



Department of Health & Human Services
Office of the National Coordinator for
Health Information Technology

Nationwide Health Information Network Overview

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Secretary's Advisory Committee on Heritable Disorders
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Agenda

- **ONC ARRA Activities**
 - Meaningful Use
 - State Grant Program
- **Nationwide Health Information Program**
 - Overview
- **Questions**



Department of Health & Human Services
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ONC ARRA Activities

Meaningful Use

State Health Information Exchange Cooperative Agreement Program



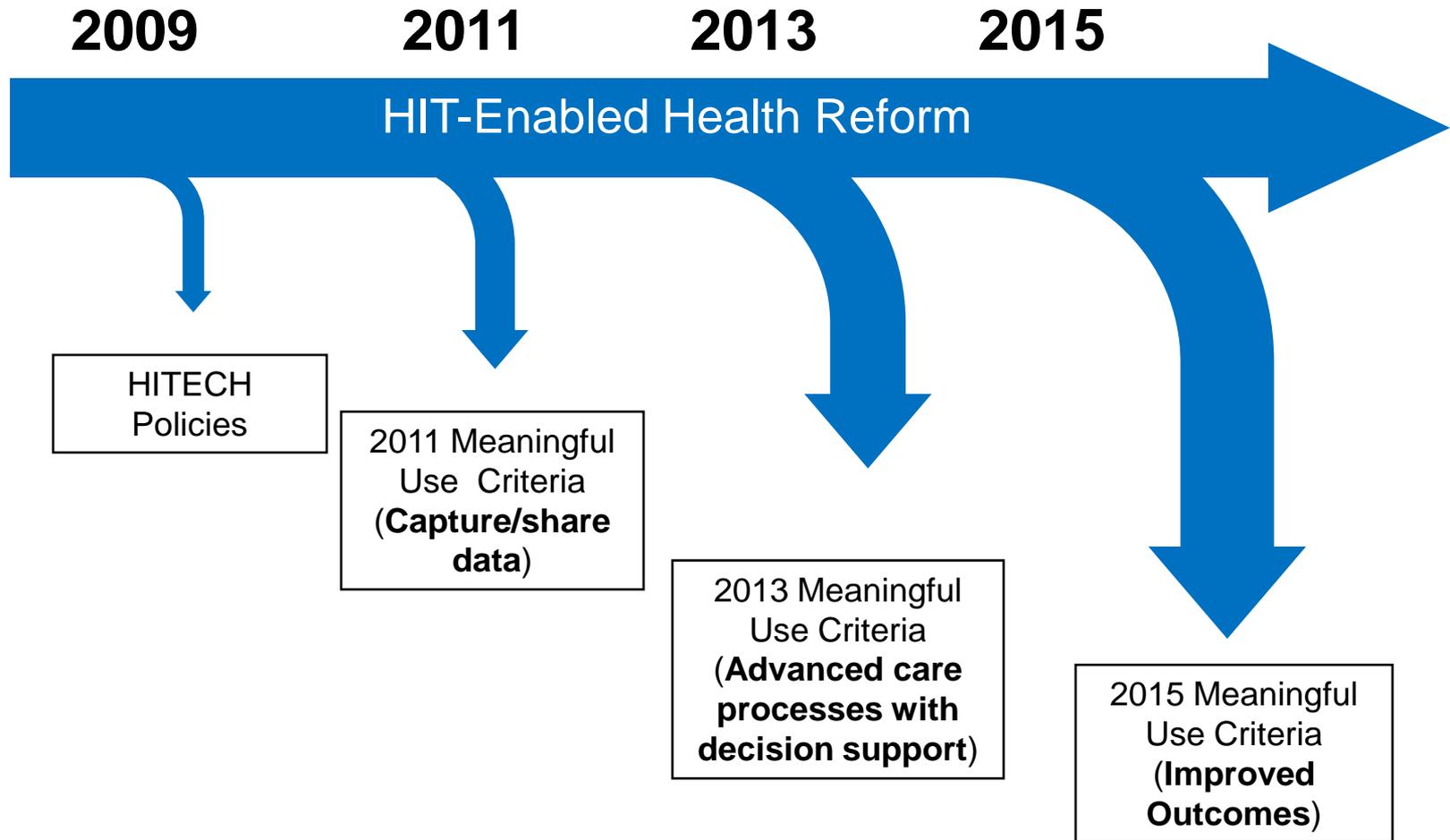
Meaningful use

- The challenge for health IT is one of changing sociology--changing the fundamental way we collect, organize and use health information.
- Achieving the realization that the value of health IT is in the way it is used – using it in a meaningful way - on a day to day basis.
- Over time, the definition of meaningful use will become more demanding; requirements increase between 2011 and 2013 and again between 2013 and 2015.
- In the summer of this year, the HIT Policy Committee provided its final recommendations regarding the definition of meaningful use. CMS is drafting the Meaningful Use Notice of Proposed Rule Making.
- The meaningful use definitions should be finalized in 2010.

HIT-Enabled Health Reform

Achieving Meaningful Use

Meaningful Use Criteria



courtesy of the
HIT Policy Committee

“June 16, 2009 Meaningful Use Matrix”

Health Outcomes Policy Priorities	Care Goals	2011 Objectives <i>Goal is to electronically capture in coded format and to report health information and to use that information to track key clinical conditions</i>	2011 Measures	2013 Objectives <i>Goal is to guide and support care processes and care coordination</i>	2013 Measures	2015 Objectives <i>Goal is to achieve and improve performance and support care processes and on key health system outcomes</i>	2015 Measures
Improve quality, safety, efficiency, and reduce health disparities	<ul style="list-style-type: none"> • Provide access to comprehensive patient health data for patient’s health care team • Use evidence-based order sets and CPOE • Apply clinical decision support at the point of care • Generate lists of patients who need care and use them to reach out to patients (e.g., reminders, care instructions, etc) • Report to patient registries for quality improvement, public reporting, etc 	<ul style="list-style-type: none"> • Use CPOE for all order types including medications [OP, IP] • Implement drug-drug, drug-allergy, drug-formulary checks [OP, IP] • Maintain an up-to-date problem list [OP, IP] • Generate and transmit permissible prescriptions electronically (eRx) [OP] • Maintain active medication list [OP, IP] • Maintain active medication allergy list [OP, IP] • Record primary language, insurance type, gender, race, ethnicity [OP, IP] • Record vital signs including height, weight, blood pressure [OP, IP] • Incorporate lab-test results into EHR [OP, IP] • Generate lists of patients by specific condition to use for quality improvement, reduction of disparities, and outreach [OP] • Send reminders to patients per patient preference for preventive /follow up care [OP, IP] 	<ul style="list-style-type: none"> • Report quality measures, including: <ul style="list-style-type: none"> - %diabetics with A1c under control [OP] - %hypertensive patients with BP under control [OP] - %of patients with LDL under control [OP] - %of smokers offered smoking cessation counseling [OP, IP] • %of patients with recorded BMI [OP] • %eligible surgical patients who received VTE prophylaxis [IP] • %of orders entered directly by physicians through CPOE • Use of high-risk medications in the elderly [OP, IP] • %of patients over 50 with annual colorectal cancer screenings [OP] 	<ul style="list-style-type: none"> • Use evidence-based order sets [OP, IP] • Record clinical documentation in EHR [IP] • Generate and transmit permissible prescriptions electronically [IP] • Manage chronic conditions using patient lists and decision support [OP, IP] • Provide clinical decision support at the point of care (e.g., reminders, alerts) [OP, IP] • Report to external disease (e.g., cancer) or device registries [OP (esp. specialists) [IP] • Conduct medication administration using bar coding [IP] 	<ul style="list-style-type: none"> • Additional quality reports using HIT-enabled NQF-endorsed quality measures [OP, IP] • %of all orders entered by physicians through CPOE [OP, IP] • Potentially preventable Emergency Department Visits and Hospitalizations [IP] • Inappropriate use of imaging (e.g. MRI for acute low back pain) [OP, IP] • Other efficiency measure (TBD) [OP, IP] 	<ul style="list-style-type: none"> • Achieve minimal levels of performance on quality, safety, and efficiency measures • Implement clinical decision support for national high priority conditions [OP, IP] • Medical device interoperability [OP, IP] • Multimedia support (e.g. x-rays) [OP, IP] 	<ul style="list-style-type: none"> • Clinical outcome measures (TBD) [OP, IP] • Efficiency measures (TBD) [OP, IP] • Safety measures (TBD) [OP, IP]

