HITSP

Healthcare Information Technology Standards Panel

HITSP Technical Committee Orientation Session

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Vice President, Informatics, HIMSS
HITSP Technical Committee Manager

The Panel's Purpose

To harmonize and integrate diverse standards that will meet clinical and business needs for sharing information among organizations and systems.

- Establish HITSP Interoperability Specifications and promote their acceptance;
- Support the deployment and implementation of HITSP Interoperability Specifications across the health care enterprise;
- Facilitate the efforts of standards developing organizations to maintain, revise or develop new standards as required to support the HITSP Interoperability Specifications.

Harmonized standards promote interoperability, enhance healthcare quality and contain costs

HIT Standardization

HITSP members agreed that a **standard** is a well-defined approach that supports a business process and . . .

- has been agreed upon by a group of experts;
- has been publicly vetted;
- provides rules, guidelines, or characteristics;
- helps to ensure that materials, products, processes and services are fit for their intended purpose;
- is available in an accessible format;
- is subject to an ongoing review and revision process.

Standards Harmonization is required when a proliferation of standards *prevents* progress rather than *enabling* it.

HITSP and Its Stakeholders - Harmonizing and Integrating Standards To Meet Clinical and Business Needs

Patients

Consumers

Employers

General Practitioners

Specialists

Payers

Suppliers

Hospitals

Review Boards

Practice Guidelines

Residential Care Providers

Outpatient Healthcare Providers

Government Agencies














HITSP - volunteer-driven, consensus-based organization funded by the Department of Health and Human Services.

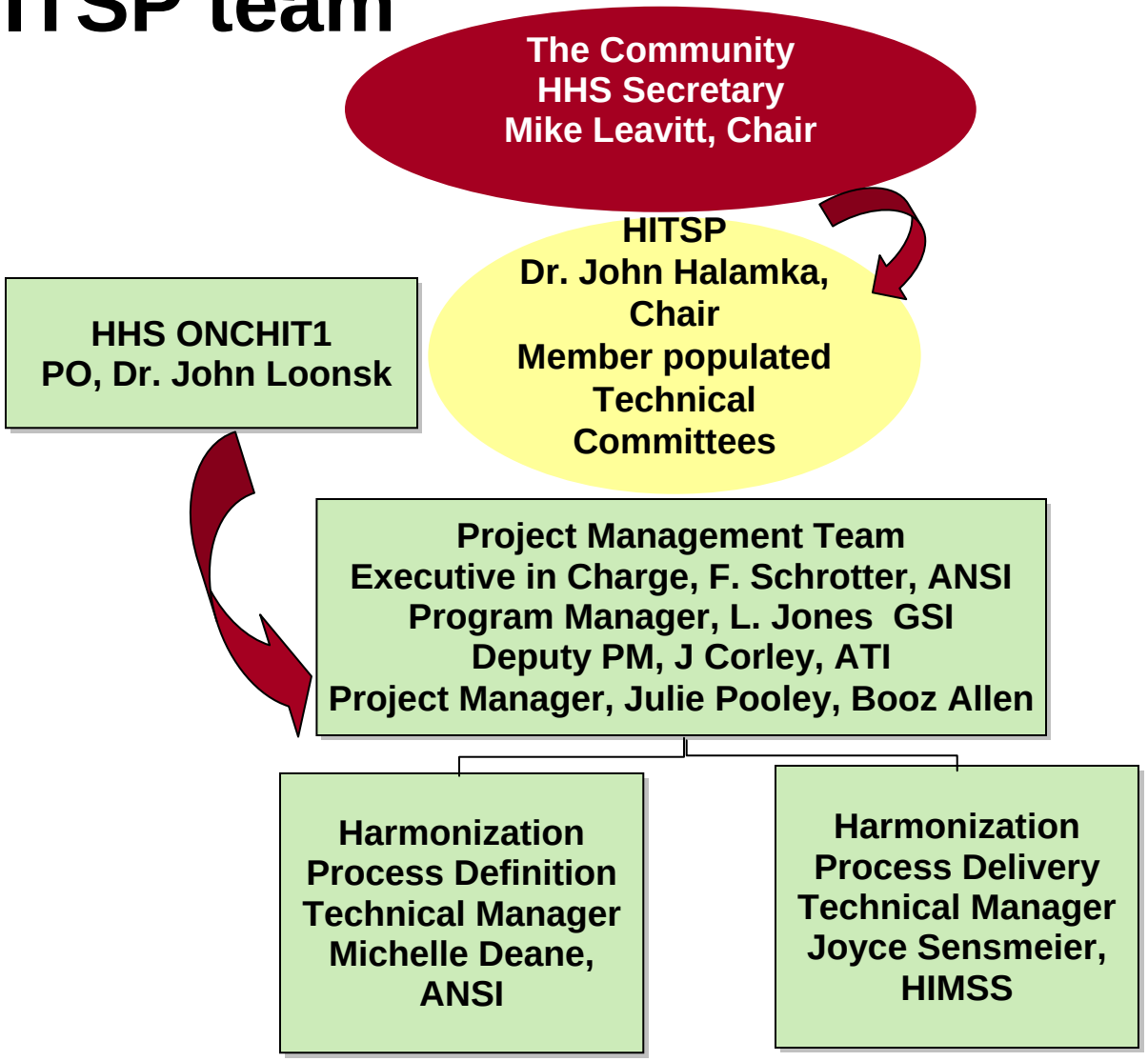
HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

Panel Members – Board of Directors – Technical and Coordination Committees

Standards Developing Organizations (SDOs)	Non-SDOs	Government Bodies	Consumer Groups	Project Team Members (non-voting)	Total
23	**313**	34	16	12	**398**
5%	**79%**	9%	4%	3%	**100%**

HITSP members are representatives of the broad Healthcare IT community

The HITSP team



Federal Agencies must use the Recognized Interoperability Standards that have been harmonized by the Healthcare Information Technology Standards Panel

Federal Register/Vol. 73, No. 15/Wednesday, January 23, 2008/Notices **3973**

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the National Coordinator for Health Information Technology (ONC), DHHS

Notice of Availability: Secretarial Recognition of Certain Healthcare Information Technology Standards Panel (HITSP) Interoperability Specifications as Interoperability Standards for Health Information Technology

HITSP is playing an integral role in the development of a Nationwide Healthcare Information Network (NHIN) for the United States

THE WHITE HOUSE
PRESIDENT
GEORGE W. BUSH

For Immediate Release
Office of the Press Secretary
August 22, 2006

Executive Order:

Promote Quality and Efficient Health Care in Federal Government Administered or Sponsored Health Care Programs

Sec. 3. Agencies shall perform the following functions:

