



National Health Information Technology Agenda

September 12, 2007

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Health Information Technology (ONC)

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Change is Underway: Drivers of Health IT Adoption

Rising Health Care Costs

and Health Information Technology as A Solution



Substantial Benefits

for Consumers and the Economy



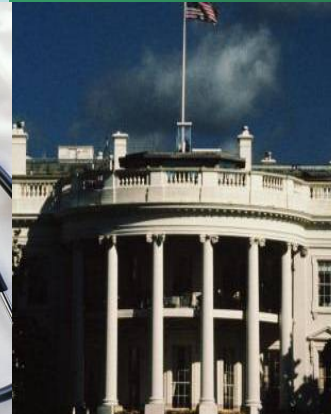
Clinical Leadership

to Achieve Highest Quality Care



Political Leadership

on Health Information Technology Adoption



Industry Leadership

Strong Endorsement from Industry and Commercial Leaders



Drivers of Health Information Technology



Key Health IT Components

A Robust, Interoperable, Health IT Environment that brings together:

- Electronic Health Records (EHR)
- Personal Health Records (PHR)
- Public Health Information



- Standards (Data, Technical and Security)
- Interoperable Health Information Exchange Network
(*Nationwide Health Information Network - NHIN*)

Office of the National Coordinator (ONC)

Executive Order, April 2004:

The President created the National Coordinator position

- To advance the vision of developing a nationwide interoperable health information technology infrastructure
- To achieve the President's goal of widespread adoption of interoperable electronic health records (EHR) by 2014

Key Role for ONC:

Provide **leadership** for the development and nationwide implementation of an **interoperable health information technology infrastructure** to improve

- The quality and efficiency of health care and
- The ability of consumers to manage their health



TIGER

ONC Strategic Framework: July 2004



Cornerstones of Value-driven Health Care

Connecting
the
System

Measure &
Publish
Quality

"Every American should have access to a full range of information about the quality and cost of their health care options."

- HHS Secretary Mike Leavitt

Measure &
Publish
Price

Create
Positive
Incentives

Federal Government and ONC Levers



<u>LEVERS</u>	<u>FEDERAL GOVERNMENT</u>	<u>ONC</u>
• Laws	X	X
• Procurement	X	X
• Conditions of Doing Business	X	X
• Reimbursement	X	
• COLLABORATIONS	X	X



Organizational Framework to Facilitate Transformation: AHIC

American Health Information Community (AHIC – “The Community”)

- A federal advisory committee (FACA), funded & staffed by ONC
- Chaired by Secretary Leavitt
- 17 members; public – private collaboration
- Provides input and recommendations to HHS
 - How to make health records digital and interoperable
 - Assure that the privacy and security of those records are protected, in a smooth, market-led way
- Detailed work performed in work groups and brought back to The Community for deliberation and decisions





American Health Information Community (AHIC) Work Groups

Seven work groups established

- Involving over 120 experts and stakeholders
- Focus of Work Groups - Identify and make recommendations regarding policy, technical, business and social issues related to their charges and priorities

