



Healthcare Information  
Technology Standards Panel



# Standards Harmonization in the US: The Role of IHE

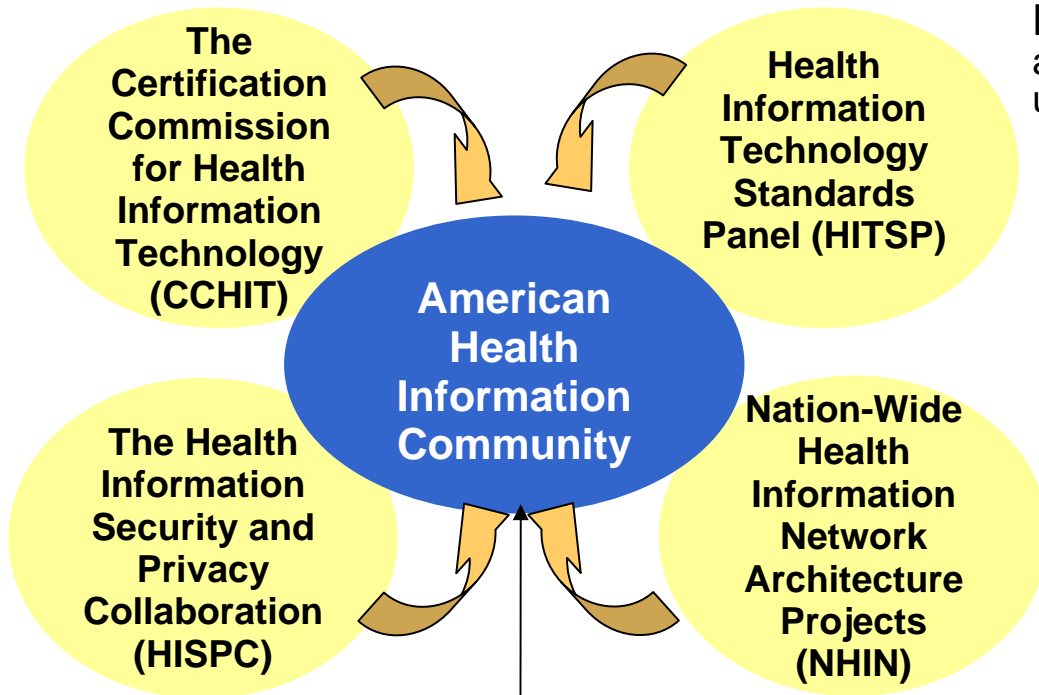
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Chair, Healthcare Information Technology Standards Panel

Chief Information Officer, Harvard Medical School

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# The National Health IT Effort



- Chaired by HHS Secretary Leavitt
- Seven federal agency representatives
- Six health industry members
- One IT industry member (Intel)
- One employer (Pepsi)
- One state health department member (IN)

Nation-Wide coordination of policies, resources and priorities – ONC Initiatives and Contracts for unifying regions

- **The AHIC Community serves as hub for identifying breakthrough opportunities**
- **CCHIT focuses on developing a mechanism for certification of health care IT products**
- **HITSP bringing together all relevant stakeholders to identify *appropriate IT standards***
- **HISPC is a partnership focused on addressing variations in *business policy and state law that affect privacy and security***
- **NHIN focuses on interoperability pilots starting in 2006**



# Standards and Harmonization

- A *standard* specifies 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 ongoing review and revision process
  
- Harmonization is required when a proliferation of standards prevents progress rather than enables it



# Healthcare Information Technology Standards Panel

- The HITSP is a group organized to harmonize the standards used to exchange health data in the United States
  - The Panel brings together experts from across the health care IT community – from consumers to doctors, nurses, and hospitals; from those who develop healthcare IT products to those who use them; and from the government agencies who monitor the U.S. health care system to those organizations who are actually writing the standards
  - The Panel's activities are led by the American National Standards Institute (ANSI), a not-for-profit organization that has been coordinating the U.S. voluntary standardization system since 1918
  - Cooperative partnerships have been and are being developed between and among certain standards developers



