 - Anonymize Newborn Screening Data
 - New construct developed to address needs from NBS gaps/extensions document
 - Went to public comment in November
 - No substantive comments received

SPI TC Report

Technical Note



- TN900 – Security and Privacy Technical Note
 - Differentiated “entity identity” and “patient identity”
 - Integrated NIST SP800-95 threats as part of risk mitigation description
 - Described Consent Management Capability (HITSP/CAP143)
 - Included additional Anonymize constructs (HITSP/C164, HITSP/C165)
 - Included Security and Privacy related Service Collaborations



SPI TC Report

New Work Products

- Common Data Transport – TN907
 - New Technical Note developed as an interim deliverable (in lieu of RDSS) in response to the ONC CDT Gaps/Extension Document
 - It contains an analysis of the requirements, existing HITSP constructs, and alignment NHIN specifications
 - It also contains a discussion of REST vs SOAP and is congruent with the recently published IFR
 - Next Steps: Public Comment at end of January to seek input prior to potential development of more Constructs or Capabilities



SPI TC Report

New Work Products

- C165 - Anonymize Long Term Care (new construct)
 - New construct developed to support a discovered need of the Long Term Care IS
 - Will go to public comment end of January

- TP13 – manage Sharing of Documents
 - Updated to add XCPD (Cross-Community Patient Discovery) and MPQ (Multi-Patient Queries).
 - This is a major change to support Wave 2 IS requirements from Population Perspective TC
 - Will go to public comment end of January

SPI TC Report

New Work Products



- Consumer Preferences – Draft RDSS
 - Full report provided next

SPI TC Report

Thanks



- ❑ Around 30 documents updated, produced and delivered in the last 60 days
- ❑ Special thanks to all volunteers, Work Group leaders, and to fellow co-chairs for incredible leadership
- ❑ Special thank you to Johnathan, Elliot, Sarah for facilitation and technical writing



HITSP

Healthcare Information Technology Standards Panel

Final Report from the HITSP Consumer Preferences Tiger Team

- Co-Chairs:
- Walter G. Suarez, MD, Kaiser Permanente
 - Mureen Allen, MD, ActiveHealth Management
- Facilitators:
- Johnathan Coleman, Security Risk Solutions, Inc
 - Michael Nusbaum, MH Nusbaum & Associates, Ltd.
 - Elliot Sloane, PhD, Center for Healthcare Information Research and Policy (CHIRP)

Arlington, VA | January 25, 2010



Background

- ❑ Established in August, 2009, as a jointly sponsored activity from SPI-TC and Consumer Perspective TC
- ❑ Quickly built up a team of over 100 participants with multiple perspectives represented (providers, payers, consumers, federal and state government, SDOs, vendors, associations)
- ❑ Purpose: address the information exchange requirements and interoperability needs of the ONC Requirements Document on Consumer Preferences



Background

- Focus on three areas:
 - Review initial categorization of Consumer Preferences from ONC Requirements Document
 - Research, identify and document existing and emerging standards for Consumer Preferences
 - Review NHIN Factory Specs on Consumer Preferences

