Federal Health IT Strategic Plan Progress Report

June 2013

A web-based version of this progress report can be found on the healthIT.gov Strategic Planning site.

Contents

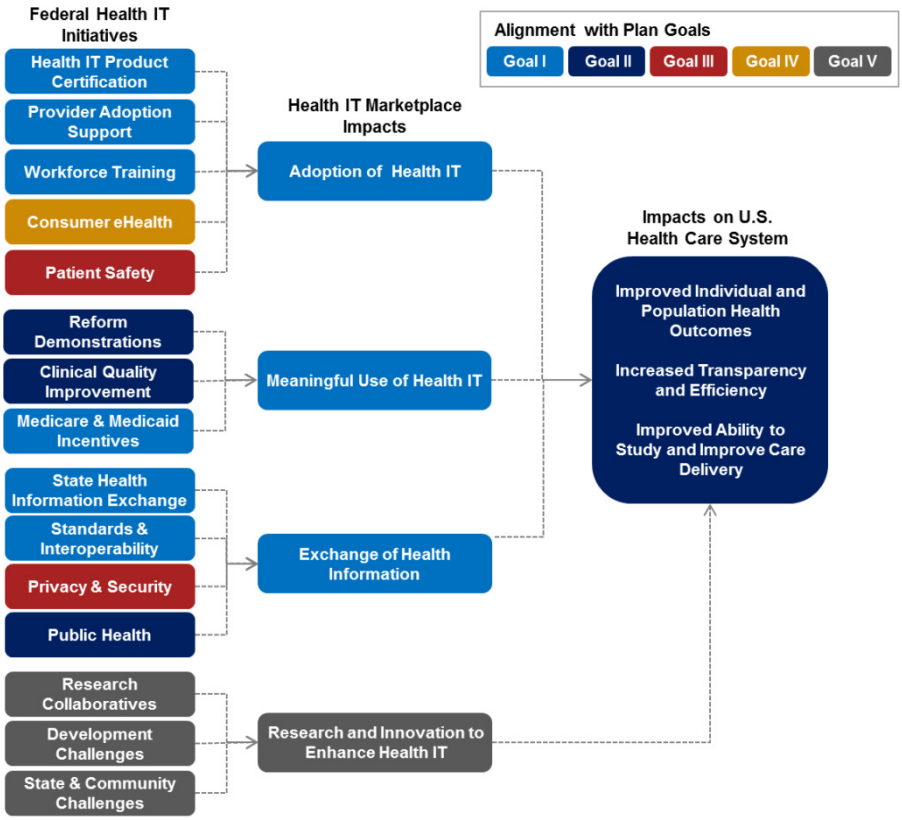
Introduction

The Federal Health IT Strategic Plan 2011 – 2015 describes the Federal government's strategy to improve health and health care for all Americans through use of health information and technology.

This Progress Report highlights key steps taken to implement the Plan's five strategic goals:

- Goal 1: Achieve Adoption and Information Exchange through Meaningful Use of Health IT
- Goal 2: Improve Care, Improve Population Health, and Reduce Health Care Costs through the Use of Health IT
- Goal 3: Inspire Confidence and Trust in Health IT
- Goal 4: Empower Individuals with Health IT to Improve their Health and the Health Care System
- Goal 5: Achieve Rapid Learning and Technology Advancement

Impacts of Federal Health IT Initiatives on Marketplace and Healthcare System



Executive Summary

This Progress Report highlights resources and services the Federal government implemented to guide nationwide adoption and use of health IT to support better health and health care for Americans.

For data on the programs described in this Progress Report, see the Health IT Dashboard.

Federal investments in a wide array of programs and activities, including the Meaningful Use EHR Incentive Program, have impacted the health IT marketplace, allowing the health care system to improve health and health care.

- As of April 2013, 74% of eligible professionals and 87% of eligible hospitals have registered to participate in the Meaningful Use EHR Incentive Program;
- Hospital EHR adoption more than tripled since 2009, from 12% in 2009 to 44% in 2012;
- Office-based provider adoption increased by 86% from 2009 to 2011, from 21% to 39%;
- Higher levels of health information exchange, such as e-prescribing (33% of providers had e-prescribing capabilities in 2009, compared with 73% in 2012);
- Health IT use for clinical quality measurement and clinical decision support to improve quality of care;
- Success in improving health outcomes in communities across the U.S;
- Updated privacy and security guidelines to address new technologies and uses of health IT;
- Greater consumer access to health information through eHealth tools, such as patient portals; and
- Collaboration between private and public sector on innovative approaches, using health IT to solve health care problems.

In 2013, ONC's priorities will center on collaborating with Federal partners and private stakeholders to:

- Help providers, hospitals and other facilities, and others in the health care system to use tools and processes designed for the Meaningful Use EHR Incentive Program to achieve quality improvement goals in clinical practice and population health;
- Expand health information exchange and interoperability capacity; and
- Increase patient engagement, using health IT to foster consumer confidence and equal partnerships in making health decisions.

Many challenges remain. ONC and Federal partners will continue to engage with the public through open dialogue, including the Health IT Policy and Standards Committees, to address existing and emergent policy and market changes.

Impacts on the U.S. Health Care System

Goal II of the Federal Health IT Strategic Plan focuses on how to use health IT to improve care, improve population health, and reduce health care costs.

