



# DEPARTMENT OF HEALTH AND HUMAN SERVICES

**Fiscal Year**

**2014**

Office of the National  
Coordinator for Health  
Information Technology

*Justification of  
Estimates for  
Appropriations Committee*

**OFFICE OF THE NATIONAL COORDINATOR FOR HEALTH IT  
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## LETTER FROM THE NATIONAL COORDINATOR

I am pleased to present the fiscal year (FY) 2014 budget request for the Office of the National Coordinator for Health Information Technology (ONC). Health information technology (health IT) is a critical component of the Administration's efforts to improve our Nation's health care and move from a transaction-based system to one that emphasizes quality and value. As the National Coordinator for Health IT, I am extremely proud of the role that ONC's programs and its dedicated workforce play in facilitating the adoption and use of health IT in ways that help improve care, improve community health, and make care more efficient.

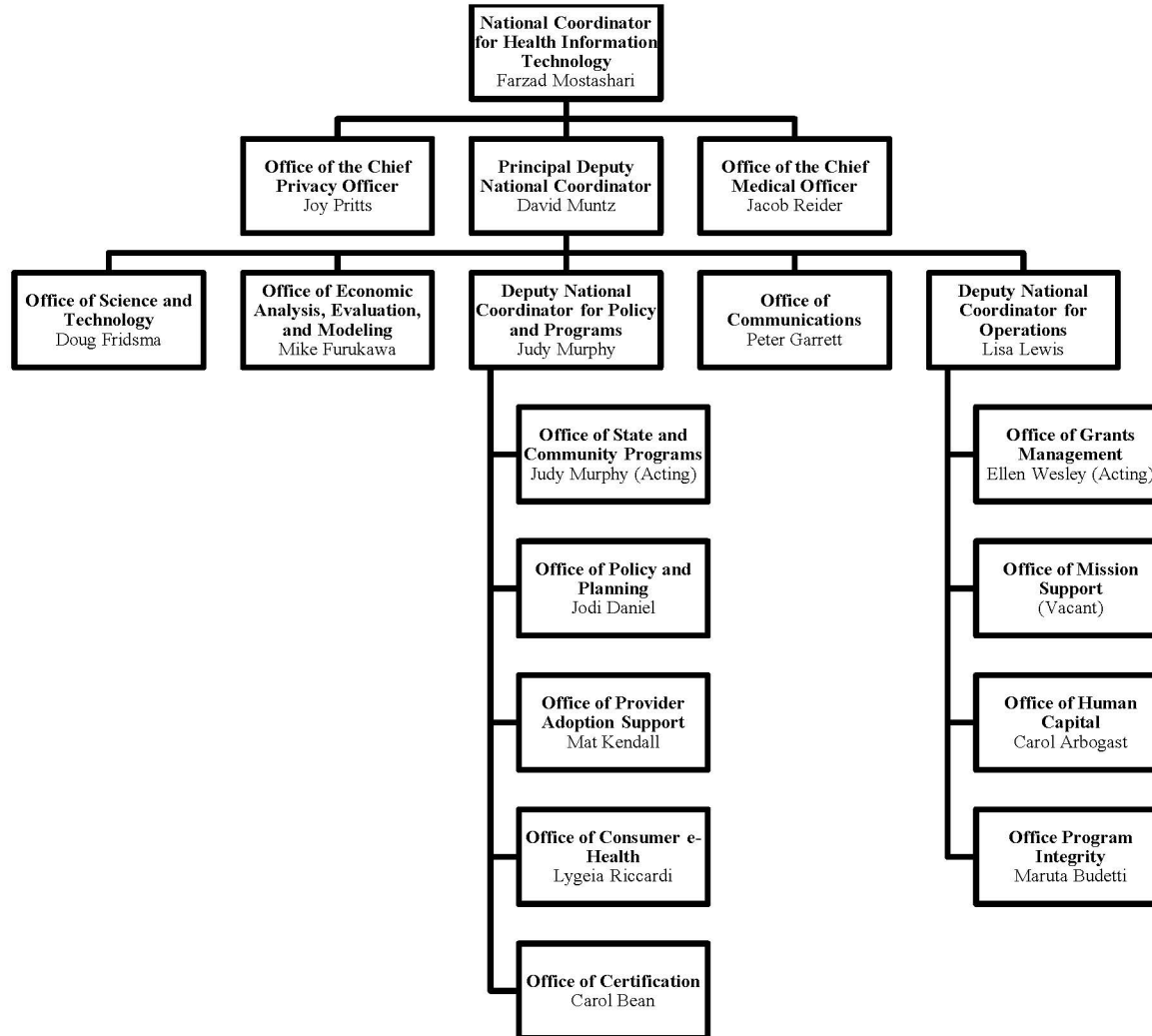
The FY 2014 budget request for ONC reflects a continued commitment to maximizing the positive impact of health IT in a fiscally responsible way. The Health Information Technology for Economic and Clinical Health (HITECH) Act, which is part of the American Recovery and Reinvestment Act of 2009 (Public Law 111-5, Recovery Act), was a landmark moment in American health care. In investing \$2 billion in key health IT infrastructure projects at ONC and creating the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs, the legislation responded to President Obama's call to move from a paper-based to a digital health care system. The Department's investments in health IT have begun to pay great dividends, as the rate of EHR use by hospitals and providers throughout the country has risen sharply since the legislation was enacted, and we have started to see evidence of improved outcomes through the effective use of health IT.