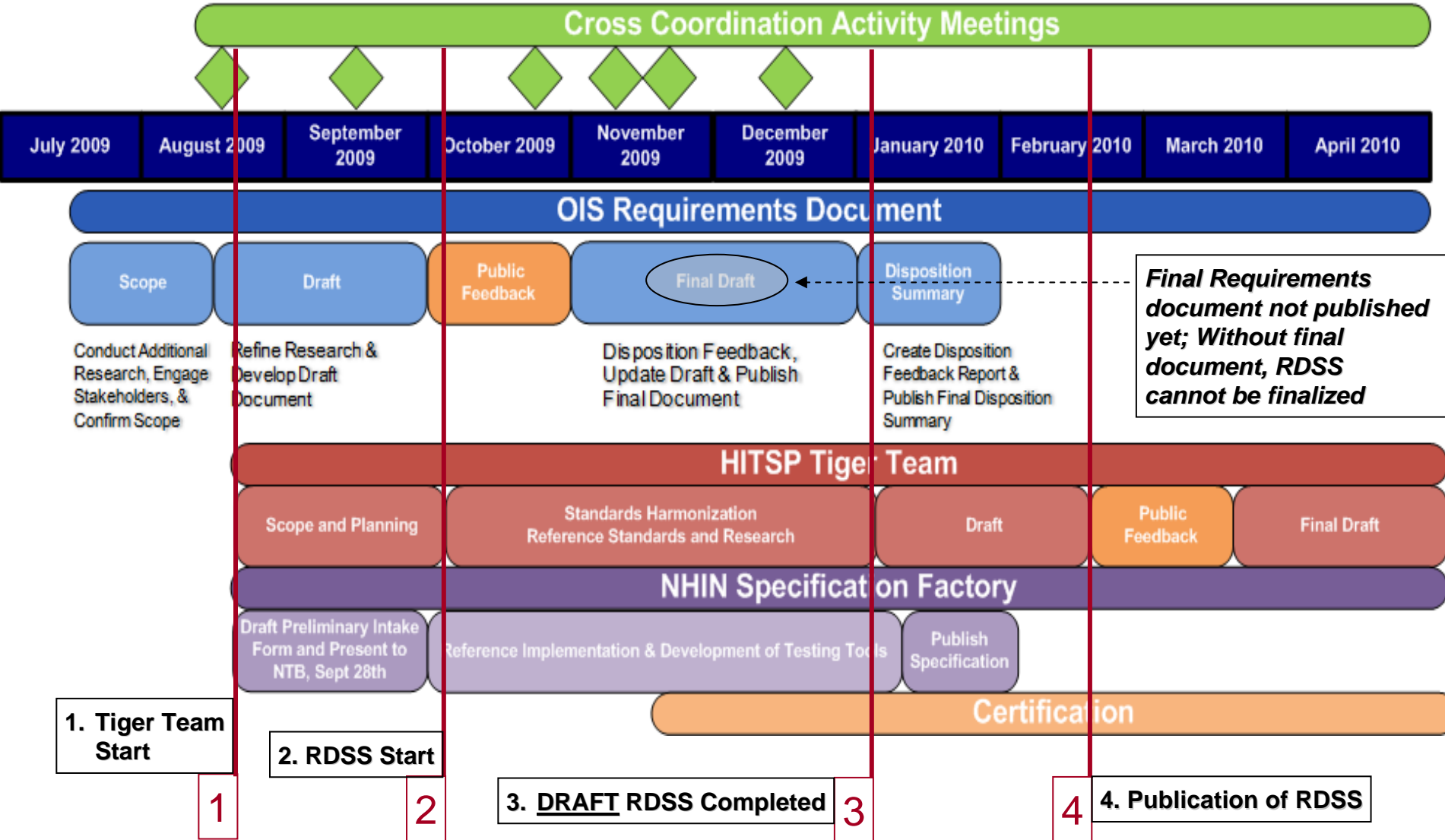


Background

- Testing new approach to the development of ISs and other HITSP harmonization products
 - Work concurrently on RDSS while Requirements Document is finalized
 - Interactive communication between ONC, HITSP, NHIN throughout the process
 - Speed-up development process and shorten timeline for product completion on the part of HITSP



High Level Cross Coordination Timeline





Overview of Consumer Preferences

Per ONC document:

- For the purposes of this document, the term “consumer preferences” is used to collectively represent several inter-related capabilities including, but not limited to:
 - The ability for a consumer to define permissions for who is permitted to access information in their EHR and under what circumstances this access is appropriate,
 - The ability for a consumer to express preferences for how and under what circumstances their health information would or would not be made available by their healthcare providers,
 - The ability for a consumer to authorize the release of their health information to another provider or third party; and
 - The ability to establish various types of consumer preferences including but not limited to consents, advance directives and other potential types outlined in the Dataset Considerations section of the document.



Overview of Consumer Preferences

Consumer expressions of choices, desires or directives in two general areas:

1. Health information privacy (consents or authorizations)

- Establishing access restrictions and management parameters on health information
- Defining privacy preference “conditionants” including:
 - By type of information (all data, segmentation of data)
 - By role and criteria based access, including type of encounter, embargoed records (VIP, legal restrictions)
 - By time (start, end, duration)
 - By level of participation (opt-in, opt-out, with or without additional classifications, with or without additional granularity)
 - By purpose of use



Overview of Consumer Preferences

2. Content, Communication and Representation

- Status and/or designation, including advanced directives, DNR orders, healthcare proxies, living wills, medical surrogates, access to family members
- Care or associated services needs and communication needs, including appointment reminders, lab results
- Comfort needs, including non-medical dietary restrictions, language needs, cultural needs, clergy preferences

Original Perspectives and Scenarios



- **Perspectives/Roles**

- **Consumer:** Any recipient or legal proxy of a recipient of healthcare who wishes to create preferences regarding aspects of their care and how their health-related information (HRI) is accessed or shared.
- **Primary Receiving Organization:** Any organization (provider, information exchange or other information recipient) who receives and may act on or manage a consumer preference and its related health information.
- **Secondary Receiving Organization:** Any organization (provider, information exchange or other information recipient) who receives from another organization and may act on or manage a consumer preference and its related health information.