The Federal government coordinates with consensus organizations, professional associations, integrated health systems, and community-based groups to integrate best practices and knowledge into clinical and administrative work streams.

- Community-level initiatives are demonstrating solutions for using health IT to improve care.
- Clinical quality improvement initiatives rely on standardized data collection and quality measure reporting through electronic health records (EHRs), and methods to integrate clinical decision support into practice workflows to improve clinical decision-making.

Reform Demonstrations	Clinical Quality Improvement

Reform demonstrations advance clinical and payment reform at the community level, each with its unique population and regional context.
• The 17 Beacon Communities are working to:
  ○ Build and strengthen the health IT infrastructure and exchange capabilities within communities;
  ○ Translate investments in health IT to measureable improvements in cost, quality, and population health; and
  ○ Develop innovative approaches to performance measurement, technology and care delivery to accelerate evidence generation.
The Centers for Medicare & Medicaid Services' Innovation Center (CMMI) supports the development and testing of innovative health care payment and service delivery models.
	Health IT helps provide evidence for what works in health care, as health quality improvement relies on using scientifically-based research and guidelines to measure the processes and outcomes of care.
	• EHRs can simplify quality reporting through better data collection, clinical measure calculation, and measure development; and
	• EHRs can integrate clinical decision support at the point of care to present personally relevant treatment options.

Reform Demonstrations

Communities are testing technology-driven methods for improving health, increasing care quality, and reducing cost (Federal Health IT Strategic Plan Goal II). The collective experiences and lessons learned from these demonstrations can be distilled into actionable guidance to help other communities take steps to improve.

- The 17 Beacon Communities are building and strengthening local health IT infrastructure and serving as "test beds" to advance patient-centered care, while helping to improve health, increase quality, and reduce costs.
  - Several Beacon Communities are providing infrastructure for new payment models for accountability and care coordination. These communities are demonstrating how technology enables high value health care.
  - Beacon Communities are pioneering technology-based approaches to help patients become more engaged in their health care, including:
    - Mobile health platforms that enhance patient-centered care by assessing risk for chronic disease, providing reminders, helping patients track their disease, and connecting patients with their physician and other resources (New Orleans, Cincinnati, Utah, San Diego, and Southeast Michigan);
    - Patient portals that allow patients to securely exchange messages with their providers (Tulsa and Western New York); and
    - Home monitoring technology to reduce hospital readmissions and hospital visits by identifying problems early (Western New York and Indiana).

  - Beacon Communities have demonstrated early successes in improving the health of patients and communities:
    - Improved diabetes HbA1c and LDL-C control (Bangor, Crescent City, Indiana, Cincinnati, Delta BLUES);
    - Higher rates of screening for breast cancer and colorectal cancer (Colorado, Indiana);
    - Reduced readmission rates for patients with congestive heart failure (Keystone); and
    - Decreased number of inappropriate cardiac catheterization lab activations, resulting in approximate cost savings of $15,000 per avoided activation (San Diego).
  - Beacon Nation (Hawaii) developed a learning guide to improve hospital transitions and chronic disease management, using automated alerts based on Admission, Discharge and Transfer events.
- The Centers for Medicare & Medicaid Services' Innovation Center (CMMI) develops new payment and service delivery models in accordance with the Affordable Care Act and previous legislation, plus specific demonstration projects. Innovation Models are organized into seven categories:
  - Accountable Care;
  - Bundled Payments for Care Improvement;
  - Primary Care Transformation;
  - Initiatives Focused on the Medicaid and CHIP Population;
  - Initiatives Focused on Medicare-Medicaid Enrollees;
  - Initiatives to Speed the Adoption of Best Practices; and
  - Initiatives to Accelerate the Development and Testing of New Payment and Service Delivery Models.

Clinical Quality Improvement

HHS provides technical and policy guidance that help measure developers, health care providers, and their health IT vendors to create and use both clinical quality measures (CQMs) and clinical decision support (CDS) aids to deliver high-quality care (Federal Health IT Strategic Plan Goal II).

- HHS created specifications for electronic clinical quality measures (eCQMs) in alignment with the Meaningful Use EHR Incentive Program and the National Quality Strategy.
  - The CQMs for Meaningful Use EHR Incentive Program Stage 2 recommended core measures of health care for adults and children for blood pressure control, clinical depression prevention and screening, and tobacco use prevention and screening. For a complete list of the core measures, visit CMS website for the 2014 CQMs.
  - ONC and the National Library of Medicine (NLM) published a data elements catalog that includes required elements for eCQMs, as specified in the 2014 Edition EHR certification criteria.
  - HHS is working with other stakeholders to advance the rapid incorporation of clinical best practices into CQMs, reducing the time required to translate research into CQMs.
- ONC has made two CQM reporting tools available for anyone to use free of charge. Cypress is a tool that tests EHRs' ability to calculate Meaningful Use EHR Incentive Program CQMs. PopHealth is a tool for providers and vendors to implement summary quality reporting.
- HHS is working with private sector leaders in clinical quality to minimize data reporting burden by ensuring that clinicians can use CQMs effectively in electronic systems to participate in multiple quality improvement programs.
- HHS is leading an effort to link and share Healthcare Acquired Infection (HAI) data held across different government agencies.

- Health eDecisions initiative builds on research to develop CDS standards that will make CDS more interoperable, shareable, and scalable. The first standards set was submitted to Health Level 7 (HL7) for balloting in early 2013.