November 29, 2005

**CONSUMER
EMPOWERMENT**

CHRONIC CARE

**POPULATION
HEALTH**

EHRs

May 16, 2006

**CONFIDENTIALITY,
PRIVACY &
SECURITY**

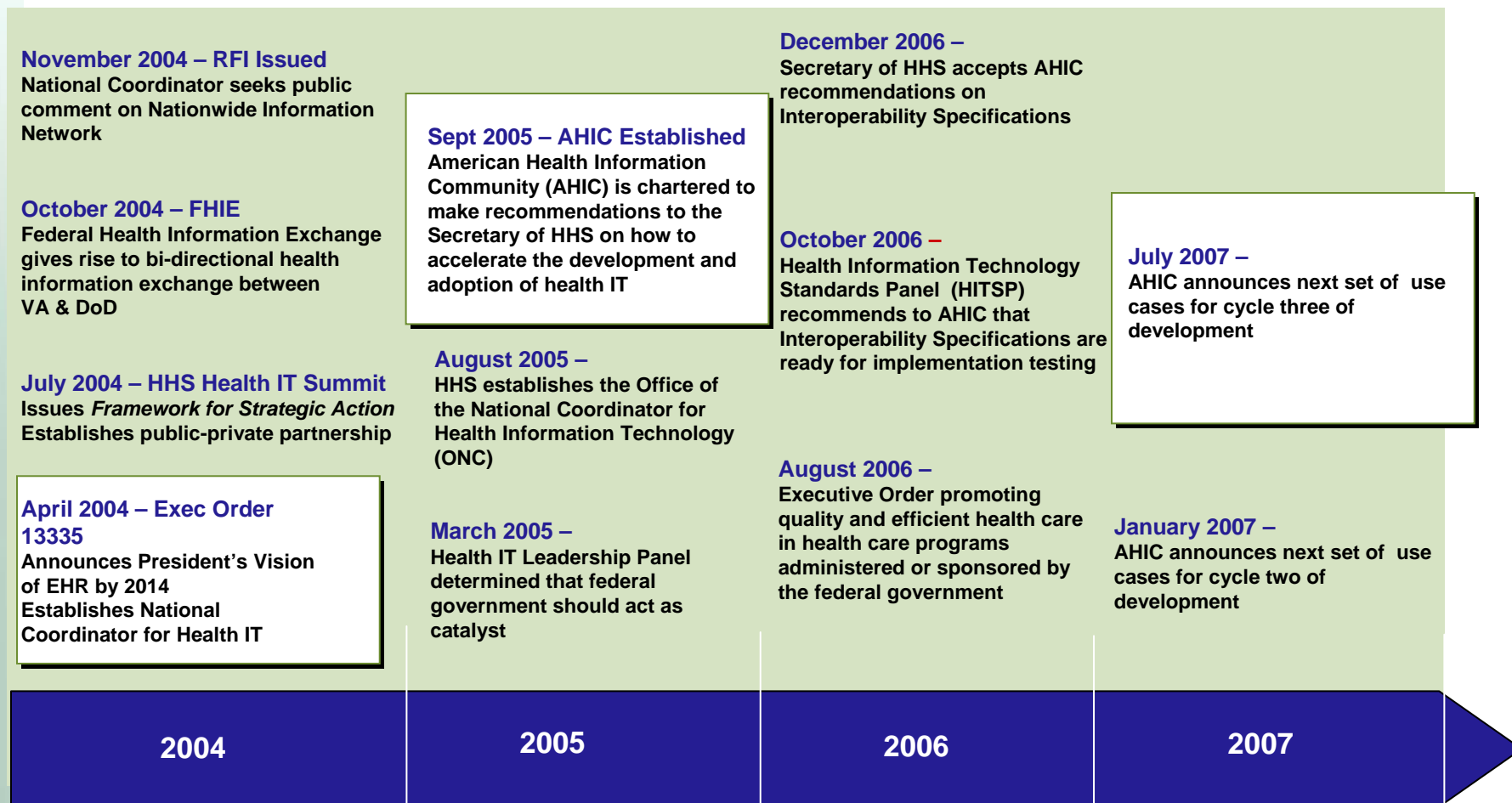
QUALITY

October 31, 2006

**PERSONALIZED
HEALTHCARE**



Historical Timeline





AHIC Priorities and Use Case Roadmap

2006

Consumer Empowerment Use Case

- Registration
- Medication History

EHR Use Case

- Laboratory Result Reporting

Biosurveillance Use Case

- Visit
- Utilization
- Clinical Data
- Lab and Radiology

2007

Consumer Access to Clinical Information

- Access to Clinical Data
- Provider Permissions
- PHR Transfer

Emergency Responder EHR

- On-site Care
- Emergency Care
- Definitive Care
- Provider Authentication and Authorization

Quality

- Hospital Measurement & Reporting
- Clinician Measurement & Reporting
- Feedback to Clinicians

Medication Management

- Medication Reconciliation
- Ambulatory Prescriptions
- Contraindications

2008 Possible Use Cases

Remote Monitoring

- Remote Monitoring of Vital Signs & Labs (glucose)