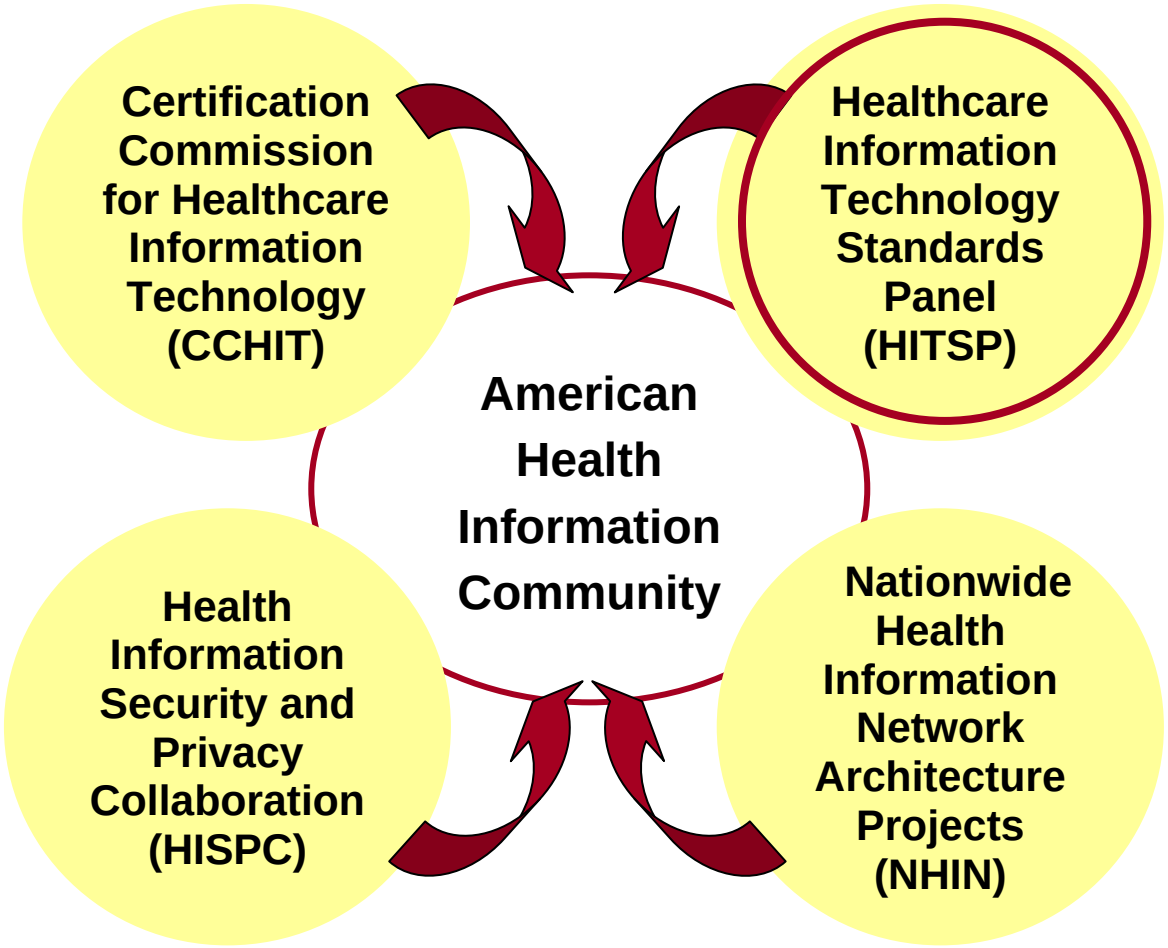
Health Information Technology -

For Federal Agencies. As each agency implements, acquires, or upgrades health information technology systems used for the direct exchange of health information between agencies and with non-Federal entities, it shall utilize, where available, health information technology systems and products that meet recognized interoperability standards.

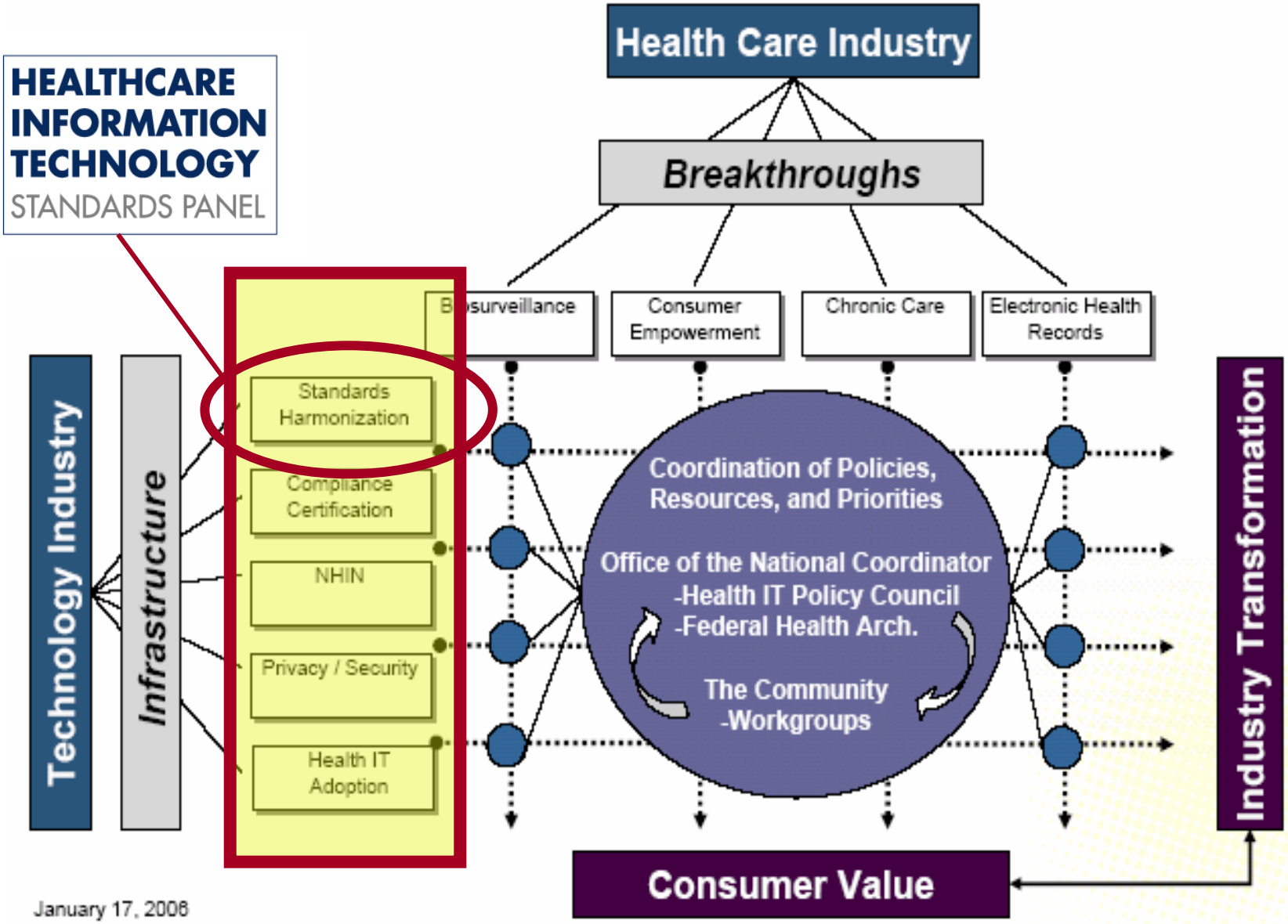
HITSP-Harmonized standards promote interoperability, enhance healthcare quality and contain costs