Meaningful Use of Health IT

Goal I of the Federal Health IT Strategic Plan focused on increasing adoption of electronic health records (EHRs) and electronic exchange of health information. The Centers for Medicare & Medicaid Services (CMS) and ONC established a regulatory framework for financial incentives under the Medicare and Medicaid EHR Incentive Programs.

These Federal investments and regulations have led to rapid increases in the rate of EHR adoption and electronic information exchange in the health care marketplace. While much work to date focused on assisting eligible professionals and hospitals, HHS is exploring methods to encourage ineligible providers to adopt and use health IT.

Meaningful Use of EHRs requires structured data capture and advanced clinical processes. These include health information exchange, e-prescribing, lab results, electronic transmission of patient care summaries across multiple settings, and greater patient access to data.

Medicare and Medicaid EHR Incentives Program

Health Care Professionals	Hospitals
• As of April 2013, 74% of eligible professionals have registered for EHR incentive programs. • 192,126 eligible providers have successfully attested to achieving Meaningful Use requirements as of March 2013.	• As of April 2013, 87% of eligible hospitals have registered for EHR incentive programs. • 2,874 eligible hospitals have successfully attested to achieving Meaningful Use requirements as of March 2013.

Adoption of Health IT

Since 2011, the marketplace has seen increased rates of adoption and use of EHRs in hospitals and among health professionals (Federal Health IT Strategic Plan Goal I), driven by the Medicare and Medicaid EHR Incentive Program and complementary provider support programs.

To support sustained growth in health IT adoption, ONC and other agencies are providing adoption support to providers and consumers through healthIT.gov. The Health IT Dashboard maintains state-based summaries of health IT adoption and program utilization.

EHR Adoption by Health Care Professionals and Hospitals

Health Care Professionals	Hospitals

• 39% of all office-based physicians had adopted at least a basic EHR by 2012.
• Physicians are increasingly adopting advanced EHR technology:
  ○ In 2012, about 2 in 3 physicians had computerized capability to record lists of patients' medication and allergies and to provide warnings for drug-drug interactions.
  ○ Computerized capabilities to engage patients and families in their healthcare – providing patients with clinical summaries and electronic copies of their health information – were adopted by over half of physicians in 2012.
Visit the Health IT Dashboard for data on provider adoption of EHRs.
	• 44% of non-Federal acute care hospitals had adopted a basic EHR by 2012.
	• Non-Federal acute care hospitals are increasingly adopting advanced EHR technology:
	  ○ In 2012, over 7 in 10 hospitals had computerized provider order entry for medication orders, up from 27% of hospitals in 2008.
	  ○ In 2012, 94% had computerized capability to record lists of patients' medication allergies and 85% had the capability to provide warnings for drug-drug interactions.
	Visit the Health IT Dashboard for data on hospital adoption of EHRs.

Health IT Adoption Support Programs

EHR Product Certification	Provider Adoption Support	Workforce Training
ONC established a program to certify health IT products, providing assurance to providers that selecting these systems and modules will allow them to meet Meaningful Use criteria.	ONC and other agencies are equipping providers with resources to learn how to adopt and meaningfully use health IT.	Educational programs are building a robust workforce that can support providers' health IT adoption and its meaningful use.

Consumer eHealth	Patient Safety	Broadband Access
Outreach and initiatives support consumers and providers to use health IT collaboratively in health care decision-making.	ONC is collaborating with Federal partners and the private sector to strengthen patient safety enhancements in health IT products.	The Federal Communications Commission (FCC) expands access to broadband spectrum, especially in rural areas, and encourages creation of state and regional broadband health care networks that accelerate adoption of technologies to improve health outcomes and lower health care costs. FCC created the Healthcare Connect Fund, building on lessons learned from prior pilots, testing how to use broadband most effectively to improve the quality and reduce costs of health care in rural areas. The Fund reforms modernize the FCC's existing universal service Rural Health Care Program to expand the benefits of telemedicine nationwide.

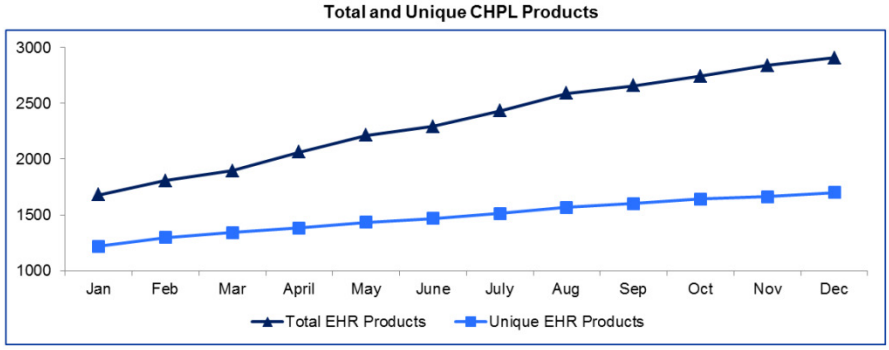
Health IT Product Certification

In 2012, ONC, in collaboration with the National Institute of Standards and Technology (NIST), implemented the ONC Health IT Certification Program as a companion to the Medicare and Medicaid EHR Incentive Programs. The Certification Program provides a defined process for independent certifying bodies to test EHR technology and certify that qualified products follow defined criteria that meet Meaningful Use requirements (Federal Health IT Strategic Plan Goal I).