Original Perspectives and Scenarios



■ Scenarios

The Process Diagram explains business processes surrounding consumer preferences including descriptions of events and actions. The Diagram is broken into two scenarios and 29 events



Scenario 1: Creation of a Preference – The process by which the consumer creates a preference by expressing their preference an organization.

- **Scenario 2: Preference Management: Application, Exchange and Replacement** – The process by which the an organization identifies and/or retrieves, applies, and exchanges a consumer's preference to another organization.

CP-TT - Approaches to Identifying Existing and Emerging Standards



Considerations for Identifying Standards

- **What standards are we trying to identify?**
 - Privacy-related standards
 - Content-related standards
 - 'Universal' standards (applicable to both)
- **Key Actions and Information Exchange Components**
 - **Consumer:** Express, Amend, Replace, Request Exchange, Request Audit
 - **Receiver/Requester/Submitter:** Create, Transmit, View, Store, Apply, Amend, Replace Transmit Update, Reconcile Conflicting Preferences, Acknowledge Receipt of Preference (or Update), Maintain Audit Log of Preferences, Classify Data

CP-TT - Approaches to Identifying Existing and Emerging Standards



Considerations for Privacy Preferences

- **What** - information is to be allowed/restricted (all, some, certain)
- **By whom** - who is the entity that holds the data and to whom the consent will apply
- **To whom** - the entity/individual what will receive or will access the information
- **For what purpose** - will the information be allowed to be collected, accessed, used or disclosed
- **When** - a time factor affecting the consent
- **How** - the methods by which the collection, access, use or disclosure may be done (i.e. HIE, PHR, etc)
- **Opt-in/Opt-out** - the goal of this HITSP Workgroup was not to replace the commonly referred to “Opt-in/Opt-out,” but to further clarify it

CP-TT - Approaches to Identifying Existing and Emerging Standards



Considerations for Content Preferences

- Many different 'content' type options
- No easily definable categorization of each content type
- Most exist in legal (paper-based) documents but not in electronic form or defined standards
- Most depend on federal and/or state regulatory specs/guidelines and have other legal ramifications/considerations
- All require the 'intervention' of a human at the end of the process to ultimately complete the execution (hard to automate process end-to-end)

Consumer Preferences Tiger Team Work



- ❑ Extensive review of draft Requirements document; provided detailed comments including
 - Refinement of Scenarios (break-out of two original scenarios into sub-scenarios)
 - Refinement of Process Diagrams (based on changes to original scenarios)
 - Out-of-scope clarifications (consumer education, reconciling preferences)

- ❑ Organized the TT into two Workgroups: Privacy Preferences and Content Preferences



Consumer Preferences Tiger Team Work

- ❑ Initial joint discussions to understand new RDSS template, agree on refinements to original scenarios, process diagrams, information exchange flows
- ❑ Each workgroup met weekly to begin documenting key definitional issues around respective preferences
- ❑ Content preference workgroup had larger initial task, as various types of content preferences not well defined or categorized
- ❑ Each workgroup began completing respective sections of RDSS
- ❑ Workgroups started with an environmental scan of activities related to consumer preferences

Environmental Scan – Current Consumer Preference Activities



- ❑ HIT Policy Committee work (and newly created Privacy and Security Workgroup) and HIT Standards Committee work (particularly the Privacy and Security Workgroup) regarding recommendations on Meaningful Use, Standards and Certification Criteria
- ❑ Reports from ONC related to privacy policies across states (released January 8, 2010)
- ❑ New/upcoming ONC Whitepapers on CPs, Segmentation of Health Information

Environmental Scan – Current Consumer Preference Activities



- HL7: CBCC, Security, SOA (PASS) Workgroups
 - Composite Privacy Consent Directive Domain Analysis Model (DAM)
 - Security Domain Analysis Model (DAM)
 - Proposal to develop a CDA document for consent directive
 - Several codesets related to Consumer Preferences
 - PASS Activities – creating the service interfaces so CPs can be turned into Access Control decisions