Referrals & Transfer of Care

- Referrals
- Problem Lists
- Transfer of Care

Remote Consultation

- Structured Email
- Reminders
- On-line Consultation

Personalized Healthcare

- Genomics

Public Health Case Reporting

- Case Reporting
- Bidirectional Comm.
- Labs

Response Management

- Resource ID
- Vaccine
- EHR Data

2009 and Beyond

CE 3.0 Administrative features
CE 3.1 Appointment scheduling
CE 3.2 Demographic profile
CE 3.3 Editing account profile
CE 3.4 Insurance eligibility & claims
CE 3.5 Financial recordkeeping & management
CE 4.0 Reminders (examples)
CE 4.1 Annual check-ups
CE 4.2 Cancer screening—mammograms
CE 4.3 Cancer screening—colonoscopies
CE 4.4 Immunizations
CE 6.0 Summaries of healthcare encounters
CE 6.1 Dates of services
CE 6.3 Procedure codes
CE 7.0 Educational information
CE 7.1 Evidence based health information
CE 8.0 Decision support
CE 8.1 Shared decision making
CE 8.2 Communications preferences
CE 9.0 Patient health outcomes
CE 9.1 Adverse events
CE 9.2 Medical errors
CE 9.3 Patient reported health outcomes
CC 3.0 Glucose monitoring
CC 4.0 Spirometry
CC 5.0 Anticoagulation
CC 7.0 Fall/motion monitoring
CC 11.0 Lesion assessment
CC 12.0 Remote monitoring for chronic conditions
CC 13.0 HIT use in specific populations
CC 15.0 Product and services certification
CC 16.1 State licensure constraints
CC 18.0 Patient identification for authorization and authentication
EHR 5.0 Clinical/encounter notes
EHR 6.0 Anatomic pathology results
EHR 8.0 Radiology reports
EHR 12.0 Machine readable and interoperable
EHR 12.1 Encounter notes
EHR 12.2 Radiology reports
EHR 12.3 Lab results

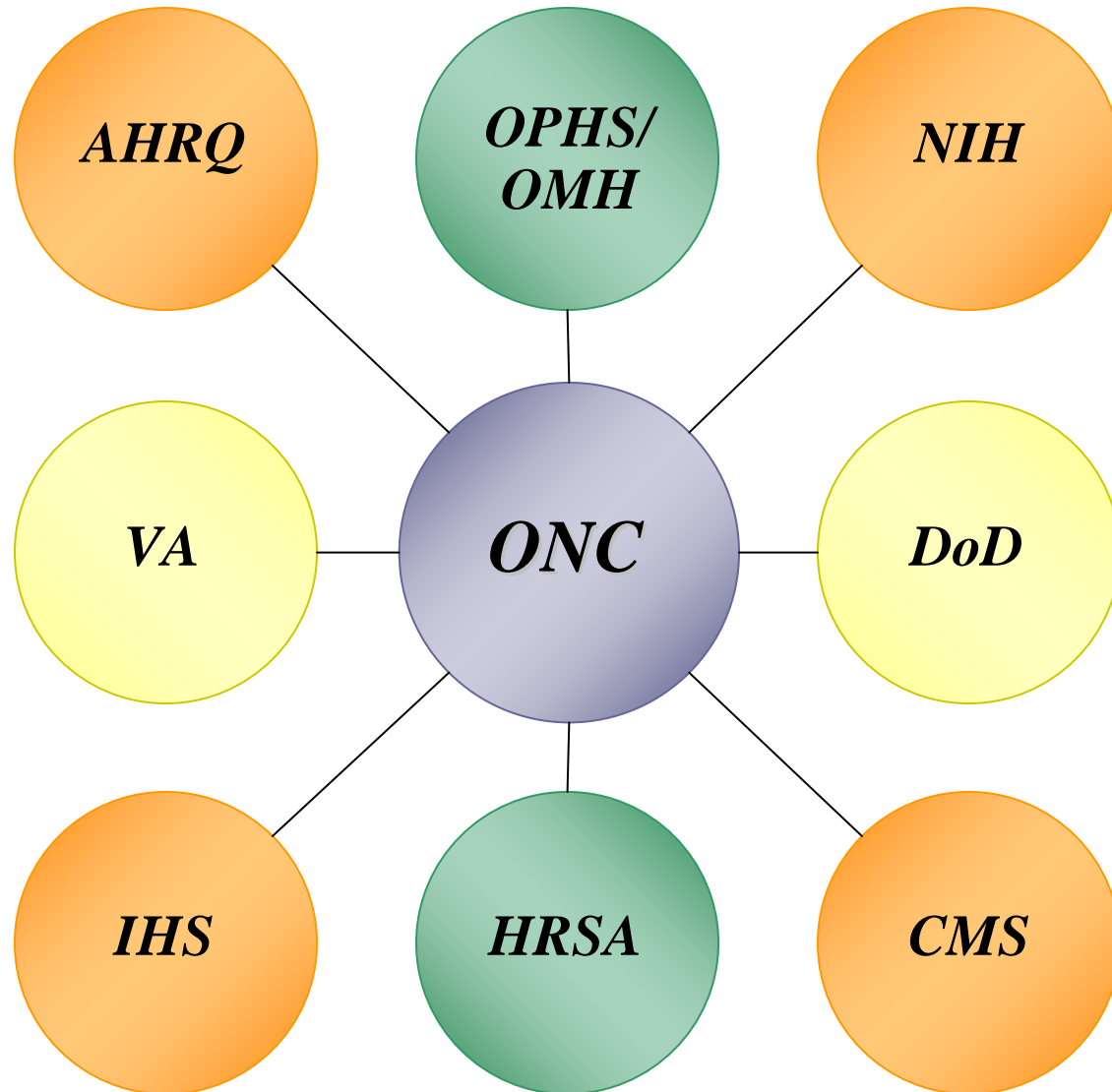
Q 3.1 Clinical decision support
Q 5.0 Clinical decision support
Q 6.0 Expanded inpatient quality measures
Q 7.0 Expanded ambulatory quality measures
BIO 1.2 Clinical symptomology
BIO 1.3 Integration with EHRs
BIO 1.4 Health alerting (HA)/email alerts
BIO 2.1 Collaborative discussions
BIO 2.2 Web pages
BIO 3.2 Chemoprophylaxis
BIO 3.3 Treatment
BIO 3.4 Isolation/quarantine
BIO 3.6.2 Disease registry
BIO 4.0 Adverse event reporting
BIO 4.1 Devices, drugs, biologic
BIO 5.0 Nosocomial infections
BIO 5.1 Medication errors
BIO 5.1.1 Ordering/prescribing/dispensing
BIO 5.1.2 Drug-drug, drug-allergy interaction decision support
BIO 5.1.3 Linkage to FDA structured product labeling database results
BIO 10.0 Public health information network (PHIN) can be leveraged
BIO 14.0 National notifiable disease conditions have been identified
AHIC 1.0 Labs, medications, allergies, immunizations
AHIC 2.0 Secure messaging/online consultation
AHIC 3.0 Bidirectional communications
AHIC 4.0 Adverse event reporting
AHIC 5.0 Case reporting
AHIC 6.0 Clinical decision support systems
AHIC 7.0 Identification/authentication
AHIC 8.0 Problem lists
AHIC 9.0 Clinical encounter notes
AHIC 10.0 Family history/social factors
AHIC 11.0 Vitals signs
AHIC 12.0 Population health/conditions
AHIC 13.0 Minimum data set
AHIC 14.0 Confidentiality, privacy, & security of patient data