In 2005, HHS Secretary Michael Leavitt chartered a public-private "Community" to serve as the focal point for America's health information concerns and drive opportunities for increasing interoperability

The Community provides 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.



Plans are now underway to transition the AHIC to a public-private partnership based in the private sector.


HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL
Health Care Industry
Breakthroughs
Biosurveillance
Consumer Empowerment
Chronic Care
Electronic Health Records
Technology Industry
Infrastructure
Standards Harmonization
Compliance Certification
NHIN
Privacy / Security
Health IT Adoption
Coordination of Policies, Resources, and Priorities
Office of the National Coordinator
-Health IT Policy Council
-Federal Health Arch.
The Community
-Workgroups
Industry Transformation
Consumer Value
January 17, 2006

HITSP Standards Harmonization

HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

Open

Inclusive

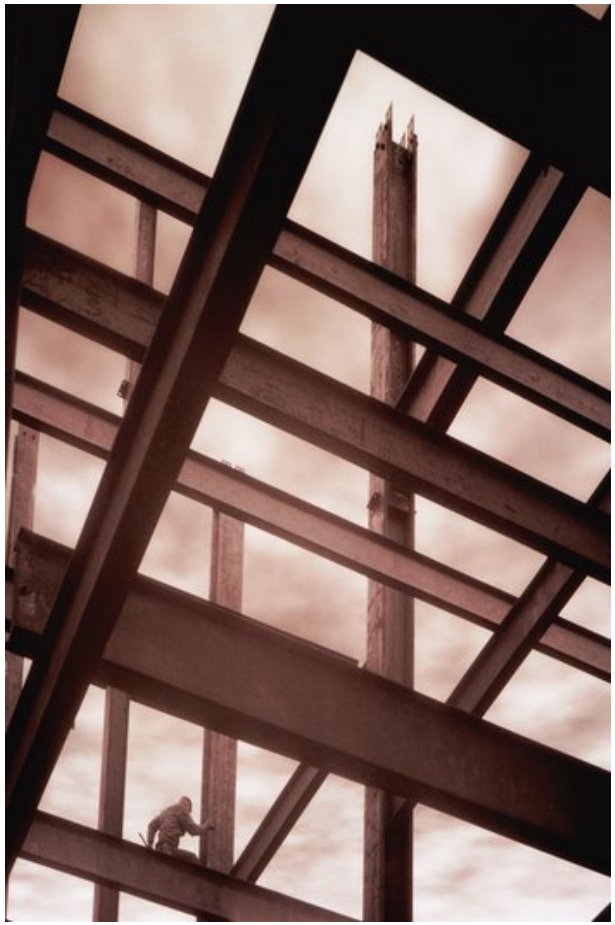
Collaborative

Use Case Driven

www.hitsp.org

1. Identify a pool of standards for a general breakthrough area
2. Identify gaps and overlaps for specific context
3. Make recommendations for resolution of gaps and overlaps
4. Develop **Interoperability Specifications** for using the selected standard(s) for a specific context
5. Test the instruction for using the standard

Building a Framework for HIT Solutions



- **Interoperability Specifications** are intended to be used by architects and system designers as a way to guide future implementation efforts based on health IT

- These specifications represent an ongoing effort to create a framework/template that represents a solution set for solving the known problems related to an AHIC-defined Use Case

HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

Technical Committees were formed to focus on the AHIC breakthrough areas

Technical Committees

Provider Perspective

- EHR – Lab Reporting
- Emergency Responder – EHR
- Medication Management

Consumer Perspective

- Consumer Empowerment
- Consumer Access to Clinical Information

Population Perspective

- Biosurveillance
- Quality

Provider Perspective Technical Committee

- 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 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.

Consumer Perspective Technical Committee

- 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.

- Consumer Access to Clinical Information

  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.