Accredited Testing Laboratories (ATLs) test the products. ONC-Authorized Certification Bodies (ONC-ACBs) certify tested EHR products based on the standards and certification criteria adopted by the HHS Secretary.

By certifying EHR modules as well as full-suite EHR products, the Certification Program promotes a competitive market that supports flexibility and innovation among EHR vendors and allows providers to purchase products targeted to their needs. Additionally, the Program's rigorous testing and certification framework provides greater certainty that certified products will meet Meaningful Use requirements.

- ONC collaborated with CMS to define the certification criteria for Meaningful Use EHR Incentive Program Stages 1 and 2 requirements.
- ONC's Certified Health IT Product List (CHPL) includes over 1,700 unique complete and modular EHR products from over 800 vendors.



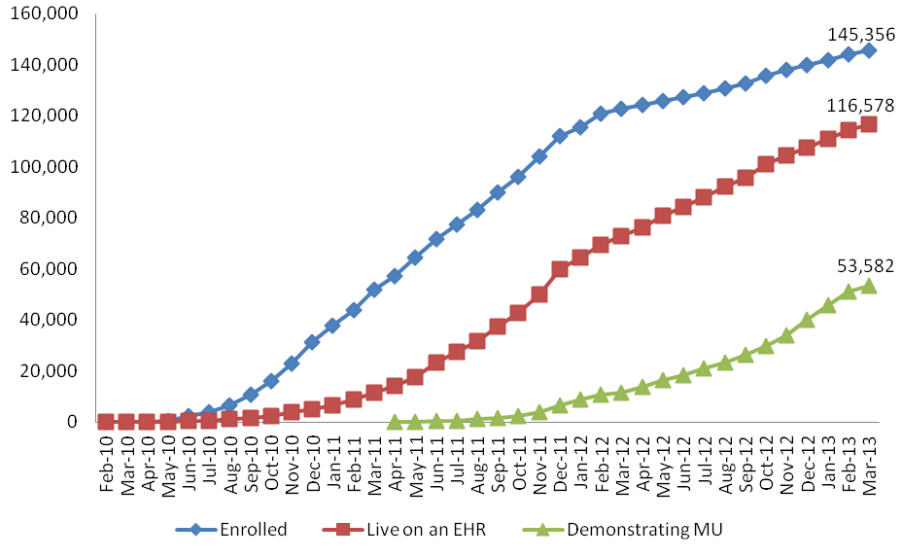
CHPL Products	2012											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Unique	1218	1296	1341	1381	1433	1467	1511	1568	1600	1642	1663	1699
Total	1681	1805	1895	2064	2215	2291	2434	2589	2659	2744	2839	2910

Provider Adoption Support

As providers transition to Electronic Health Records (EHRs) and adopt other forms of health IT, Federal agencies are offering support to help providers overcome adoption barriers and achieve Meaningful Use of health IT.

- Regional Extension Centers (RECs) are helping providers face challenges to achieve meaningful use and leverage the meaningful use criteria to support their quality improvement and/or transformation goals (Federal Health IT Strategic Plan Goals I and II).
  - RECs are partnered with over 31,000 medical practices and 133,000 primary care providers (PCPs), equating to 43% of the nation's PCPs.
  - 49% of all nurse practitioners, 56% of rural PCPs and 83% of Federally Qualified Health Centers partner with RECs.
  - Approximately 45% of Critical Access and small hospitals that have 50 beds or less partnered with RECs.
  - RECs are also working with over 10,000 specialists, who have asked for assistance in achieving Meaningful Use.
  - GAO reported that Medicare providers working with an REC were over 2.3 times more likely to receive an EHR incentive payment then those who weren't.
  - Approximately 61% of providers paid for Medicaid Meaningful Use and 21% of providers paid for Medicare Meaningful Use have worked with an REC.