AHIC 15.0 Data access/data control
AHIC 16.0 Data aggregation
AHIC 17.0 Infrastructure areas missing
AHIC 17.1 Security, network, repositories
AHIC 18.0 Vital measurements
AHIC 19.0 Text documents
AHIC 21.0 Health literacy (multilingual support)
AHIC 23.0 Advance directive/living wills
AHIC 24.0 Social/family history
AHIC 26.0 Medication history
AHIC 27.0 E-prescribing
AHIC 28.0 Standardization of device interfaces
AHIC 29.0 Care plans/clinical flow sheets
AHIC 30.0 Provider list
AHIC 31.0 Adverse events
AHIC 32.0 Nosocomial infections
AHIC 33.0 Clinical data storage for surveillance
AHIC 34.0 Case reporting
AHIC 35.0 Bi-directional communications
AHIC 36.0 Lab results
AHIC 37.0 Anatomic pathology results
AHIC 38.0 Radiology reports
AHIC 39.0 Social history
AHIC 40.0 Procedure reports
AHIC 41.0 Medications
AHIC 43.0 Dental
AHIC 44.0 Workflow integration
AHIC 45.0 Int'l public health collaboration
AHIC 46.0 Legal liability & regulatory barriers
AHIC 47.0 Consumer consent
CCHIT
CCHIT 1.0 Patient safety
CCHIT 2.0 Transfer of care
HITSP 1.1.4 Text reports
HITSP 1.1.5 Numeric results
HITSP 1.1.7 Images
HITSP 1.2 HIPAA covered entities
HITSP 1.2.1 X12 Claims attachment

HITSP 2.0 Secondary uses of data
HITSP 2.1 Clinical research
HITSP 2.2 Clinical trials
HITSP 2.3 Population health
HITSP 3.0 Quality/control measurements
HITSP 3.1 Consistency across uses
HITSP 4.0 Clinical device data
HITSP 4.1 Glucometers
HITSP 4.2 Monitors
HITSP 4.2 Smart pump
HITSP 5.0 Cross use case work on security (standards)
HITSP 5.3 Authentication models to support chain of trust data exchanges