Population Perspective Technical Committee

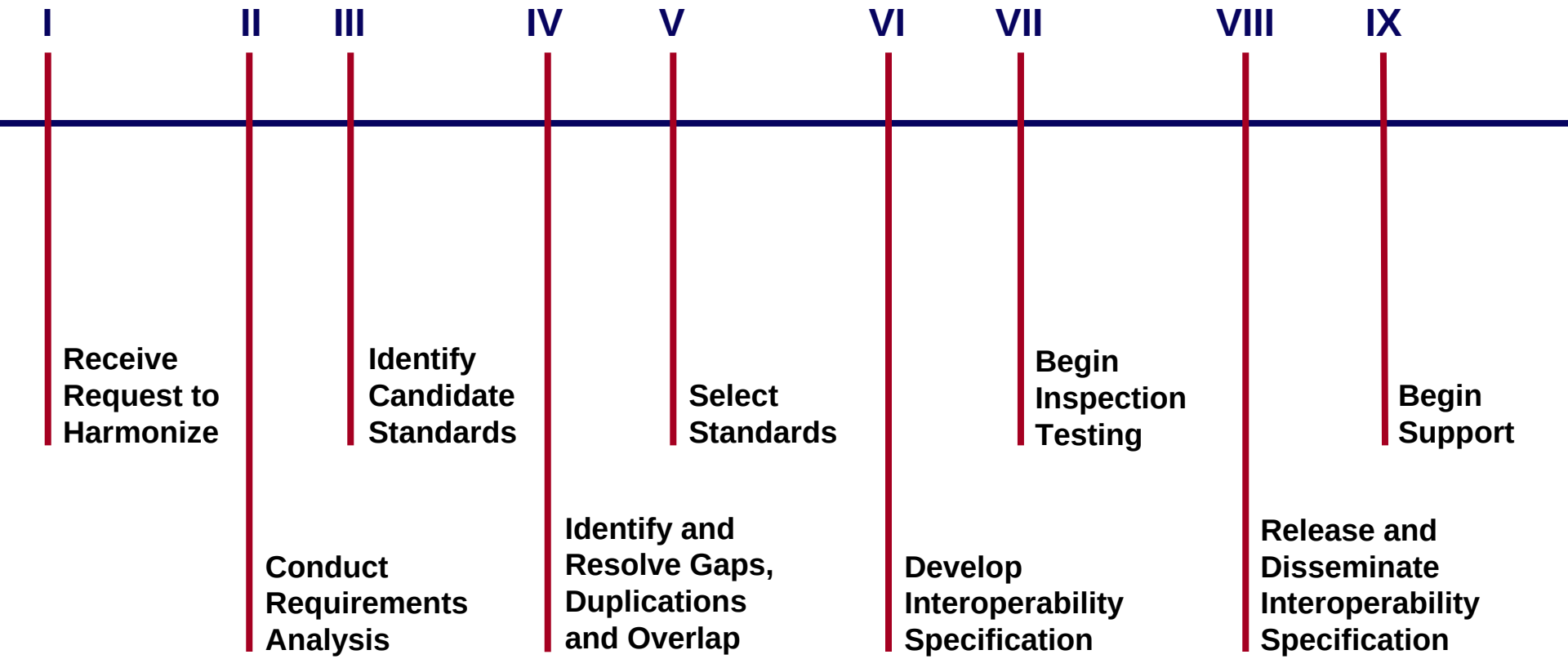
- Biosurveillance

  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

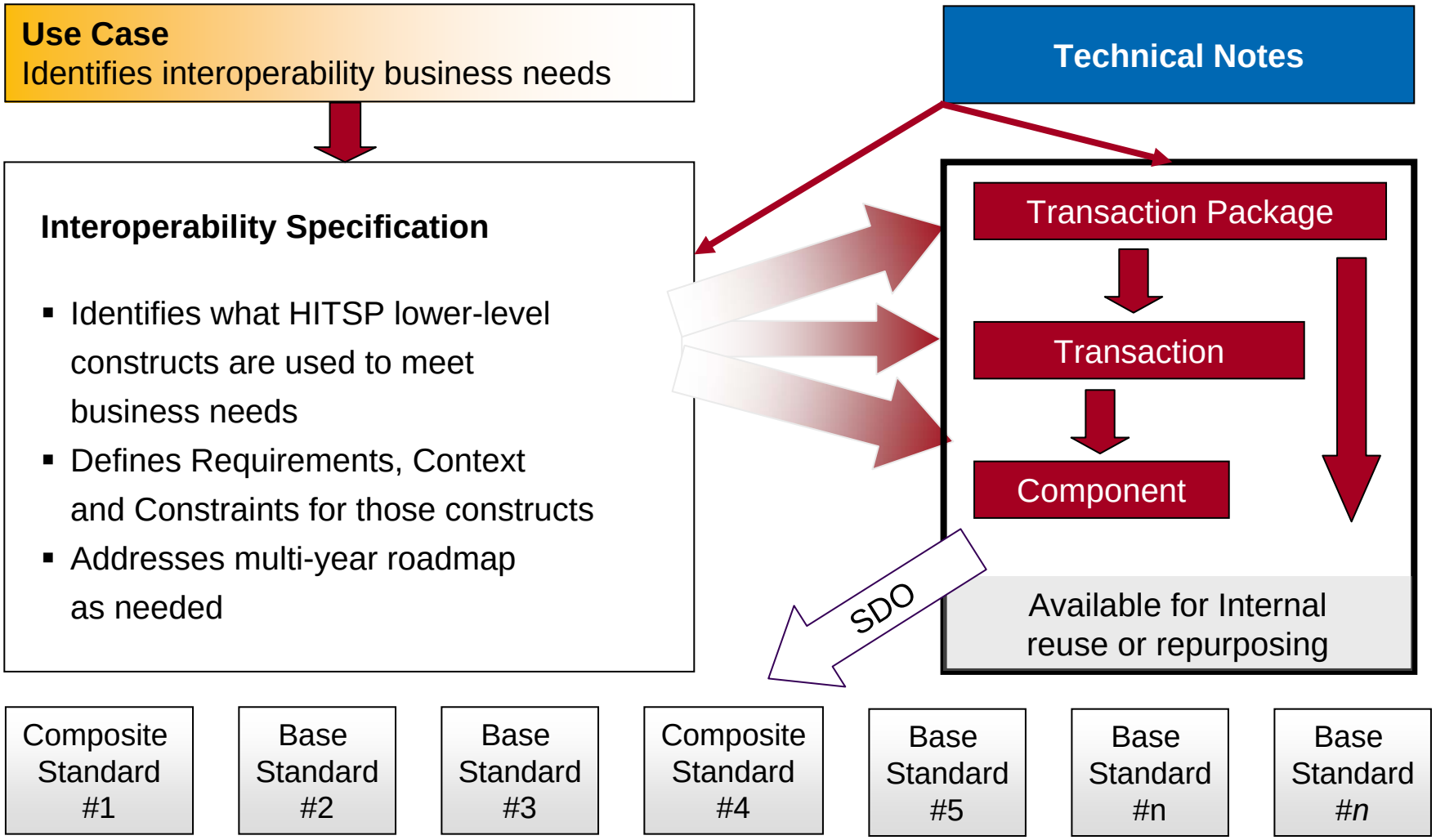
  This use case depicts two scenarios related to quality measurement, feedback and reporting with respect to a patient's encounter with the healthcare delivery system: quality measurement of hospital-based care and of care provided by clinicians.

Steps in the HITSP Harmonization Process



HITSP Program Management

Harmonization Framework



Definitions and Rules

Level	Definition	Example	Rules
Use Case or Harmonization Request	▪ Defines business/functional requirements ▪ Sets Context	▪ ONC EHR- Lab Use Case	
Interoperability Specification	▪ Models business/ functional/ interoperability requirements ▪ Identifies technical/system requirements to meet use-case ▪ Identifies how to use one or more HITSP constructs to meet use-case requirements	▪ HITSP EHR – Lab Interoperability Specification (IS01)	▪ Based on UML diagram to identify technical actors and actions ▪ Sets context ▪ Testable functional requirements ▪ Ids transactions or transaction packages
Transaction Package	▪ Defines how two or more transactions are used to support a stand-alone information interchange within a defined context between two or more systems	▪ Record Locator Service ▪ Entity Identification Service	▪ Thin context and interoperability requirements ▪ Testable ▪ Based on analysis of like technical actors, context and content harmonized across transactions ▪ May be fulfilled by one or more transactions or composite standard ▪ Expresses constraints on the transactions or composite standard
Transaction	▪ Logical grouping of actions, including necessary content and context, that must all succeed or fail as a group.	▪ Query lab result ▪ Send lab result	▪ Fulfills all actions between two or more systems needed to meet one or more interoperability requirements ▪ Testable ▪ May be fulfilled by components or composite standard ▪ Expresses constraints on components or composite standard

Definitions and Rules (cont.)