Health Care Professionals Partnering with RECs

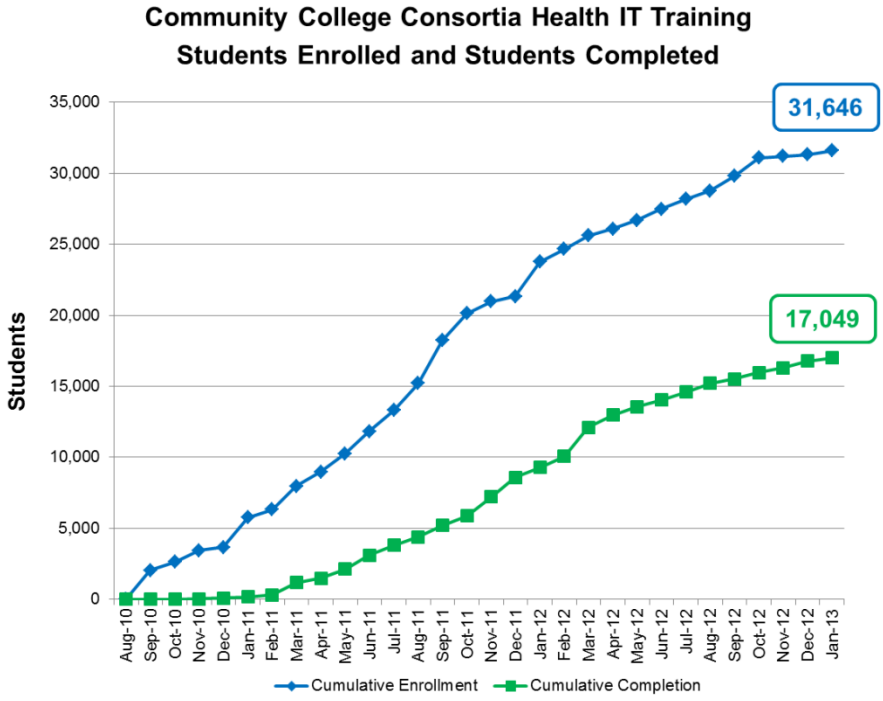


Source: ONC CRM Data, Data as of March 2013

Workforce Training

ONC's Workforce Development Program aims to fill essential roles to guide providers and facilities in using health IT effectively to manage patient care and improve communications and information sharing (Federal Health IT Strategic Plan Goal I).

- Over 17,049 students have completed training through the Community College Consortia Program, which includes 82 community colleges in 50 states.
- ONC developed a series of six Health IT Professional Exams to provide a standardized approach for validating individual competency to perform specific health IT jobs.
- Over 983 students have graduated from the University Based Training program, with 764 currently enrolled.
- ONC funded the development of standard health IT curricula available for use at no cost to provide health IT training nationwide.



Consumer eHealth

The Federal government has initiated policy, public outreach, public-private partnerships, challenges, and other initiatives to create opportunities for health IT to help empower health consumers (Federal Health IT Strategic Plan Goal IV).

- Meaningful Use EHR Incentive Program Stage 2 requires providers to offer patients a way to view, download, and transmit their health information to a third party and to increase patient use of secure messaging to communicate with providers.

Blue Button

ONC is charged with leading a nationwide effort to expand the adoption and use of the Blue Button, a symbol for easy, electronic access by consumers of their clinical or claims data. An estimated 88 million Americans have access to some of their clinical or claims data through Blue Button and there have been over 1.5 million Blue Button downloads. The Blue Button Pledge Program is a voluntary mechanism whereby a wide range of stakeholder organizations can publicly commit to promoting consumer engagement by making information more easily accessible to patients in an electronic form and encouraging its use.

- The "Automate Blue Button" initiative engaged 68+ volunteer organizations to establish common industry approaches and standards to let consumers privately and securely designate a preferred holding place where any updates to their health data should automatically go.
- Blue Button+ provides a guide for data holder organizations that meets and builds off the view, download and transmit requirements in Meaningful Use Stage 2 and for developers to build products and services that include these automated capabilities and can receive, aggregate and reconcile this information.
- The Blue Button "Mash Up" challenge for developers created apps that would combine Blue Button data with information from other sources so people can take action on their health and care.

Health IT Patient Safety

The Federal government is helping to strengthen patient safety in the use of health IT (Federal Health IT Strategic Plan Goal III). To promote adoption of health IT, providers and consumers must trust that the systems are safe.

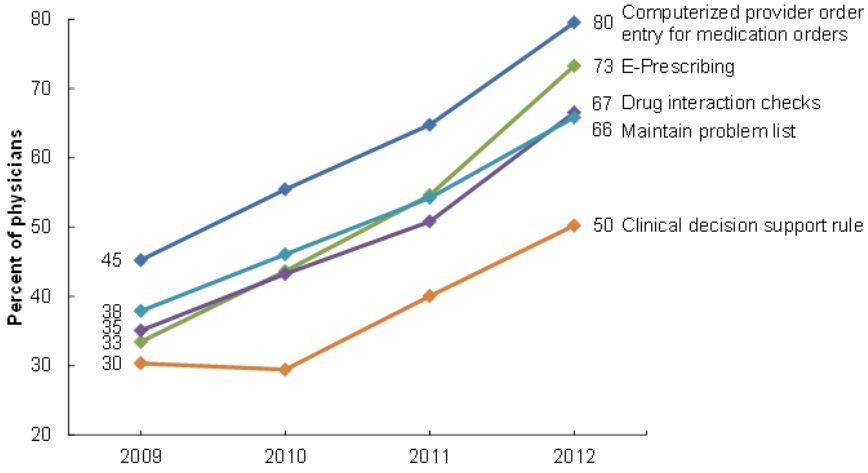
- In 2011, ONC commissioned the Institute of Medicine (IOM) to evaluate health IT safety concerns and to recommend ways that both government and the private sector can make patient care safer using health IT.
- HHS published the final Health IT Patient Safety Action and Surveillance Plan in June 2013, which provides direction to public and private entities on actions to address health IT and patient safety. Key features include agency-specific actions to strengthen patient safety in health IT and to work with developers and patient safety organizations to facilitate voluntary reporting of patient safety events.
- HHS is working to foster widespread use of the Agency for Healthcare Research and Quality Common Format documents to identify and describe safety issues associated with the use of health IT, enabling adverse event reporting, data aggregation and analysis to support quality improvement.
- Within the 2014 Edition EHR certification criteria, ONC collaborated with NIST to define two safety-related requirements:
  - Enable EHR developers to apply user-centered design processes to health IT systems, incorporating all the data elements defined in the common industry format for usability testing; and
  - Integration of safety-enhanced design and quality management into EHRs to improve usability so that certified products can achieve specified goals for effectiveness, efficiency, and satisfaction.