courtesy of the
HIT Policy Committee

Timeline for Next 12 Months

- 3Q09: Develop process for updating meaningful use objectives and measures
 - Tag 2011 measures relevant to specialties
- 4Q09: Conduct informational hearings to inform 2013 and 2015 criteria development
- 1Q10: Update 2013 and 2015 criteria
- 2Q10: Work with HIT Standards committee to ascertain availability of relevant standards
- 3Q10: Refine 2013 meaningful use criteria
- 4Q10: Assess industry preparedness for meeting 2011 and initial 2013 meaningful use criteria

Informational Hearing on MU criteria for 2013-15

October 2009

- Addresses gaps in appropriate measures for assessing meaningful use
- Criteria for specialists
 - Use of measures relevant to specialists
 - Participation in national registries
 - Development of new measures
- Feedback and new ideas from provider organizations for MU criteria for 2013, 2015
 - Spectrum of physician practices
 - Spectrum of hospitals
 - Safety-net providers

Phasing of MU Criteria

Some Considerations

- Enable health reform
- Focus on health outcomes, not software
- Feasibility
 - Balance urgency of health reform with calendar time needed to implement HIT
 - Starting from low adoption rate
 - Sensitive to under-resourced practices (e.g, small practices, community health centers, rural settings)
 - But also, HIT essential to achieving health reform in all settings
- Recovery Act provisions
 - Timelines fixed (2015, 2011-12)
 - Funding rules defined (front-loaded incentives)

Supporting Meaningful use

- Experience supports the finding that meaningful use of Health IT isn't easy and requires ongoing help to implement and maximize use. HITECH recognized this need as well.
- There are two important grant programs, totally approximately \$1.2B of ONC's \$2B in discretionary funds, to assist and support ongoing implementation of health IT supporting meaningful use.
 - **State Health Information Exchange Cooperative Agreement Program**
 - **Health Information Technology Extension Program**
- Keep up to date on state Health Information Exchange Cooperative Agreement, the Health Information Technology Extension Program and Meaningful Use, visit:
 - <http://healthit.hhs.gov> - select "HealthIT/Recovery"

State Health Information Exchange Cooperative Agreement Program

- The HITECH Act amends Title XXX of the Public Health Service Act by adding Section 3013, State Grants to Promote Health Information Technology. Section 3013 provides for state grants to promote health information technology.
- Over the next several months, cooperative agreements will be awarded through the **State Health Information Exchange Cooperative Agreement Program** to states and qualified State Designated Entities (SDEs) to develop and advance mechanisms for information sharing across the health care system.
- Under these State cooperative agreements \$564 million will be awarded to support efforts to achieve widespread and sustainable health information exchange (HIE) within and among states through the meaningful use of certified Electronic Health Records (EHRs).
- The Centers for Medicare & Medicaid Services will issue proposed criteria for meaningful use by the end of 2009.

State Health Information Exchange Cooperative Agreement Program

- To help potential applicants and other interested parties better understand the federal grants process, The Office of the National Coordinator for Health Information Technology (ONC) has prepared a Getting Started [Grants Primer](#). This document highlights the key steps needed to find and apply for grants.
- The following links lead to government-wide web sites related to federal grants and other federal funding opportunities.
 - [Grants.gov](#)
 - [FedBizOpps.gov](#)
- ONC is also initiating a series of Section 3013 State Cooperative Agreements Program Technical Assistance Calls to provide resources and answer questions for those interested in responding to this funding opportunity.