Level	Definition	Example	Rules
Component	▪ An atomic construct used to support an information interchange or to meet an infrastructure requirement (e.g., security, logging/audit)	▪ Lab result message ▪ Lab result context	▪ Typically will use one “primary” standard and may have other “secondary” standards ▪ Expresses constraints on base or composite standards
Base Standard	▪ A standard capable of fulfilling a discrete function within a single category produced and maintained by a single standards organization.	▪ Messaging standard ▪ Security standard ▪ Code set.	Per HITSP definition the term “standard” refers, but is not limited to,: – Specifications – Implementation Guides – Code Sets – Terminologies – Integration Profiles
Composite Standard	▪ Grouping of coordinated base standards, often from multiple standards organizations, maintained by a single organization. In HITSP, it can serve as a component, transaction or transaction package functional requirements..	▪ Integration profiles ▪ Implementation guides ▪ Health transaction services	Per Definition above

HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

Standards Readiness Criteria Tier I

- The standards required to support each major Use Case event were organized within an agreed upon standards taxonomy
- The standards selected for inclusion in the pool were examined using ‘HITSP approved’ Harmonization Readiness Criteria

HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

Standards Readiness Criteria Tier II

Suitability

The standard is named at a proper level of specificity and meets technical and business criteria of use case

Compatibility

The standard shares common context, information exchange structures, content or data elements, security and processes with other HITSP harmonized standards or adopted frameworks as appropriate

Preferred Standards Characteristic

Approved standards, widely used, readily available, technology neutral, supporting uniformity, demonstrating flexibility and international usage are preferred

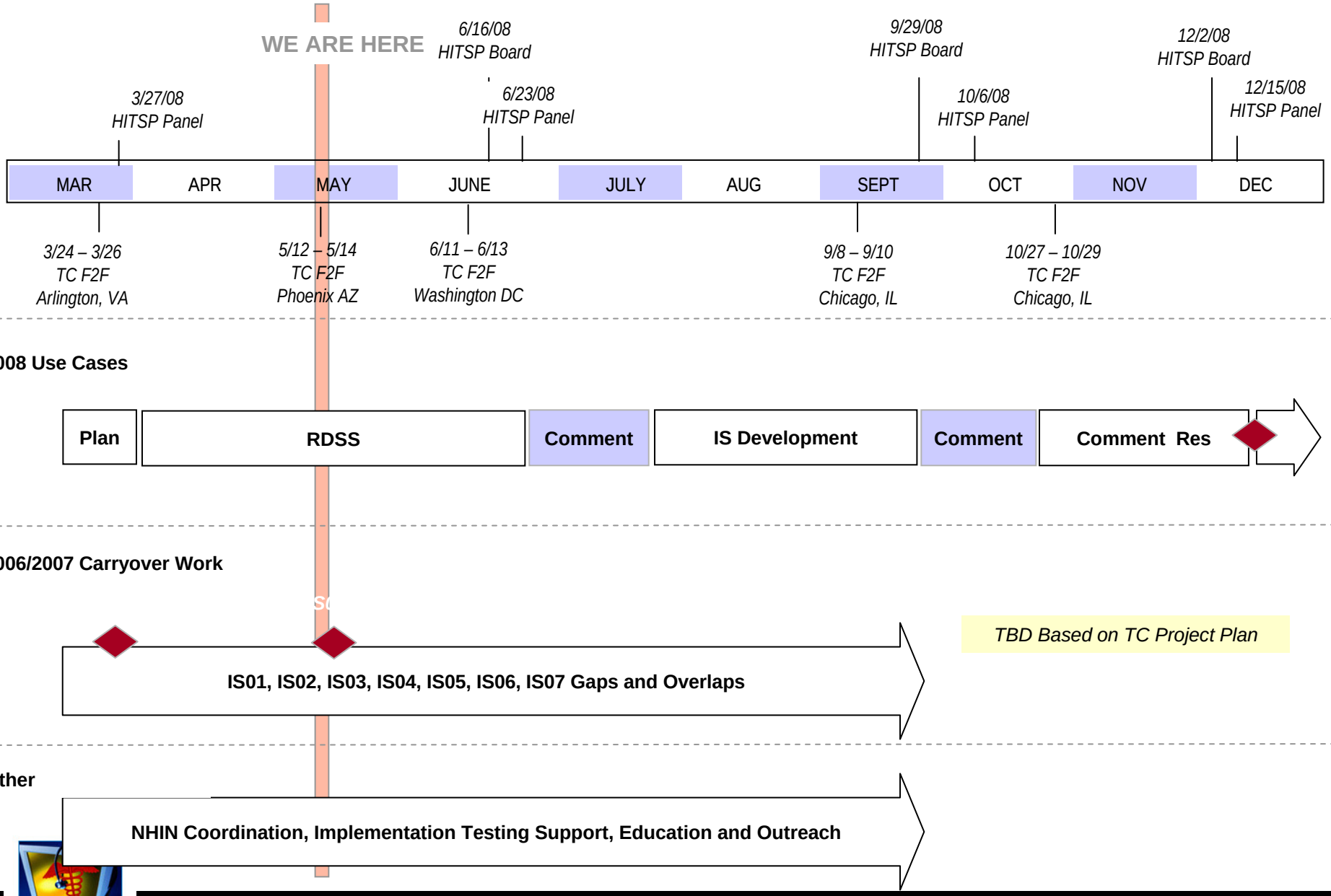
Standards Development Organization and Process

Meet selected criteria including balance, transparency, developer due process, stewardship and others