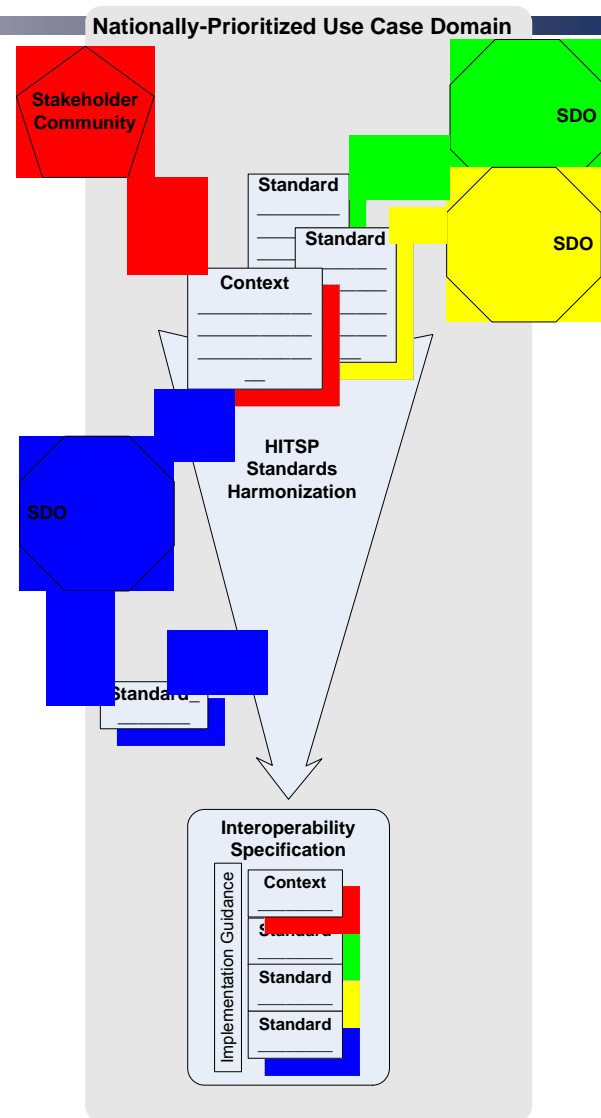
# Membership and Board Representation

- A total of 155 organizations participate in HITSP representing
  - 17 Standards Development Organizations
  - 114 non-SDOs such as clinicians, providers, safety net providers, vendors, purchasers, payers, public health professionals, and researchers
  - 15 government organizations
  - 9 consumer organizations
- The HITSP Board of Directors also represents multiple stakeholders
  - 8 representatives from SDOs
  - 9 representatives from non-SDOs
  - 4 representatives from government appointed by ONCHIT
  - 2 representative from consumer organizations