Nationwide Health Information Network (NHIN) Overview



Nationwide Health Information Network (NHIN)

The widespread availability and low cost of the Internet make it an attractive option for the secure exchange of health information. However, internet-based exchanges present two critical challenges:

- **Patient privacy, security and trust** must be maintained, and
- Information exchange should be “**interoperable**” between systems, so that information generated in one system can be used and understood by another.

The NHIN was designed to address these challenges:

- Privacy, Security and Trust: the NHIN creates a “trusted” network where there is:
 - Assurance that parties can be trusted (Governance, Directory, Certificates)
 - Assurance that patient preferences are being adhered to
 - Assurance that the transmission across the internet is secure.
- Interoperability: the **NHIN** includes a set of technical protocols, industry standards and very specific implementation guides that enable NHIN participants to read and understand the health information that is exchanged with minimal or no “point to point” coordination

Nationwide Health Information Network

The NHIN provides:

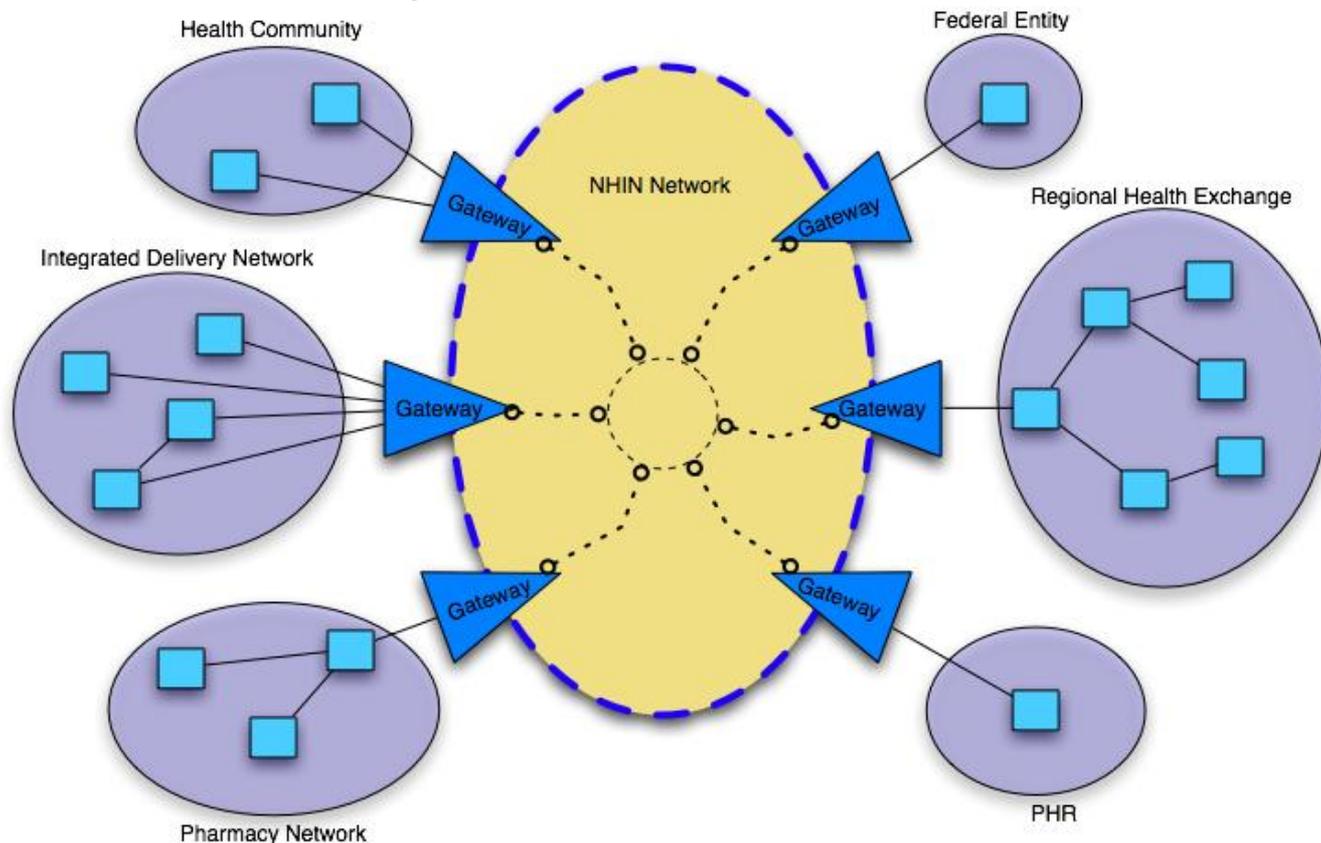
- Common legal framework for information sharing
- Common infrastructure necessary for network security and connectivity
- Specifications for interoperable services