Environmental Scan – Current Consumer Preference Activities



□ Other Standards Efforts

- ISO, ASTM work on coding areas such as Purpose of Use
- LOINC – work on new codes related to privacy

□ Evaluating work being done by in other countries

- Canada
- EU



NHIN and HITSP

- Evaluate NHIN requirements related to consumer preferences

- Build on HITSP Products
 - TP30 / TP20

 - CAP143

 - C83

RDSS Development

January 15, 2010
Version 0.1.0

HITSP Consumer Preferences Requirements and Design Specification

HITSP/RDSS 169

HITSP

Healthcare Information Technology Standards Panel

Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

HITSP Consumer Preferences Tiger Team



HITSP Consumer Preferences RDSS 169
- DRAFT -
20100115 v0.1.0

1

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RDSS Development

- ❑ The RDSS document defines the **information exchange requirements** involved in the **creation, management, execution** and **exchange** of Consumer Preferences.
- ❑ The document also provides detailed mapping of **scenarios, systems** descriptions, **capabilities** being used, **orchestration** of these capabilities, and their **existing gaps**.
- ❑ Finally, the document provides a complete **mapping of information exchange requirements to functional requirements** based on the reference document and the need for new exchange content, exchange actions, data requirements and new or updated capabilities and constructs.

RDSS Development



- The RDSS document describe the content and exchange requirements of two distinct types of Consumer Preferences:
 - Privacy Preferences: consumer's desire to grant or deny access to some or all of their healthcare-related information, to some defined set of users, for some defined set of purposes, for some defined time period.



RDSS Development

– Content Preferences, which describe the consumer's desire about how they wish to be treated by their care givers. These preferences include such items as, but not limited to:

- Advance Directives
- Audio Preference
- Cultural Preferences
- Dietary Preference
- Language Preference
- Do Not Resuscitate (DNR)
- Confidential Communication Preference
- Disposition of deceased human body/organs
- Live organ donation
- Living Wills
- Medical Home designation
- Spiritual Preference
- Vision Preference
- Other Preferences
- Funeral arrangements (disposition of body)
- Health Care Proxy/Medical Surrogate

RDSS Development – Refinement of Scenarios



Table 2-3 Description of Scenarios

Scenario Name	Scenario Description
Scenario 1: Creation and Management of Content Preferences and Consumer Privacy Preferences	This scenario describes the process by which the consumer creates and manages their (a) content preferences and (b) privacy preferences.
Scenario 2: Enforce Privacy Policy	This scenario describes the information exchange requirements that support an organization's enforcement of Privacy Policies.
Scenario 3: Execute Content Policy	This scenario describes the execution of a content preference.
Scenario 4: Exchange Preferences between healthcare organizations	This scenario describes the exchange of Consumer Privacy Preferences and Consumer Content Preferences between healthcare organizations. There are four sub-scenarios described, which differ mainly by how the scenario is triggered.