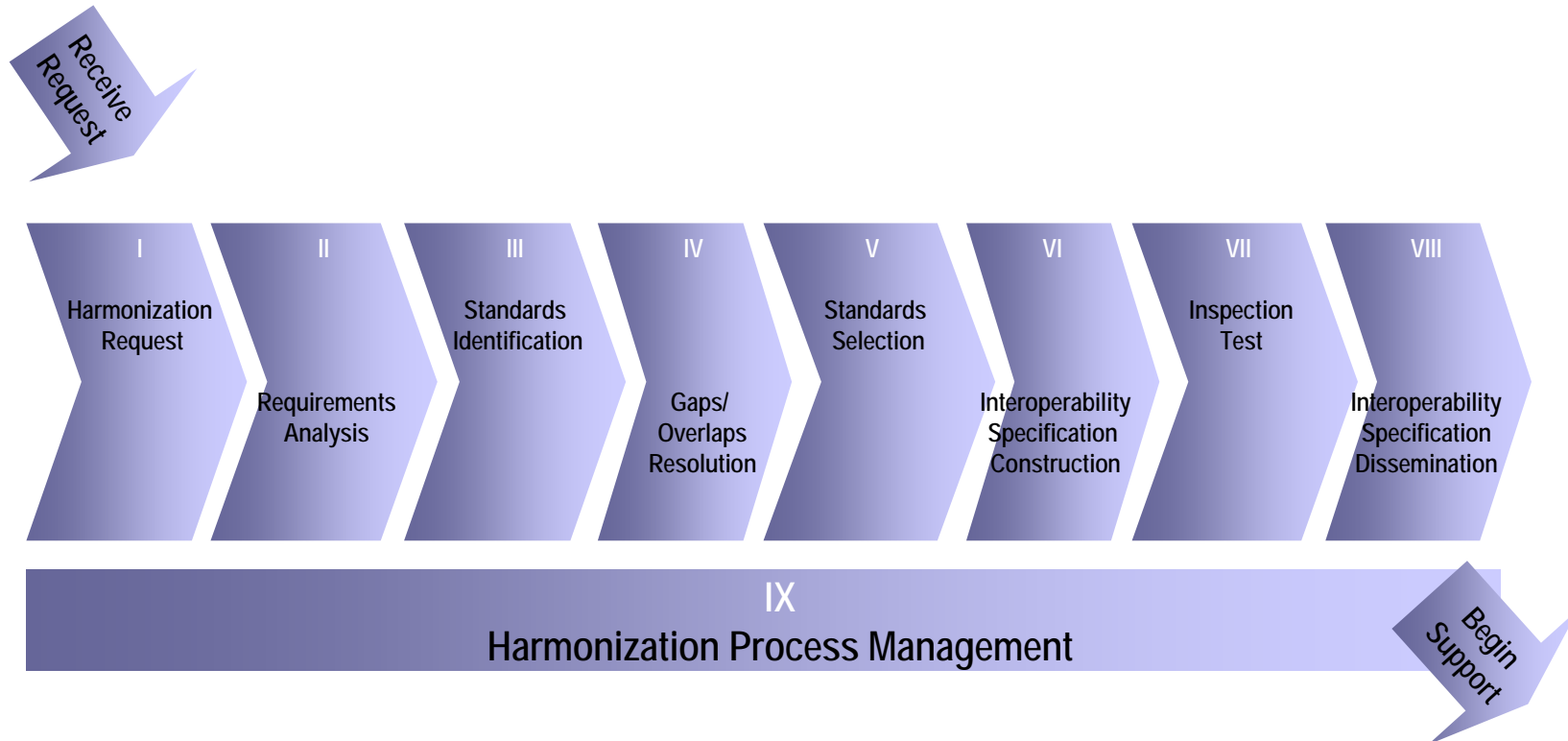
# A few terms to describe the process

- Harmonization - the selection of standards most appropriate to support specific events, actions and actors in a Use Case
- Context – the unique requirements of a specific actor within a Use case
- Gap - missing or incomplete standards that are required to support events in a Use Case
- Overlap - Overlaps refer to instances where some or all of the requirements are met by multiple standards.



# Harmonization Process

## Steps taken by industry within the context HITSP



# HITSP Panel Process

- AHIC Working Groups, NHIN contractors or other customers prepare a Harmonization Request
- HITSP Technical Committees analyze requirements, identify candidate standards, and highlight standard gaps and overlaps
  - Gaps are forwarded to SDOs for their guidance as to emerging candidate standards or new standards requirements
  - Overlaps are resolved through SDO interactions
- HITSP selects the final set of standards
- The standards recommended by the Technical Committees are discussed and ratified by the HITSP panel



# HITSP Panel Process

- Technical Committees work with SDOs and other groups to produce implementation level guidance
- It may be that certain aspects of implementation guidance, especially when multiple SDOs are involved, will be created by other groups for HITSP
- HITSP work products are delivered to AHIC for their endorsement
- CCHIT will include functional criteria for interoperability based on HITSP implementation guides in its certification work



# Technical Committee Process

- Technical Committees receive a HITSP Harmonization Request
- Technical Committees use the Standards and Gaps template to formally model harmonization request, inventory their assumptions for each event (not actions within an event), name appropriate potential standards, document overlaps, and identify gaps
- If the modeling identifies a reusable component shared across many use cases, then work done previously on this aspect of the use case should be leveraged. Technical committees should clearly understand the scope of these 'building blocks' i.e. a lab exchange building block could be real time or batch, push to an EHR or query/response, human readable or machine interpretable etc.



# Technical Committee Process

- Once overlaps are identified, the Tier 1 and Tier 2 criteria should be used to evaluate the overlaps
- The deliverable from this stage of technical committee work should include a list of gaps to be forwarded to the SDOs for their early input on resolving the gaps as well as a strawman list of the likely HITSP "Interoperability Specifications" that will be needed to create the unambiguous "cookbook" to support the use case.



# Tier 1 Appropriateness Criteria

Suitable for purpose

Organization and process

Costs

Life cycle maturity



## Tier 2 Criteria as Filters



**SUITABILITY**

**COMPATIBILITY**

**PREFERRED STANDARDS CHARACTERISTICS**

**PREFERRED STANDARDS DEVELOPER ORGANIZATION and  
PROCESS**

**TOTAL COSTS and EASE of IMPLEMENTATION**



# September HITSP Deliverables

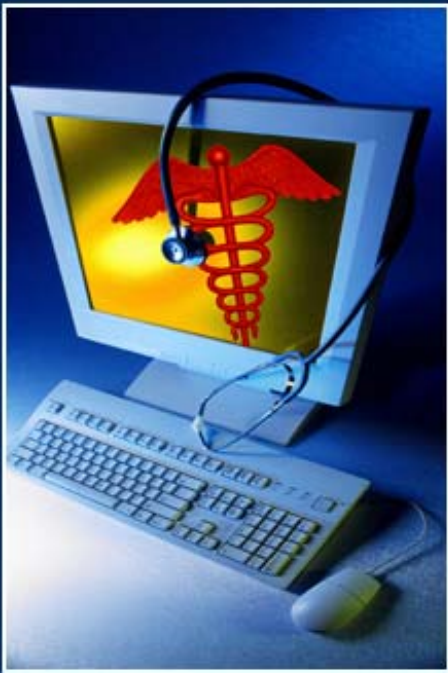
- In September HITSP will deliver specific implementation level guidance – “Interoperability Specifications” for four AHIC breakthrough areas
- Interoperability specifications will:
  - Define the standards and specific implementation context for those standards
  - Describe specific value sets for unambiguous data exchange and system to system interaction
  - Provide the necessary instructions to implement the specific standards in commercial and self-developed systems



# The Role of IHE

- Models for Harmonization
  - Mapping of standards which have different levels of granularity
  - Preferred standards and evolution over time
  - Unification
- Building Blocks
- Implementation Guides/Interoperability Specifications
- Architecture and Context
- Process Expertise
  - Standard v. Implementation Guide
  - Testing
- Pilots such as those in Massachusetts





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# Questions and Answers

**Dr. Halamka**

For more information:

[www.hitsp.org](http://www.hitsp.org)