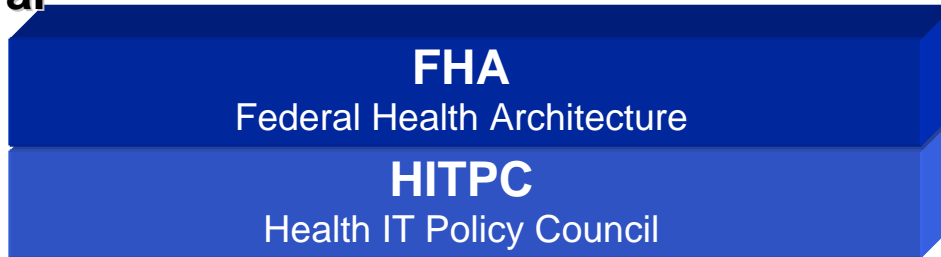


Health IT Initiatives

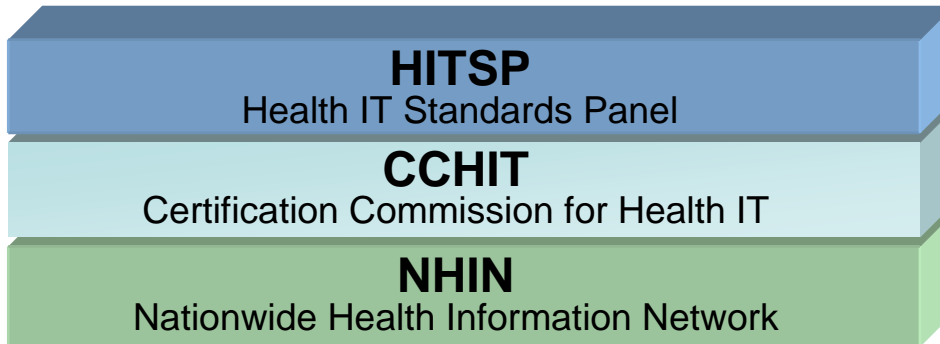


Other Collaborations to Foster Health IT Adoption/Implementation

Federal



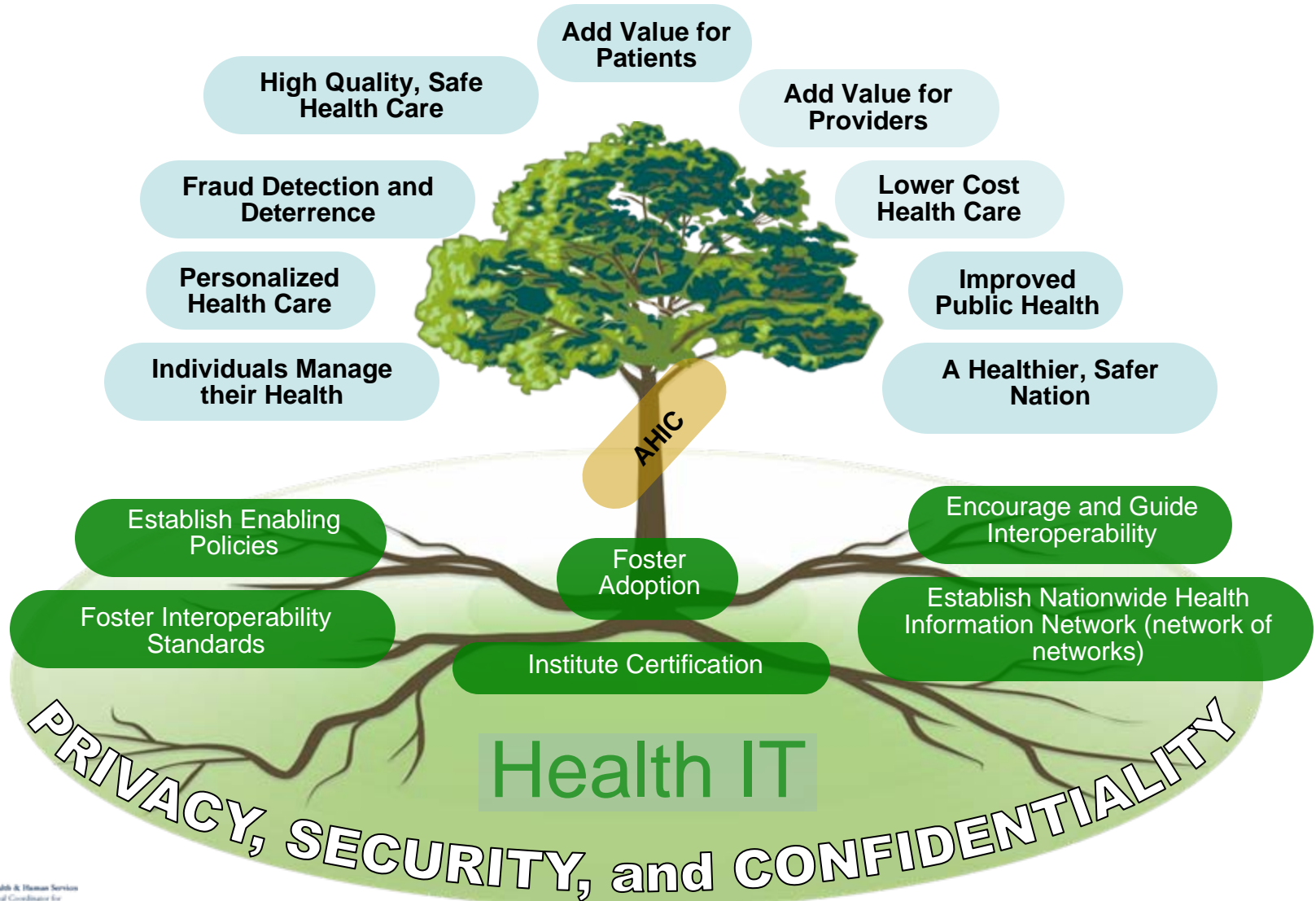
AND Public - Private



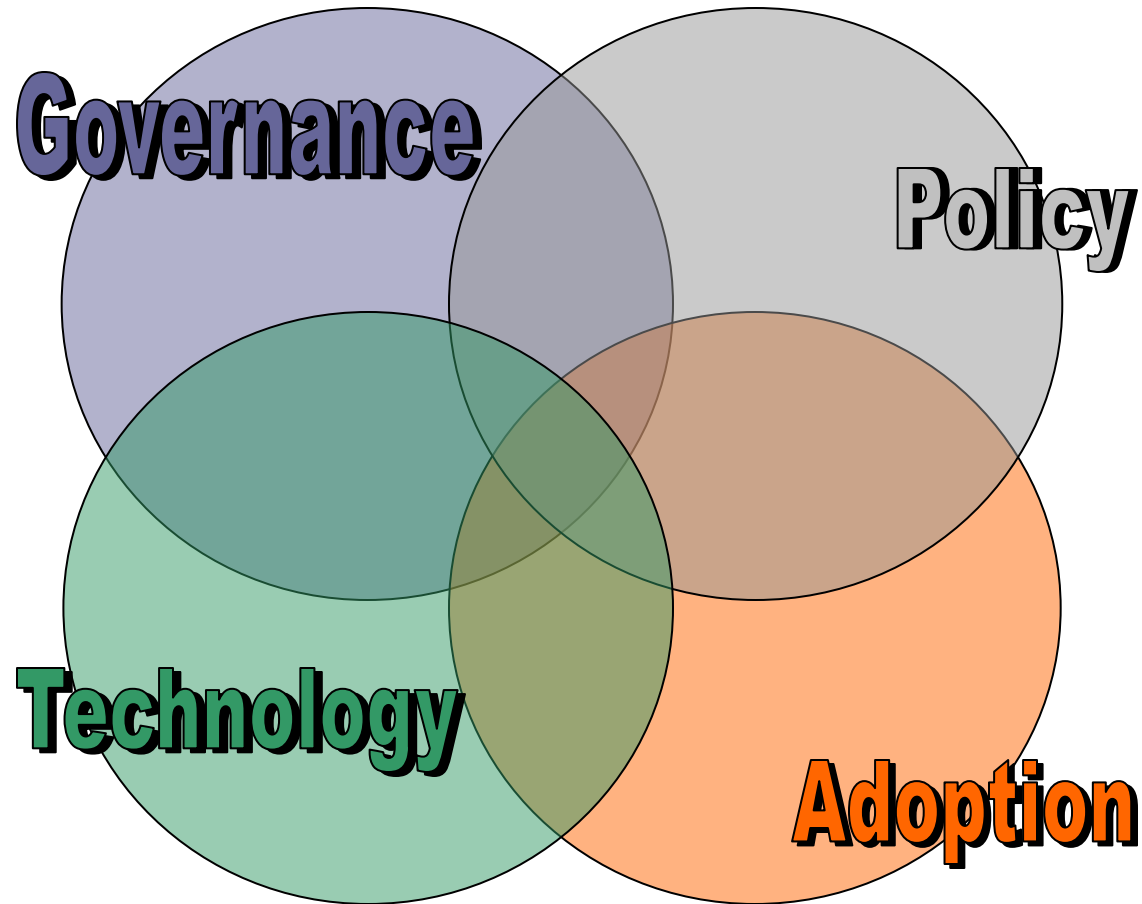
AND State-based



Health IT Support for Transforming Health and Care



Moving Forward: Elements of Success for Health IT

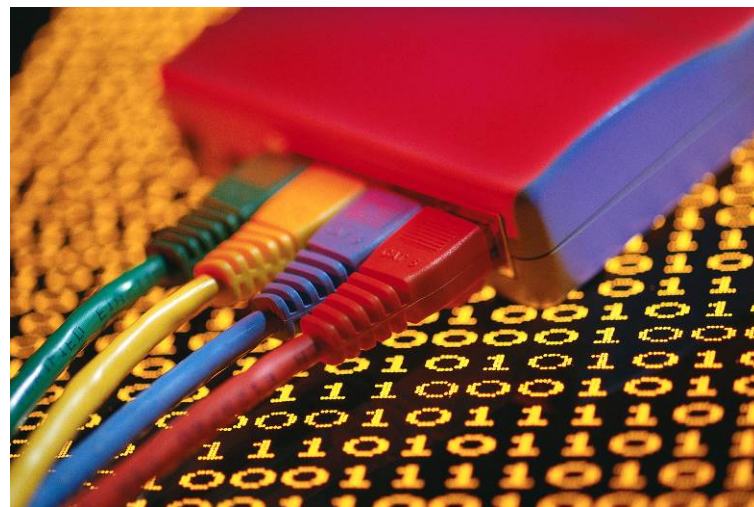


Technology

Technology

Interoperability

- ✓ Standards Harmonization by HITSP and accepted by HHS
 - Biosurveillance
 - EHR-Laboratory
 - Consumer Empowerment – Registration & Medication
- ✓ AHIC Identified Priorities for Next Round of Use Cases
 - Quality
 - Medication management
 - Consumer access to clinical information
 - Emergency responder EHR
- ☐ Recognition of Standards - 2007
- ☐ Inclusion in Certification – 2008
- ☐ Inclusion in Federal Systems and Contracts - 2008



Technology (cont)

Technology

Security

- ✓ CCHIT - Ambulatory EHR Security
- ✓ NHIN Security Models
- ✓ NHIN Functional Requirements
- ❑ HITSP Security Standards
- ❑ CCHIT – Inpatient and Networks Security
- ❑ NHIN Security Architecture