RDSS Development – Capabilities Used

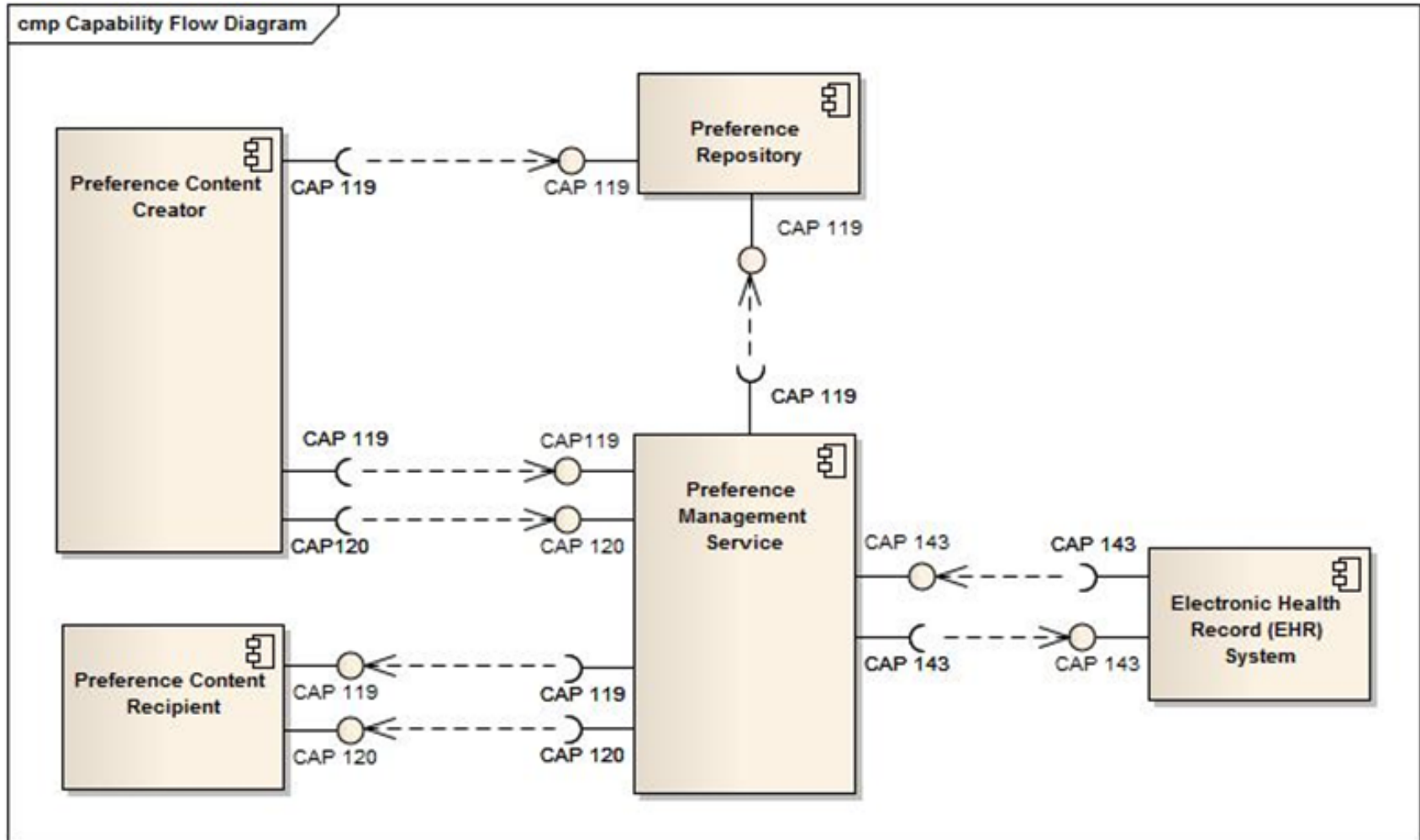
Table 3-2 Capabilities Used

Capability	Capability Summary	IERs satisfied
HITSP/CAP 119 - Communicate Structured Document	Communicate Structured Document (CAP119) addresses interoperability requirements that support the communication of structured health data related to a patient in a context determined by the author of the document. This Capability supports the exchange of all CDA documents.	IER-1a IER-2a IER-1c IER-2a IER-5a IER-6a IER-1b GAP IER-1d GAP IER-2b GAP IER-5b GAP
HITSP/CAP 120 – Communicate Unstructured Document	Communicate Unstructured Document (CAP120) addresses the exchange of notes and other documents which do not contain structured information. These documents may assist clinicians in providing additional information about a patient encounter or care plan that is pertinent to the understanding of the patient’s condition or preferences.	IER-1b IER-1d IER-2b IER-5b IER-6b
HITSP/CAP 143 – Manage Consumer Preferences and Consents	This Capability addresses management of consumer preferences and consents. This capability will be updated to reflect the new requirements described in this RDSS.	IER-3 IER-4a IER-4b IER-7 (TP13) IER-8 (TP13) IER-9a IER-9b IER-10 IER-11 (TP13) IER-12



RDSS Development – Capabilities Used

Figure 3-1 Diagram Showing Capabilities used Between Systems





RDSS Development

- Section 4 – Initial set of capability gaps identified and recommended resolution provided

- Section 5 – Appendix
 - Harmonization request traceability table provided (back to the original Requirements Document from ONC)

 - Detailed identification of all new exchange content needed for both



Next Steps

- ❑ Draft RDSS delivered to IRT for internal editorial and quality review
- ❑ IRT comments addressed and final draft delivered to HITSP program management (January 22, 2010)
- ❑ Draft RDSS will not go out for public comment
 - No Final Requirements Document out yet
 - Would not be appropriate to request comments on a draft RDSS that is based on a draft Requirements Document
- ❑ Open work item for future work
 - Once final Requirements Document is published, draft RDSS will need to be harmonized with Requirements Document, and then harmonization process can proceed (development of IS, constructs, etc)