Total Costs and Ease of Implementation

Deferred to future work

HITSP 2008 TC Timeline Overview

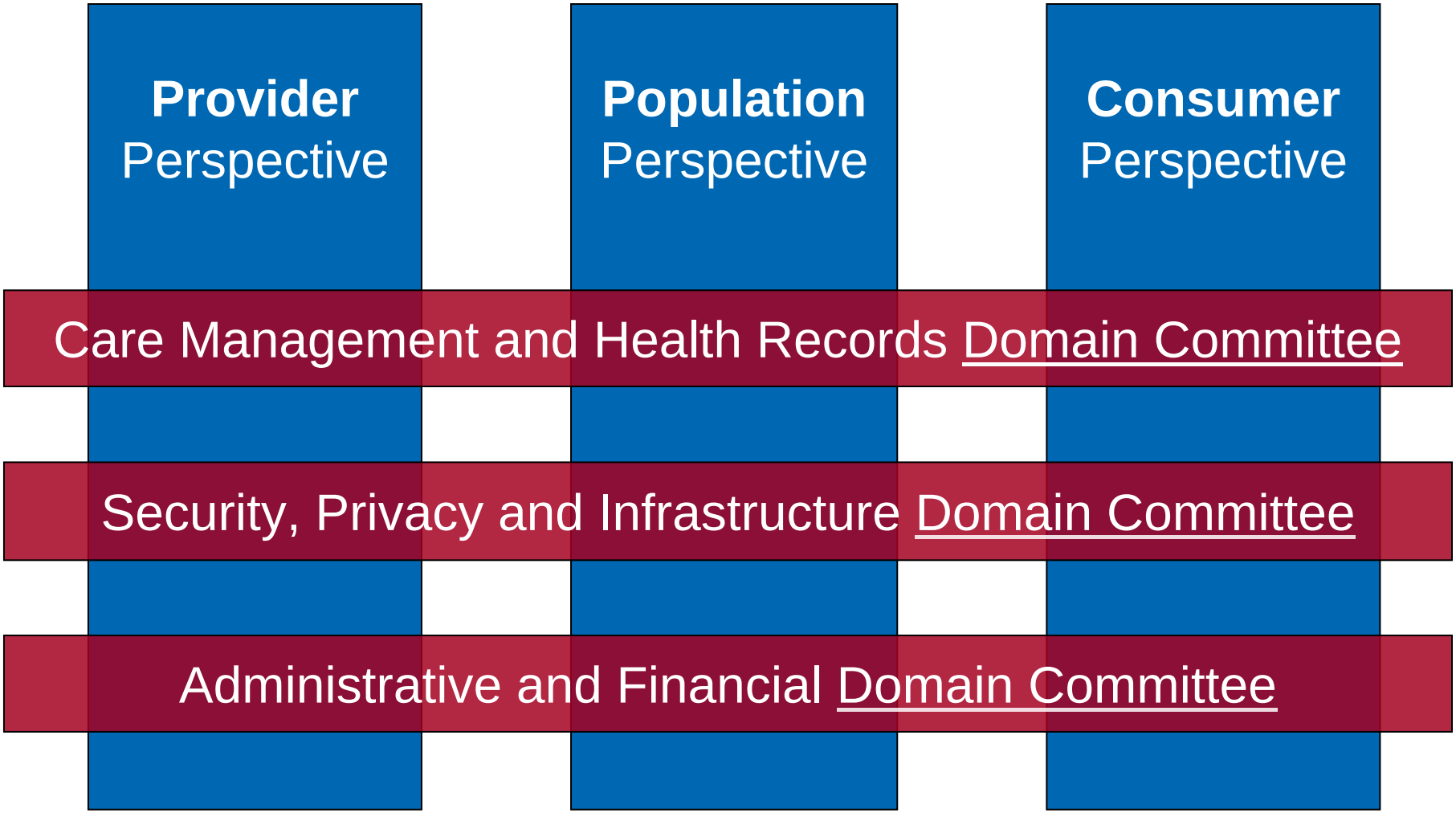


In order to better conduct its new work, HITSP is implementing a new Technical Committee structure

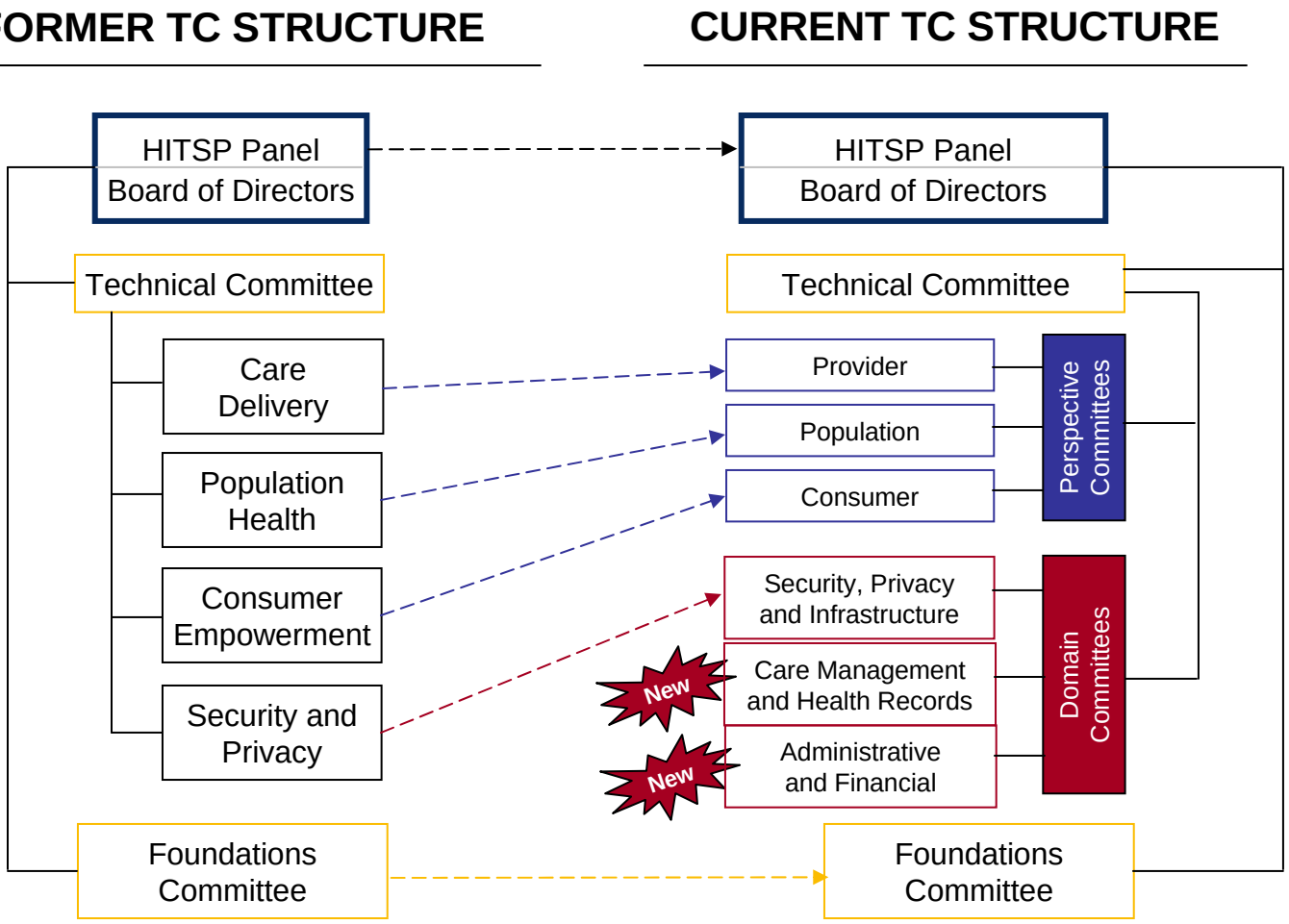
- Three (3) Perspective Committees aligned with AHIC perspectives
  1. Provider
  2. Population
  3. Consumer