Nationwide Health Information Network (NHIN)

- ✓ Prototype Architecture Demonstrations
- ✓ Public Forums
- ✓ Functional Requirements (NCVHS)
- ✓ Report on Prototype Architectures
- ❑ Trial Implementations Fall 2007
- ❑ Engage State and Local Health Information Exchanges



Governance – Public and Private Partnerships

Governance

American Health Information Community (National)

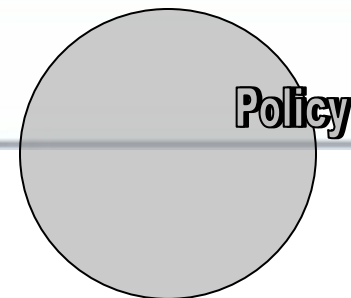
- ✓ Priority Setting
- ✓ Growing and Maturing
- ✓ Recommendations and Results
- ❑ Privacy! Privacy! Privacy!
- ❑ Widespread adoption of interoperable Health IT
- ❑ Transition of AHIC to private sector



Regional and State-level Activities

- ✓ Guiding Principles for State-level HIE
- ✓ Steering Committee of State Leaders in HIE
- ❑ Successful governance models for HIE
- ❑ Path to financial sustainability for HIEs
- ❑ Implement privacy and security solutions

Policy



Executive Orders

- ✓ April 2004 - Establish ONC
- ✓ August 2006 – Interoperability; Quality & Cost Transparency

Regulation/Guidance

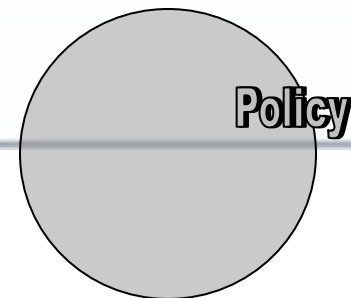
- ✓ Stark Exception and Anti-Kickback Safe Harbor
- ✓ AHIC recommendations on CLIA
- ✓ Guidance on recognizing certification bodies for health IT