ONC's budget reflects the level of resources necessary to both maintain and advance the health IT activities created by the HITECH Act and continue to provide value to the health IT marketplace. For example, the budget will allow ONC to continue activities that ensure health IT products follow consensus-based standards and policies which promote coordination of care through interoperable information exchange. The budget provides continued support for programs that directly support the Medicare and Medicaid EHR Incentive Programs, including EHR testing and certification and a National Learning Collaborative that helps providers adopt and meaningfully use EHRs. The budget provides resources for critical projects that help ensure that patient health information remains private and secure. The budget also takes steps to promote the safety and usability of health IT products and supports initiatives that make it easier for patients and consumers to engage in their own care through health IT.

ONC's budget request represents an increase over past years. With HITECH funding ending in FY 2013, the proposed funding is needed to ensure that progress towards secure, interoperable health IT systems is continued. ONC's budget will ensure that investments such as the EHR Incentive Programs continue to yield meaningful results, and that health IT fulfills its important role in modernizing and transforming the Nation's health care system.

/signed Farzad Mostashari/  
Farzad Mostashari, M.D., Sc.M.  
National Coordinator for Health IT

# ORGANIZATIONAL CHART



The ONC organizational chart has been realigned to reflect the reorganization published in the Federal Register (Volume 77, Number 96) on May 17, 2012.

# **EXECUTIVE SUMMARY**

## **Introduction and Mission**

### **Agency Overview**

The Office of the National Coordinator for Health Information Technology (ONC), a staff division of the U.S. Department of Health and Human Services (HHS), is the lead agency charged with formulating the federal government's health information technology (health IT) strategy and coordinating federal health IT policies, programs, and investments. ONC supports the Department's goal to Strengthen Health Care by pursuing the modernization of the American health care system through the adoption and meaningful use of health IT. These efforts will make health information available for better decision-making by consumers, clinicians, health care managers, and policy-makers at all levels of our health care system.

### **Vision**

A health system that uses information to empower individuals, improves the health of the population, and supports new models of payment reform.

### **Mission**

To improve health and health care for all Americans through use of information and technology.

### **Introduction**

Information is the lifeblood of modern medicine, and improving the flow of information is foundational to transforming health care. In a modern health care system, every patient encounter and many patient activities outside of the clinical setting generate health information that can be used to support a range of clinical processes. For this information to be useful, however, it must be structured and formatted in a way that can be understood. Moreover, providers and other consumers of health information must be able to exchange and use that information seamlessly and securely across different information systems, care settings, and organizational and geographic boundaries.

These are the goals of health IT and the policies and programs supporting its acceptance and use. Health IT comprises the technologies — from electronic health records (EHRs) and personal health records (PHRs) to remote monitoring devices and mobile health applications — that can collect, store, and transmit health information. By enabling health information to be used more effectively and efficiently throughout our health system, health IT has the potential to empower providers and patients; make health care and the health system more transparent; enhance the study of care delivery and payment systems; and drive substantial improvements in care, efficiency, and population health.

Despite recent progress in achieving these goals, substantial work remains to be done. While recent years have seen a dramatic increase in the number of U.S. providers using health IT, interoperability and patient engagement continue to lag behind. As a result, health information can be costly and difficult to collect, preventing it from being available where and when providers and patients need it most.

ONC provides the collaborative framework through which policy-makers and stakeholders address critical health IT issues and barriers. Working directly with the health IT community, ONC develops consensus-based standards and technologies that facilitate interoperability and health information exchange (HIE). At the same time, ONC inspires confidence and trust in health IT by protecting the privacy and security of health information and ensuring the safe use of health IT in every phase of its development and implementation.

To ensure that health IT is widely and effectively implemented, ONC provides expertise, guidance, and resources to implementers and consumers, and administers a reliable Health IT Certification Program. ONC also works closely with the Centers for Medicare & Medicaid Services (CMS) to establish the criteria governing the Medicare and Medicaid EHR Incentive Programs (Meaningful Use Programs), which provide incentive payments to eligible providers who adopt and meaningfully use certified EHR technology (CEHRT).