- Food and Drug Administration (FDA) and Federal Communications Commission (FCC) collaborate with ONC on Section 618 of the 2012 FDA Safety and Innovation Act (FDASIA) to develop a proposed strategy and recommendations on an appropriate, risk-based regulatory framework pertaining to health information technology, including mobile medical applications, that promotes innovation, protects patient safety, and avoids regulatory duplication.

Exchange of Health Information

The Meaningful Use EHR Incentive Program and new initiatives implemented under the Affordable Care Act are promoting the exchange of health information across organizational and geographic boundaries. Federal partners help advance the secure exchange of health information among hospitals, providers, consumers, and other health organizations aligned with these emerging programs (Federal Health IT Strategic Plan Goal I).

Percent of physicians with computerized capabilities to meet selected Meaningful Use Core objectives: 2009-2012



2012 is significantly different from 2009 for all computerized capabilities ($p < 0.01$).
SOURCE: ONC analysis of 2009-2012 National Electronic Health Records Surveys.

Advanced clinical processes

- Physicians with e-prescribing capabilities increased from 33% in 2009 to 73% in 2012, and 94% of community pharmacies actively e-prescribe.
- Many providers use EHR system functions to engage in additional technology-supported activities. For example, physicians able to exchange secure messages with patients increased by 40% from 2011 to 2012.

Advancing Health Information Exchange

HHS sought input on a series of potential policy and programmatic changes and new ideas to accelerate electronic health information exchange and interoperability beyond current achievements through ONC programs and the Meaningful Use EHR Incentive Program. HHS is considering a number of potentially feasible policy levers that could build upon existing authorities and programs.

HHS supports widespread, secure health information exchange through standards and specifications that facilitate data interoperability, and through rules and guidelines that protect health information privacy and security.

State HIE Program	Standards & Interoperability	Privacy & Security	Public Health
ONC distributes grant funds to help states develop capacity for health information exchange.	HHS collaborates with public and private partners to establish standards and specifications supporting the secure, interoperable exchange of health information.	HHS developed rules and guidelines to protect the privacy and security of health information during electronic health information exchange.	Health IT is being used to support public health initiatives across Federal, state, and local levels.

State Health Information Exchange

As part of the State Health Information Exchange (HIE) Program, ONC distributes grants that fund state efforts to plan and establish capacity for health information exchange (Federal Health IT Strategic Plan Goal I).

Through the State HIE Program, 56 states, eligible territories, and qualified State Designated Entities were awarded funding to increase connectivity and enable patient-centric information flow, leading to improved care quality and efficiency.

State HIE awardees are exploring the continual evolution and advancement of necessary governance, policies, technical services, business operations, and financing mechanisms for HIE.

Educational resources are available that clarify health information exchange regulatory requirements and help guide providers through decision-making to improve data portability:

- A "Getting Started" toolkit walks providers through the process of evaluating processes, vendors, and exchange systems to exchange information with other providers and facilities; and
- An "Interoperability Basics" training course helps providers understand and meet the Meaningful Use EHR Incentive Program Stage 2 requirements for data exchange.

Standards & Interoperability

HHS has collaborated with public and private partners to develop standards and specifications that support the interoperable, secure exchange of health information, in alignment with Meaningful Use EHR Incentive Program requirements (Federal Health IT Strategic Plan Goal I).

- ONC transitioned governance for the eHealth Exchange from the government to a non-profit, public-private structure, Healtheway. The eHealth Exchange is a group of Federal and non-Federal organizations that use common standards and specifications securely to exchange health information.
- ONC developed standardized mechanisms for transporting health data using the Direct protocol or eHealth Exchange (formerly known as the Nationwide Health Information Network) web services.
- The Standards and Interoperability Framework develops through multi-stakeholder collaborations the technical standards and specifications that enable health IT products to interoperate within the nationwide health IT ecosystem, facilitating health information exchange between providers, consumers, and other healthcare stakeholders within and across states:
  - ONC shortened the timeframe for developing health IT standards and specifications from an average of 3 years to 9 months by convening key stakeholders and employing a structured process that accelerates cycles for development and decision-making;
  - The 360X project aims to help providers share patient health information, including care plans, between the referring provider and a specialist across different EHR products and platforms in a "closed loop referral"; and
  - ONC convened stakeholders to agree upon a national standard to improve the consistency of core clinical information contained in patient summary documents exchanged during transitions of care.

- The Federal Health Architecture released CONNECT 4.0, an open-source platform based on eHealth Exchange standards for health information exchange that now allows for higher-volume messages and sharing of larger file sizes.
- The Federal Health Architecture is working to integrate eHealth Exchange specifications to support several Federal programs, including the DOD/VA Virtual Lifetime Electronic Record, the Social Security Administration Disability Determination, CMS Electronic Signature for Medical Documentation (esMD) and the Medicare End Stage Renal Disease benefit.
- In 2012, the FCC released an Order to allocate spectrum for Medical Body Area Networks (MBANs), making the U.S. the first country in the world to make spectrum available for this specific usage. MBANs are networks of wireless sensors, often no bigger than a Band-Aid, which can transmit data on a patient's vital health indicators to their doctor or hospital.

Privacy & Security

Federal privacy and security efforts help to inspire confidence that electronic health information will be protected and used appropriately within health IT systems in patient care (Federal Health IT Strategic Plan Goal III).