- Three (3) Domain Committees focused on healthcare domains
  1. Care Management and Health Records
  2. Security, Privacy and Infrastructure
  3. Administrative and Financial

NEW . . . . HITSP TC Matrix Organization



Technical Committee Governance Structure



New AHIC Use Cases (2008)

Provider	Consumer	Population
Consultations and Transfers of Care	Remote Monitoring	Immunizations and Response Management
Personalized Healthcare	Patient – Provider Secure Messaging	Public Health Case Reporting

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.**

Technical Committees Leadership

- **Provider Perspective TC Co-chairs**
  - Allen Hobbs, PhD, Kaiser Permanente, Allen.Hobbs@kp.org
  - Steve Hufnagel, DoD/Medical Health System (MHS), SHufnagel@tiag.net
  - Mike Lincoln, MD, Department of Veterans Affairs, michael.lincoln@va.gov
- **Consumer Perspective TC Co-chairs**
  - Mureen Allen, MD, FACP, ActiveHealth Management mallen@activehealth.net
  - Charles Parisot, EHR Vendor Association, charles.parisot@med.ge.com
  - Scott Robertson, PharmD, Kaiser Permanente, scott.m.robertson@kp.org

Technical Committees Leadership

- **Population Perspective TC Co-chairs**
  - Floyd Eisenberg, MD, MPH, Siemens Medical Solutions, Floyd.Eisenberg@siemens.com
  - Peter Elkin, MD, Mayo Clinic College of Medicine, Elkin.Peter@mayo.edu
  - Steve Steindel, PhD, Centers for Disease Control & Prevention, sns6@cdc.gov
- **Administrative and Financial Domain TC Co-chairs**
  - Don Bechtel, Siemens Medical Solutions, donald.bechtel@siemens.com
  - Durwin Day, Health Care Service Corporation dayd@bcbsil.com
  - Deborah Belcher, GE Healthcare deborah.belcher@ge.com

Technical Committees Leadership

- **Security, Privacy & Infrastructure Domain TC Co-chairs**
  - Glen Marshall, Siemens Medical Solutions, glen.f.marshall@siemens.com
  - John Moehrke, GE Healthcare, John.Moehrke@med.ge.com
  - Walter Suarez, MD, Institute for HIPAA/HIT Education and Research, walter.suarez@sga.us.com
- **Care Management and Health Records Domain TC Convener**
  - Keith Boone, GE Healthcare, keith.boone@ge.com
  - Corey Spears, McKesson Health Solutions

HITSP Project Team Facilitators and Technical Writers

- **Provider Perspective Technical Committee**
  - Suzi Hines, Principal, Sage Consulting, LLC, sfhines@bellsouth.net
  - Michael Glickman, Computer Network Architects, Inc., mglickman@CNAInc.com
- **Consumer Perspective Technical Committee**
  - John Donnelly, IntePro Solutions, Inc., jtdonnelly@intepro.biz
  - Mike Nusbaum, M.H. Nusbaum & Associates Ltd., michael@mhnusbaum.com
- **Population Perspective Technical Committee**
  - Lori Reed-Fourquet, e-HealthSign LLC, Lori.fourquet@sbcglobal.net
  - Fran Corley, Sage Consulting, corleyfg@bellsouth.net

TC Project Team Facilitators & Technical Writers

- **Security, Privacy & Infrastructure Domain Technical Committee**
  - Johnathan Coleman CISM, CISSP, Security Risk Solutions, Inc., jc@securityrisksolutions.com
  - Sarah Quaynor, ANSI, sarah.quaynor@GSIHEALTH.COM
- **Administrative and Financial Domain Technical Committee**
  - Theresa Wisdom, HIMSS, twisdom@himss.org
- **Care Management and Health Records Domain Technical Committee**
  - Gene Ginther, Stellar Systems, ginther@stellarsystems.com
  - Don Van Syckle, DVS Consulting, don@dvsconsult.com

HITSP Coordinating Committees and Leadership

- **Foundations Committee**
  - Steve Wagner
  - Bob Dolin
- **HITSP Process Review Committee**
  - Lynne Gilbertson
  - Erik Pupo
- **HITSP-CCHIT Joint Work Group**
  - Jamie Ferguson,
  - **CCHIT Orientation Material**
- **Harmonization Readiness Committee**
  - Lynne Gilbertson
- **Business Plan Committee**
  - Steve Lieber
- **International Landscape Committee**
  - Bill Braithwaite
- **Governance Committee**
  - Michael Aisenberg
- **Internal Review Board (IRB)**
  - Erik Pupo
  - Charles Parisot

Perspective Technical Committees

Terms of Reference

- Review each new Use Case or Interoperability Request, provide feedback to requestor, evaluate scope of effort and develop statements of work for completion
- Perform high level design of Interoperability Specifications and lower level constructs including requirements analysis, standards selection and minimum data set identification
- Submit recommendations to Panel for review, approval and resolution
- Identify Domain Committee(s) and provide high level design and statements of work to guide construct development
- Develop, review and evaluate Interoperability Specifications for the selected standards, integrating relevant constructs
- Manage overall execution plan/schedule in collaboration with Domain Committees
- Ensure timely response and disposition of public comments
- Ensure on-going process for addressing corrections/change requests and resolutions

Domain Technical Committees

Terms of Reference

- Identify and analyze gaps and duplications within the standards industry as they relate to domain constructs
  - Describe gaps, including missing or incomplete standards
  - Describe duplications, overlaps, or competition among standards
- List all standards that satisfy requirements imposed by the relevant Use Case or Interoperability Request and apply readiness criteria
- Interact with HITSP Secretariat for coordination with Standards Organization regarding standards gaps, overlaps, and identification of standards
- Evaluate, select and constrain recommended standards
- Receive and prioritize statements of work and collaborate with Perspective Committees to refine scope and develop work plan
- Develop and/or revise domain constructs to meet requirements, high level design and statements of work
- Maximize reuse with consideration for backwards compatibility
- Ensure domain constructs adequately support all Interoperability Specifications referencing those constructs
- Work in collaboration with Perspective Committees to meet project schedule and timelines