Report from the Care Management & Health Records Domain Technical Committee



- Restarted efforts after IS 107 (EHR Centric IS) and TN903 Data Architecture was completed (August 2009)
- Goals Included
 - Address the 2009 AHIC Use Case gaps and extensions
 - Modification of existing constructs to better support ARRA and Meaningful Use
 - Construct maintenance to support HITSP template updates
- Work was broken up into three waves
 - Wave 1 completed
 - Wave 2 work analysis begun



CM&HR Wave 1 Activities

- CAP - 119 Communicate Structured Document
 - Changes for Clinical Notes Extension
 - Use of C83 based Content Modules
- C83 - CDA Content Modules
 - Support for encodings using HITECH specified vocabularies
 - Additions to support Wave 1 Constructs for Clinical Notes Extension and Population Newborn Screening
- C80 – Clinical Document and Message Vocabulary
 - Extended Value sets to support Vocabularies specified in Meaningful Use
 - Inclusion of jointly developed National Library of Medicine Vocabularies for starter set of Laboratory Order and Newborn Screening Laboratory Orders
 - Added Vocabulary to support Wave 1 and Wave 2 work



CM&HR Wave 1 Activities

C152 – Labor and Delivery Summary

- Support for Maternal and Child Health Use Case
- Support for Newborn Screening Use Case
- Ability to support as a Clinical Note

C161 – Antepartum Record

- Support for Maternal and Child Health Use Case
- Ability to support as a Clinical Note

C163 – Laboratory Order Message

- Support for the General Laboratory Order Use Case



CM&HR Wave 1 Maintenance

C70 – Immunization Query and Response

- Updated to support Data Architecture TN903
- Identification of HITSP data elements (C154), mapping and constraints

C72 – Immunization Message

- Updated to support Data Architecture TN903
- Identification of HITSP data elements (C154), mapping and constraints

C78 – Immunization Document

- Updated to support Data Architecture TN903
- Identification of HITSP data elements (C154)
- Addition of templatedIds and constraints

Report from the Care Management & Health Records Domain Technical Committee



- ❑ Published Constructs for public comment (November-December, 2009)
 - ❑ Completed resolution/disposition of over 150 Laboratory Order Message comments by January 4
 - ❑ Completed resolution/disposition of 118 comments for all other CM&HR Constructs by December 20
- ❑ Completed internal editorial and quality review prior to publication (January, 2010)
- ❑ Published final documents for Panel approval (January 18, 2010)



CM&HR Wave 2 (Work in progress)

- C148 – EMS Transfers of Care
 - Address Pre-hospital Care gap for EHR Emergency Responder Use Case

- C162 – Plan of Care
 - Support Clinical Notes Extension and Gaps
 - Addressed Gaps in Consults and Transfers of Care Use Case

- C166 – Operative Note
 - Support Clinical Notes Extensions and Gaps

- C168 – Long Term Care and Post Acute Assessment
 - Based on HL7 Implementation Guide: CDA Framework for Questionnaire Assessments
 - Support Clinical Notes Extensions and Gaps

CM&HR Wave 2 Maintenance



- ❑ C28 – Emergency Care Summary
 - ❑ Updated to support Data Architecture TN903
 - ❑ Expanded Construct from direct IHE reference to use of HITSP/C83 cda Section
 - ❑ Addition of templatedIds and constraints

Report from the Data Architecture Tiger Team



- ❑ Tiger Team work started as part of ARRA Initiative
 - ❑ Membership: 160 joined the TT; added a large number of new members to HITSP
- ❑ Goals of Data Architecture Tiger Team
 - ❑ Provide Data Architecture Design for Use of Data Element, Value Sets and Templates Used Within HITSP
 - ❑ Ensure Data Element Consistency Across HITSP Specification
 - ❑ Develop Data Architecture Technical Note – TN903
 - ❑ Support Meta-Data Registries
 - ❑ Address CMHR/DA Public Comments