ONC carries out the above activities through the following offices:

Deputy National Coordinator for Programs and Policy (DNC-PP): DNC-PP supports the adoption, utilization, and meaningful use of health IT among providers and consumers by guiding policy development and adoption support through the following offices:

- *Office of Policy and Planning (OPP)*: OPP develops and coordinates policies that support market optimization and provides proactive and forward-thinking strategies that reflect open and transparent processes.
- *Office of Consumer e-Health (OCEH)*: OCEH works to empower patients and caregivers to be partners in their health care through the adoption and utilization of health IT.
- *Office of State and Community Programs (OSCP)*: OSCP coordinates the efforts of states and communities in adopting HIE and develops governance mechanisms to ensure the efficient exchange of health information.
- *Office of Provider Adoption Support (OPAS)*: OPAS assists providers in adopting and utilizing health IT through a national network of organizations that are focused on supporting individual providers by identifying barriers and effective adoption strategies.
- *Office of Certification (OCERT)*: OCERT accredits the testing and certification bodies that ensure health IT is certified for use by federal agencies and partners and as required for attestation by providers participating in the Meaningful Use Programs.

Office of the Chief Privacy Officer (OCPO): OCPO develops and coordinates privacy, security, and data stewardship policy across the federal government, state and regional agencies, and foreign countries by providing subject matter expertise and technical support.

Office of the Chief Medical Officer (OCMO): OCMO engages with a wide array of clinical stakeholders and provides a clinically based perspective on ONC policies and activities. This includes clinical issues around health IT safety, usability, clinical decision support, and quality measures.

Office of Science and Technology (OST): OST promotes the adoption of interoperable, open, standards-based technologies and architectures that ensure information can flow seamlessly and securely between interoperable health IT. By engaging a range of stakeholders through a standardized framework, OST accelerates the development and harmonization of health IT standards.

Office of Economic Analysis, Evaluation, and Modeling (OEAM): OEAM provides ONC policy and program leaders with reliable, systematic studies and data analysis related to ONC programs as well as the U.S. health system and economy at large.

Office of Communications (OCOMM): OCOMM provides ONC with comprehensive communication strategies for public outreach, media relations, and public affairs.

Deputy National Coordinator for Operations (DNC-OPS): DNC-OPS provides agency wide support functions for ONC, including grants management, budget formulation and execution, procurement, human capital, and program integrity.

## All Purpose Table

(Dollars in Thousands)

<b>Program</b>	<b>FY 2012 Actual</b>	<b>FY 2013 Annualized CR</b>	<b>FY 2014 President's Budget</b>	<b>FY 2014 +/- FY 2012</b>
Budget Authority	16,415	16,515	20,576	+4,161
PHS Evaluation Funds	44,811	45,086	56,307	+11,496
User Fee	0	0	1,000	+1,000
<i>Total, Program Level</i>	61,226	61,601	77,883	+16,657

### Overview of Budget Request

The Fiscal Year (FY) 2014 Budget Request for ONC is \$77.9 million, including \$20.6 million in budget authority, \$56.3 million in Public Health Service (PHS) Evaluation Funds, and \$1.0 million in CEHRT fees to support program activities. This represents an increase of \$16.7 million above the FY 2012 enacted level.

ONC provides the leadership, program resources, and services needed to guide nationwide implementation and meaningful use of health IT. ONC establishes the policies, standards, and certification that support the federal health IT infrastructure; and supports the efforts of states, communities, providers, and consumers to adopt and meaningfully use health IT. These efforts will improve care to patients, improve population health, and increase the value of every health care dollar.

Recognizing the need to overcome significant barriers that were slowing the acceptance of health IT and HIE, Congress passed the Health Information Technology for Economic and Clinical Health (HITECH) Act, part of the American Recovery and Reinvestment Act of 2009 (Recovery Act). The HITECH Act aimed to improve health care quality, safety, and efficiency through the promotion of health IT and HIE. The HITECH Act reaffirmed the vital role of the federal government in optimizing the health IT market and strengthening the nation's health IT infrastructure.

Over the past three years, \$2 billion in HITECH funding for ONC has supported grant programs and investments in standards and security that have dramatically accelerated the adoption and meaningful use of CEHRT. With the end of HITECH funding in FY 2013, the FY 2014 Budget will allow ONC to leverage vital HITECH Act investments and continue to support the growing number of consumers, health care providers, and vendors engaged in modernizing the nation's health care system. Since 2009, ONC has focused on reaching a critical mass in the use of health IT through steep adoption of CEHRT, PHRs, and interoperable standards. As a result of these efforts, providers and consumers are increasingly realizing the benefits of health IT and HIE.