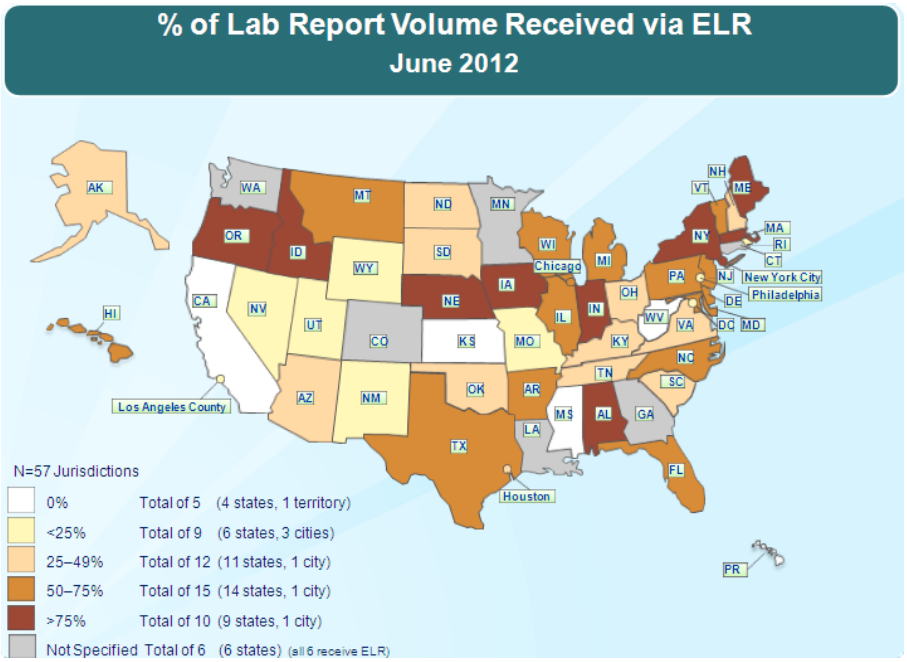
- The Office for Civil Rights (OCR) released the final rule implementing the modifications to the Health Insurance Portability and Accountability Act (HIPAA) Privacy and Security Rules, as required by the HITECH Act. This effectively extends the use and disclosure requirements of the Privacy Rule as well as most provisions of the Security Rule to the contractors of health care providers and health plans ("business associates") currently covered by HIPAA, as well as their subcontractors.
- HHS analyzed health data breach reports to identify trends in security vulnerabilities, and addressed these prevailing issues in the 2014 Edition EHR certification criteria.
- ONC released the State HIE Privacy and Security Program Instruction Notice to grantees, furthering the adoption the Health IT Policy Committee recommendations on privacy and security safeguards and health information exchange, particularly those with respect to individual choice on whether to participate in certain types of health information exchange.
- Through the Data Segmentation for Privacy Initiative (DS4P), Federal and industry partners explored standards that prevent health information from inappropriate sharing and drafted an implementation guide to help providers withhold certain sensitive health information, in compliance with established law.
- OCR has stepped up enforcement of the HIPAA Privacy and Security Rules. In calendar year 2012, OCR investigated 4,342 complaints alleging a violation of the Privacy and/or Security Rules; 3,363 were resolved through corrective action by the Covered Entity. OCR has levied more than $15 million in fines and penalties for violations of the HIPAA Privacy and Security Rules since 2008.
- OCR piloted an audit program and performed 115 audits of covered entities to assess compliance with the HIPAA Privacy and Security Rules.
- ONC continues to develop privacy and security-oriented technical assistance materials for ONC grantees and other stakeholders:
    - ONC and OCR partnered to develop tools and resources to help providers meet privacy and security requirements addressing the security of ePHI when using mobile devices and developed a videogame that provides privacy and security training for health care professionals; and
    - ONC fielded a national survey to measure consumer privacy and security concerns to inform future program design and deployment. The survey provides an analysis of changes in consumer perception over time to determine confidence and trust in health IT.
- A Personal Health Record (PHR) Model Privacy Notice provides a standardized template for web-based PHR vendors to inform consumers succinctly about their privacy and security policies.

Public Health

HHS is coordinating with the Association of State and Territorial Health Officers (ASTHO), the Council of State and Territorial Epidemiologists (CSTE), and the National Association of City and County Health Officers (NACCHO).

This effort aims to increase the capacity of state and local health jurisdictions to develop the capacity to accept electronic transactions for immunization registry reporting, electronic laboratory reporting, and syndromic surveillance reporting.

- Over 54% of lab reports to public health were electronic by June 2012. The trend has continued upward with 46 states and 6 local health departments accepting electronic lab reports.



- 48 Public Health jurisdictions can accept electronic transactions for immunization reporting and 40 jurisdictions can accept electronic transactions for syndromic surveillance.

Research & Innovation to Enhance Health IT

The Federal government has established several programs and technology challenges, and awarded research grants to advance innovation, find effective solutions to systemic and clinical health care concerns, and accelerate realization of improved care throughout the U.S.

Additionally, white papers and regional pilot programs evaluate options to include more providers into the health IT community and use health IT more efficiently to provide high quality, well-coordinated health care across the health care system.

Research Collaboratives

HHS sponsors research and data-sharing platforms to advance the development of health IT solutions that improve health care (Federal Health IT Strategic Plan Goal V).