- ☐ CLIA Guidance



Licensure and Liability

- ✓ AHIC identified state-level licensure and liability as barriers to adoption
- ✓ State Alliance for e-Health convened Health Care Practice Task Force
- ✓ State Alliance for e-Health convened the Health Information Protection Task Force
- ☐ AHIC to consider recommendations on liability
- ☐ State Alliance builds consensus for common state solutions

Policy (cont)

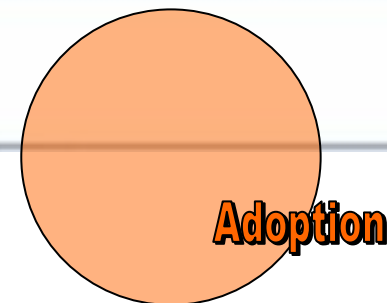


Privacy and Security

- ✓ 34 states & territories identified variations in privacy and security policies and practices
- ✓ Interim Solutions & Plans for state and organizational privacy & security issues
- ✓ NCVHS privacy and security recommendations for NHIN
- ✓ Identity proofing recommendation by AHIC advanced to HHS
- ✓ NHIN Prototype Security
- ✓ CCHIT Security Criteria
- ☐ Develop a Privacy and Security Framework
- ☐ State Alliance – Build consensus for privacy protections across states
- ☐ Final solutions and analysis for state and organizational privacy & security issues
- ☐ HIPAA Guidance on exchanging data with PHRs
- ☐ HITSP to advance security standards
- ☐ NHIN – consumer capabilities