HEALTHCARE INFORMATION TECHNOLOGY STANDARDS PANEL

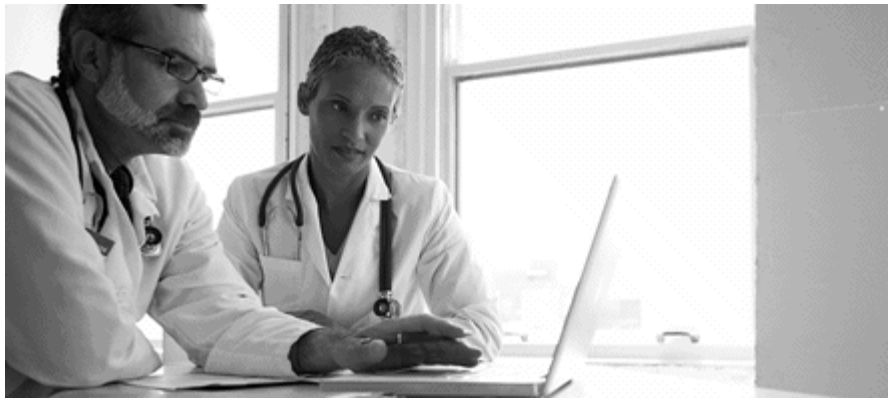
Joint Working Group

CCHIT

Healthcare Information Technology Standards Panel (HITSP)

and the

Certification Commission on Healthcare Information Technology (CCHIT)



Between the federal implications and the certification efforts of CCHIT, stakeholders will be motivated to adopt a standard way of sharing data throughout the Nationwide Health Information Network, leading to better healthcare for us all.

Trial Implementations

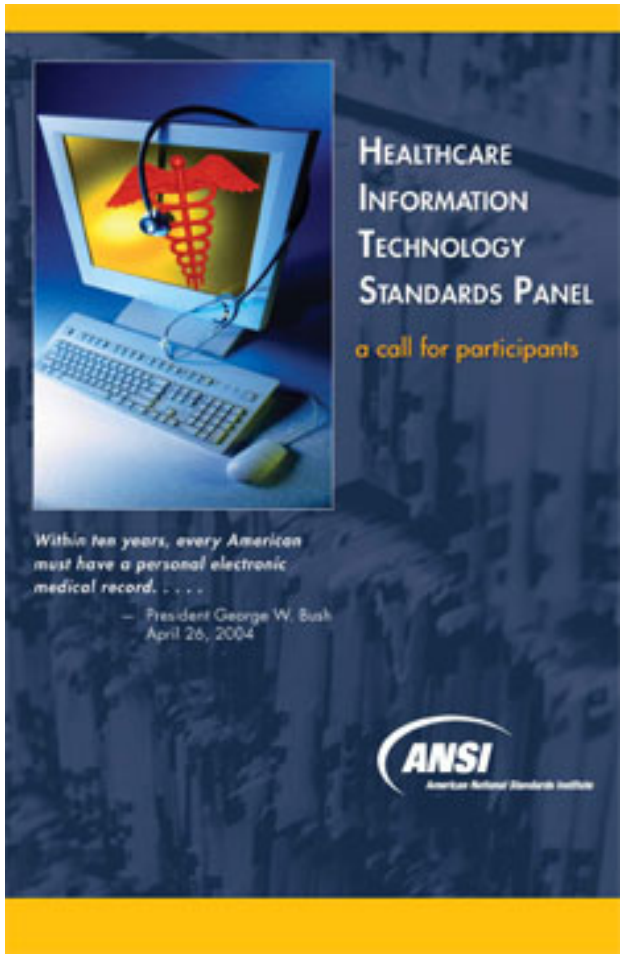
HITSP will work closely with these contractors during implementation.

United States Department of Health & Human Services

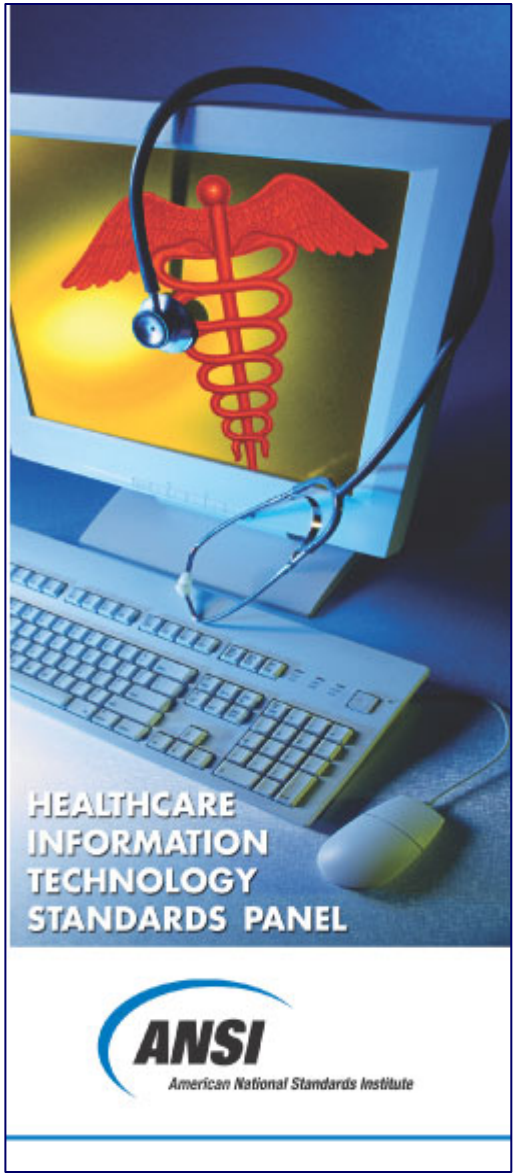
HHS has awarded $22.5 million in contracts to nine HIEs to begin trial implementations of the NHIN

- **CareSpark**
  Tri-Cities region of Eastern Tennessee and Southwestern Virginia
- **Delaware Health Information Network**
  Delaware
- **Indiana University**
  Indianapolis Metroplex
- **Long Beach Network for Health**
  Long Beach and Los Angeles, California
- **Lovelace Clinic Foundation**
  New Mexico
- **MedVirginia**
  Central Virginia
- **New York eHealth Collaborative**
  New York
- **North Carolina Healthcare Information and Communications Alliance, Inc.**
  North Carolina
- **West Virginia Health Information Network**
  West Virginia
- **Federal Health Consortium**
  Federal health agencies

HITSP Information Resources



- Also available on www.hitsp.org
  - News, organizational details and information on upcoming meetings
  - HITSP Public Document Library
  - Interoperability Specifications (ISs) and Executive Summaries
  - Use Cases



Join HITSP in developing a safe and secure health information network for the United States.

Learn more at **www.hitsp.org** or contact . . .

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Re: HITSP Technical Committees

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Healthcare Information Technology Standards Panel

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