- The Strategic Healthcare IT Advanced Research Projects (SHARP) Program funds collaborative research projects with prominent academic institutions, aimed at developing breakthrough technology solutions that enhance patient-centered care.

Enhancing Patient-Centered Care through SHARP
The University of Texas – Houston SHARP-C project is creating tools and metrics to help electronic health record (EHR) vendors design products that optimize the user experience for providers and other health care professionals. The SHARP-C project also is conducting cognitive research to enhance technology-based clinical decision support. The Mayo Clinic's SHARPn project is developing tools that standardize and leverage EHR data to analyze patient traits.

- The Query Health Initiative is a public-private collaborative effort seeking to enable distributed, population-level health queries across multiple platforms throughout the nation. Enabling population-level health information exchange without requiring a data use agreement or existing business relationship will facilitate enhanced data analysis and research, while maintaining the privacy and security of individual health data.
- The HIT Trailblazer States project facilitates the sharing of best practices and tools between states and connects states with relevant Federal work on standards, clinical quality measures, and other tools. Trailblazer states are considering how to best capture or combine data; create or refine performance measures across providers and simplify quality improvement reporting to state and federal programs; and report or provide feedback in ways that promote health care quality improvement.
- The National Learning Consortium (NLC) represents the lessons learned from ONC's outreach programs (Regional Extension Centers, Beacon Communities, State Health Information Exchange) and through the Health Information Technology Research Center (HITRC). The goal of the NLC is to organize leading practices and lessons learned and package them through healthIT.gov for broader use by health care providers and practice managers striving to implement health information technology.
- The Federal Communications Commission (FCC) Experimental Licensing Program aims to cut red tape and increase spectrum flexibility for testing new wireless health innovations to speed new technologies to market. The new experimental licensing regime will create more flexibility and streamlined processes for testing new wireless health IT products.

Development Challenges

Through dynamic grant competitions, HHS spurs health IT innovation in the private sector to address some of the biggest challenges in health care (Federal Health IT Strategic Plan Goal V).

- Health IT Prizes and Challenges spur the development of innovative health IT solutions in the private sector so these innovations may be adapted for widespread use. Many of the past and current challenges can be found on the Health 2.0 or Challenge.gov websites.
  - ONC and the Department of Veterans Affairs co-sponsored a challenge for designers to rethink how a patient's medical record is presented so that health information is easier to understand and use for decision-making by patients, providers, and caregivers.
  - Developers were challenged to design patient safety reporting systems that enable efficient patient safety incident reporting and data analysis, to learn from and prevent patient safety incidents.

Health IT Innovation

- The Partnership for Patients aims to reduce preventable hospital-acquired conditions by 40%, and reduce 30-day hospital readmissions by 20% by the end of 2013.
  - In the Ensuring Safe Transitions from Hospital to Home Challenge, developers created apps that empower patients and caregivers to communicate discharge information with providers and manage next steps in their care.
  - The Discharge Follow-Up Appointment Challenge aims to reduce hospital readmissions by engaging developers to create apps that simplify post-discharge follow-up appointment scheduling for consumers.
- The national Million Hearts initiative engages Federal partners and the private sector to develop and implement strategies to prevent 1 million heart attacks and strokes over five years.
  - As part of the Million Hearts Risk Check Challenge, five cities launched initiatives to promote and deploy the winning app in February 2013 to enable consumers to quickly determine their risk for cardiovascular disease and become motivated to obtain a more accurate risk assessment and manage their heart health.
- The Reducing Cancer among Women of Color App Challenge aimed to develop a mobile app to help underserved and minority women prevent and fight cancer.

State & Community Challenges

Through the State Health Information Exchange Challenge Grants Program, ONC awarded eight grantees to support development of innovative, scalable solutions in five areas (Federal Health IT Strategic Plan Goal V):

- Achieving health goals through health information exchange;
- Improving long-term and post-acute care transitions;
- Consumer-mediated information exchange;
- Enabling enhanced query for patient care; and
- Fostering distributed population-level analytics.

States are developing innovative and scalable solutions to allow consumers to gain access to their health information and direct it through multiple methods.

- Indiana is collaborating with five operational Health Information Organizations (HIOs) to provide consumers electronic access to their health information through a portal or Personal Health Record (PHR).
- Georgia is working with a rural community to demonstrate the power of consumer-mediated exchange for cancer patients. Georgia will be using the Direct protocol and PHRs to share information between providers.

Four grantees (Colorado, Maryland, Massachusetts, and Oklahoma) are identifying approaches that define, and when possible, address barriers to data exchange to and from long-term and post-acute care (LTPAC) transitions.

Results from these challenge grants are expected to be released in 2014.

Sharing health information with consumers

The Consumer Innovation Challenge engages a vanguard group of State Health Information Exchange (HIE) grantees. Challenge states can implement innovative approaches to share electronic health information with consumers and enable consumer-mediated exchange, where patients can aggregate, use, and share their information with their choice of providers.

Using Health IT to Improve Prescription Drug Monitoring

The Enhancing Access to Prescription Drug Monitoring Programs using Health IT (PDMP) project tested the feasibility of using health IT to increase real-time access to PDMP data by prescribers and dispensers. This project aimed to use health IT to improve clinical decision making and help address the growing problem of prescription drug misuse and overdose.