NHIN Architecture

N•H•I•N [en-eych-ahy-en] - noun.
A self-governed cooperative

The NHIN is the network that ties other health networks together in a common, interoperable infrastructure.



NHIN Architectural Principles

Highly distributed: Patient health information is retained at the local health information exchange level

Local autonomy: Each HIO must make their own determinations with respect to the release of patient information

Focus only on inter-organizational health exchange: The NHIN does not attempt to standardize implementations of the NHIN services and interfaces, only the communications between HIOs

Use public internet: The NHIN is not a separate physical network, but a set of protocols and standards that run on the existing internet infrastructure

Platform neutral: The NHIN has adopted a stack (web services) that can be implemented using many operating systems and programming languages

The NHIN Cooperative

Private HIOs	State-Level HIOs	Provider Orgs / IDNs	Federal Entities
CareSpark	Delaware Health Information Network	Cleveland Clinic	CDC
Community Health Information Collaborative	New York eHealth Collaborative	Kaiser	CMS
HealthLINC (Bloomington)	North Carolina Health Care Information and Communications Alliance (NCHICA)		DoD
HealthBridge			IHS
Indiana (Regenstrief Institute)	West Virginia Health Information Network (WVHIN)		NCI
Long Beach Network for Health			NDMS
Lovelace Clinic Foundation (NMHIC)			SAMHSA
MedVirginia			SSA
Wright State University			VA

Demonstration Projects

- NHIN limited production pilots are critical to the success of demonstrating how standards and specifications are implemented as working operational solutions for health information exchange.
- MedVirginia and SSA entered into the first limited production pilot in February, 2009.
- Other organizations planning to demonstrate health information exchange via the NHIN in the coming months include:
 - Kaiser Permanente
 - Department of Veterans Affairs
 - Department of Defense
 - Centers for Disease Control and Prevention
 - SSA Contract Awardees
- The next NHIN pilot project demonstrations will include onboarding pilot partners into the NHIN trusted community, performing conformance and interoperability testing, issuing a digital certificate, and adding them into the NHIN service registry.

Supporting New Features

- The NHIN is implementing processes to elicit and prioritize new information exchange features from the Health IT community.
- Beyond the NHIN Core services, new features have recently been submitted for consideration:
 1. CDC Population Health Data Submission – CDC requested a new profile to gather population health data from Information Exchanges.
 2. CMS Transfer of Care – CMS request a new profile to enable HIOs to transmit transfer of care reports to CMS via the NHIN,
 3. FDA Analytic Query Service – FDA request for new service for analytic purposes.
 4. CMS Quality Reporting – Request for NHIN capability to support CMS' Physician Quality Reporting Initiative
 5. CDC Public Health Alerting – Request for NHIN capability to provide alerts to providers on public health alerts and interventions
- NHIN is responding to requests to allow input and review of technical artifacts.

Going Forward

- The NHIN will showcase demonstrations and network operational capabilities in early 2010.

For more information about the NHIN:

- Go to <http://healthit.hhs.gov> and click on "Nationwide Health Information Network"
- For regular updates, join the Health IT Listserv at <https://list.nih.gov/archives/health-it.html>. Click on "Join or Leave the List, or Update Options."
- Questions? Contact us at nhin@hhs.gov