Report from the Data Architecture Tiger Team

- ❑ Published TN903 for public comment (August, 2009)
 - ❑ On-going effort to convert HITSP Transaction Packages, Transactions and Components to conform to TN903. define HITSP Data Elements and resolve HITSP Data Element inconsistencies
 - ❑ Creation of C154/HITSP Data Dictionary and re-alignment of C83/HITSP cda Sections and C80/Clinical Document and Message Terminology
- ❑ Prepared draft conversions of HL7 related Constructs (September-October, 2009) – Details provided in CM&HR Report
 - ❑ TP22 - Patient ID Cross-Referencing
 - ❑ T23 - Patient Demographics Query
 - ❑ C70 – Immunization Query and Response
 - ❑ C72 – Immunization Message
 - ❑ C78 – Immunization Document



Report from the Data Architecture Tiger Team

- ❑ Published Constructs for public comment (November-December, 2009)
 - ❑ Received 9 comments; completed resolution/disposition of comments by December 20
- ❑ Completed HITSP Inspectors Testing Process (December, 2009)
- ❑ Completed internal editorial and quality review prior to publication (January, 2010)
- ❑ Published final documents for Panel approval (January 18, 2010)



Report from the Data Architecture Tiger Team

- ❑ Continued focus on conversion of ASCX12/NCPDP Administrative and Financial Domain Technical Committee's Constructs
 - ❑ Update of C154/HITSP Data Dictionary

- ❑ Prepared draft conversions of ASC X12/NCPDP related Constructs (September 2009 – January 2010)
 - ❑ T40 – Patient Health Plan Eligibility Verification
 - ❑ T68 - Patient Health Plan Authorization Request and Response
 - ❑ T79 – Pharmacy to Health Plan Authorization Request and Response
 - ❑ TP43 – Medication Orders
 - ❑ TP46 – Medication Formulary and Benefit Information



Report from the Administrative and Financial Domain Technical Committee

- Gaps and Extensions work for 2009 included
 - Identifying standards for use in consumer/provider appointment scheduling
 - Expanding existing prior-authorization transaction functionality to include consumers

- Other work
 - Updated existing constructs
 - Assumed ownership of Capabilities developed by the Capabilities Tiger Team



Scheduling Capability

- ❑ Workgroup defined requirements: Jan – Apr 2009
- ❑ Drafted Capability (HITSP/CAP93): Sep – Oct 2009
- ❑ Published CAP93 for public comment in Nov 2009
- ❑ Dispositioned comments and refined the capability in Dec 2009 – Jan 2010
- ❑ CAP 93 is scheduled for release by HITSP on January 29



Scheduling Capability (continued)

Standards selected:

- HL7 v2.5.1 Chapter 10: Scheduling
- HL7 Version 3 Standard: Scheduling, Release 1

Core functions include:

- Requesting an appointment
- Rescheduling an appointment
- Appointment modification
- Appointment cancellation



Scheduling Capability (continued)

❑ Identified Gap

- ❑ Lack of an implementation guide for HL7 v2 Scheduling

❑ Gap Resolution

- ❑ HL7 has initiated a project to create an implementation guide
- ❑ Estimate that it will require up to 1 year to complete the implementation guide work



Prior Authorization Gaps and Extensions

- ❑ Workgroup defined requirements: Jan – Apr 2009
- ❑ Capability Drafted (HITSP/CAP141): Aug – Sep 2009
- ❑ Published CAP141 for public comment in Oct 2009
- ❑ Dispositioned comments and refined the capability in Nov – Dec 2009



Prior Authorization (continued)

□ CAP 141 Utilizes

- HITSP/T68 – Patient Health Plan Authorization Request and Response
- HITSP/T79 – Pharmacy to Health Plan Authorization Request and Response
- HITSP/SC114 – Administrative Transport to Health Plan



Prior Authorization (continued)

Core functions include:

- Request for Health Plan to authorize certain healthcare services
- Health Plan Response for healthcare services
- Request for Health Plan to authorize certain pharmacy products or services
- Health Plan Response for pharmacy products or services



Prior Authorization (continued)

❑ Identified Gaps for CAP 141

Gap Description	Required Standard	SDO	Expected Availability
Consumer requests a Provider list	ASC X12 274 transaction is not currently designed to allow consumers to make this inquiry	ASC X12	To be determined
Consumer Request Eligibility Benefits	ASC X12 270 not currently designed to interact with consumers	ASC X12	To be determined



Prior Authorization (continued)