Adoption

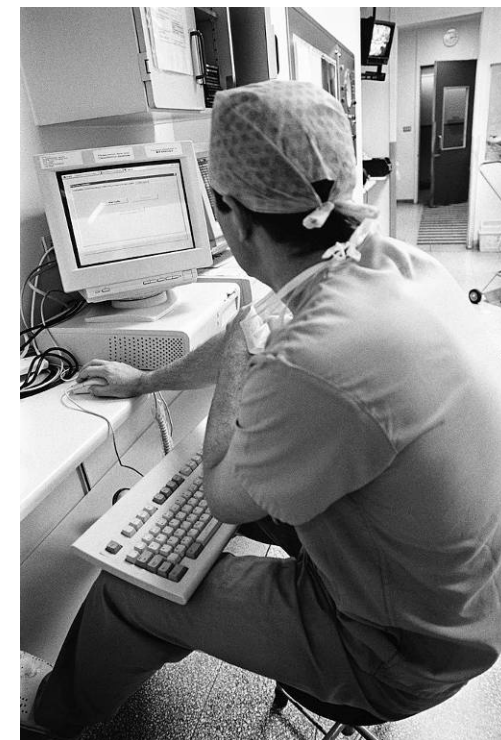


Assessment

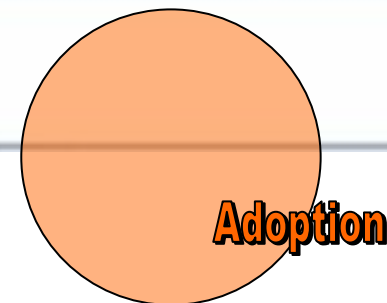
- ✓ Standardized methodologies for measuring and monitoring physician adoption
- ✓ Publication of the first annual report on the level of adoption
- ☐ Annual report on level of adoption
- ☐ Report on hospital adoption

Technical Considerations

- ✓ 92 Certified Ambulatory EHRs
- ✓ Clinical Decision Support Roadmap presented to AHIC – Spring 2006
- ☐ Certified ambulatory EHRs with enhanced interoperability – Fall 2007
- ☐ Certified inpatient EHRs – Fall 2007
- ☐ Specialty EHRs
- ☐ Personal Health Records



Adoption (cont)



Medical - Legal

- ✓ Actual and perceived risks identified
- ✓ Credits for malpractice premiums for use of specific certified EHRs

Financial Alignment and Value

- ✓ Stark Exception and Anti-Kickback safe harbor
- ✓ Areas identified for demonstration of specific value of accessing electronic information
- ✓ DOQ-U online consulting advice for physician adoption
- ❑ Pilot projects to demonstrate value – Fall 2007





Upcoming Opportunities for Participation:

- Next AHIC meeting: **Sept 18th**
- AHIC WG meetings:
 - Population Health: **Oct 11th**
 - Confidentiality/ Privacy/ Security: **Oct 4th**
 - Consumer Empowerment: **Sept 12th**
 - Personalized Health Care: **Sept 17th**
 - EHR: **Sept 25th**
 - Chronic Care: **Sept 27th**
 - Quality: **Oct 3rd**
- HITSP Panel meeting **Sept 7th**; Board meeting **Oct 9th**
 - Technical committees meet weekly
- CCHIT Town Calls on 2008 Work Products: **Sept 19th**
 - Foundation, Ambulatory, and Inpatient Network; Interoperability, Security, and Privacy and Compliance; Cardiovascular Medicine, Emergency Department, and Child Health
- AHIC Use Cases: <http://www.hhs.gov/healthit/usecases/>
 - Public Comment open through 9/28; Stakeholder teleconference 9/20



Additional Resources:

- www.hhs.gov/healthit
- Executive Order: Incentives for the Use of Health Information Technology and establishing the Position of the National Health Information Technology Coordinator
<http://www.whitehouse.gov/news/releases/2004/04/20040427-4.html>
- Executive Order: Promoting Quality and Efficient Health Care In Federal Government Administered or Sponsored Health Care Programs
<http://www.whitehouse.gov/news/releases/2006/08/20060822-2.html>



For More Information Visit...

www.hhs.gov/healthit

-or contact-

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