Gap Description	Required Standard	SDO	Expected Availability
Consumer sends Prior Auth information to a Payer or Provider system from their PHR or similar system	There are no current standards available today that include the PHR system. This requires a change to ASC X12 278	ASC X12	To be determined
Consumer uses this PHR or similar system to communicate prior-authorization information to a provider or payer system	No standards available today that includes the PHR system. Change needed to ASC X12 278 to support medical history	ASC X12	To be determined



Prior Authorization (continued)

Gap Description	Required Standard	SDO	Expected Availability
Provider send Prior Auth request for information to a Payer about non-patient specific Prior Auth information	Neither the X12 278 nor NCPDP Formulary and Benefit real-time transactions support this function today	ASC X12 NCPDP	To be determined NCPDP unable to ascertain a business needs for the exchange



Prior Authorization (continued)

Gap Description	Required Standard	SDO	Expected Availability
Query for patient-specific prior-authorization criteria	The ASC X12 271 eligibility transaction today cannot provide information about the prior-authorization criteria. It also may not provide alternative treatments	ASC X12	To be determined
Respond to non patient-specific eligibility request by a consumer or provider for specific service, treatment, therapy, etc. or a list of services	ASC X12 271 does not provide eligible benefit coverage for non-patient specific procedures or therapies	ASC X12	To be determined



Prior Authorization (continued)

Gap Description	Required Standard	SDO	Expected Availability
Respond to non patient-specific eligibility request by a consumer or provider for specific service, treatment, therapy, etc. or a list of services	NCPDP not currently designed to interact with a consumer	NCPDP	NCPDP unable to ascertain a current business need for the exchange



Prior Authorization (continued)

Gap Description	Required Standard	SDO	Expected Availability
Respond to patient-specific prior-authorization or eligibility queries from consumers	ASC X12 and NCPDP do not support the consumer	ASC X12 NCPDP	To Be Determined NCPDP unable to ascertain a current business need for the exchange



Prior Authorization (continued)

Gap Description	Required Standard	SDO	Expected Availability
Particularly in the event of a rejection, a payer may need the ability to communicate an explanation for a prior-authorization decision as well as to communicate information on alternative treatment options or an Advanced Beneficiary Notification (ABN)	The gap is being able to communicate alternate treatment options for medical benefits	ASC X12	To Be Determined



Updated Constructs

HITSP/T40 – Patient Health Plan Eligibility Verification Transaction

- Corrected a typo where 004010X092A1 was incorrectly referenced as 004010X92A1
- Global changes made to be consistent with X12 nomenclature when that information speaks directly about X12 data elements and X12 structures.
- Moved the CAQH CORE constraints to become message constraints
- Split what had become Table 2-4 into two tables, one for the eligibility request and another for the response, Table 2-5



Updated Constructs

- HITSP/T68 – Patient Health Plan Authorization Request and Response Transaction**
 - Updated to the latest HITSP Transaction template
 - Corrected a typo where 004010X094A1 was incorrectly referenced as 004010X94A1
 - Revised wording in Section 1.1 and 2.1 to add clarity
 - Updated various constraint statements in Tables 2-4 and 2-5



Updated Constructs

- ❑ **HITSP/T79 – Pharmacy to Health Plan Authorization Request and Response**
 - ❑ Updated to the latest HITSP Transaction template
 - ❑ Modified to reflect the HITSP/TN903 Data Architecture approach
 - ❑ Added Section 2.1 per HITSP/TN903
 - ❑ Duplicate constraints removed from Table 2-1
 - ❑ Added message constraints per HITSP/TN903 format
 - ❑ Added a constraints reference appendix



Capability 140 – Communicate Benefits and Eligibility

- ❑ **Assumed ownership after this capability was drafted by the Capabilities Tiger Team**
- ❑ **CAP 140 Utilizes**
 - ❑ HITSP/T40 – Patient Generic Health Plan Eligibility Verification
 - ❑ HITSP/TP46 – Medication Formulary and Benefits Information
 - ❑ HITSP/SC114 – Administrative Transport to Health Plan



Capability 140 – Communicate Benefits and Eligibility (continued)

Core functions include:

- Request for Health Plan Clinician care benefits verification
- Health Plan Clinician care benefits response
- Request for Health Plan pharmacy benefits verification
- Health Plan Response for pharmacy benefits
- Request for Medication Formulary and Benefits verification
- Health Plan or intermediary response for Medication Formulary and Benefits



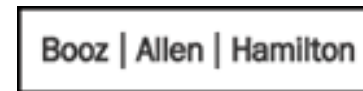
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