In the coming years, providers and consumers will seek to leverage health IT to improve care coordination, clinical decision-making, quality improvement, and population health. As this occurs, ONC will continue to forge consensus among stakeholders and coordinate effective policies and programs that promote the meaningful use of health IT while protecting the privacy and security of health information and advancing patient safety. ONC will continue to enable innovation in the health IT market by maintaining and establishing core standards, and will inspire trust and confidence in health IT through a robust Certification Program. ONC will establish good governance rules that will ensure that health information can securely follow patients wherever and whenever they seek care. Together, these efforts

will ensure that health IT fulfills its potential to realize the three-part aim of better health, better care, at lower cost.

This Budget builds on the momentum gained over the past few years through the following activities:

Policy Development and Coordination – \$16.0 million (\$4.9 million increase)

These funds will support ONC’s regulatory, policy, convening, and analysis activities, including priority policy initiatives in the areas of HIE governance, privacy and security, and patient safety and usability.

- The increased funding will support implementation of the *Health IT Patient Safety Action and Surveillance Plan* including enhancements to the AHRQ common formats for patient safety event reporting and development of corresponding certification criteria to ensure that CEHRT can be used to report safety events.
- The increased funding will also support nationwide health IT governance efforts by funding emerging private-sector governance collaboratives, publishing a series of governance guides, and launching a monitoring program to ensure that governance goals are being addressed.

Standards, Interoperability, and Certification – \$26.3 million (\$10.0 million increase)

These funds will allow ONC to maintain and develop standards that support an interoperable and secure health IT infrastructure. The increased funding will support standards development and harmonization surrounding *Structured Data Capture, Data Spigot, Patient Data Portability, and Data Provenance*. With the end of Recovery Act funding, this request will allow ONC to hire additional technical staff in order to maintain its core standards capacity while transitioning away from reliance on contractual support. ONC will continue to provide the leadership, technical expertise, and tools required by implementers to enable sustainable and robust HIE throughout the nation. This request will also ensure continued operation of the ONC Health IT Certification Program, inspiring confidence, trust, and innovation in health IT.

Adoption, Utilization, and Meaningful Use of Health IT – \$14.5 million (\$3.6 million increase)

These funds will enable ONC to continue to support providers in successfully adopting and implementing health IT systems; monitor and evaluate economic data and market trends concerning the adoption and meaningful use of EHRs; empower consumers through the use of health IT; and inform stakeholders, media, and the public. The increased funding will transition the infrastructure of the Health Information Technology Research Center (HITRC) and the Customer Relations Management (CRM) Tool, developed with Recovery Act funding, to a permanent infrastructure in support of adoption activities. As adoption rates accelerate, ONC will begin focusing on developing and distributing best practices to providers and consumers in order to help them make the most of their health IT investments to improve patient care, population health, and increase the value of every health dollar.

Agency-Wide Support – \$21.1 million (\$1.8 million decrease)

These funds will be used to provide central services and operational support to ONC’s program offices. The decrease reflects improved administrative efficiencies.



## Overview of Performance

ONC monitors a number of health system research and performance measures that contextualize and inform the government's strategic planning and performance evaluation of the national health care infrastructure and Federal health IT programs. The performance measures presented in the Performance Appendix (page 43) demonstrate some key trends showing the:

### Section 1 – Trends in EHR adoption and Health Information Exchange (HIE) activity

- 1.1 EHR adoption is accelerating health IT-enabled delivery system reform, as exemplified by major increases in EHR adoption statistics. ONC estimates that by 2014, 65 percent of non-federal acute care hospitals and primary care physicians will have at least basic electronic health records.
- 1.2 EHR systems that are being implemented now include more functionalities, as evidenced by growth in adoption of “comprehensive” EHRs as compared to “basic” EHRs.
- 1.3 Stakeholder networks are being leveraged to enable HHS to govern at the pace of technology, as shown through the work of ONC's Federal Advisory Committees.
- 1.4 EHR and HIE market places are robust and active, as shown by vendor participation in the EHR Certification Program, which reached 1,758 unique products in March 2013.

### Section 2 – Success of ONC and HITECH programs as health system modernization change agents

- 2.1 CMS EHR Incentive Programs have had strong starts, with more than two thirds of eligible professionals and over 80 percent of eligible hospitals already on the pathway to demonstrating Meaningful Use.
- 2.2 RECs are accelerating the drive towards Meaningful Use by reaching out to priority groups of the nation's primary care providers. As of March 2013, the RECs have assisted over 107,000 primary care providers with adopting an EHR and working towards Meaningful Use.
- 2.3 State HIE Program is improving collaboration and capacity to promote information exchange by States their health systems.
- 2.4 Health IT Workforce have helped strengthen the nationwide infrastructure for providing technical assistance and leadership to the health care community as it transitions towards the greater and more meaningful use of EHRs. Almost 17,000 health IT professionals have completed ONC workforce training programs by December 2012.
- 2.5 Strategic Health IT Advanced Research Projects (SHARP) Program is developing innovative solutions to address major challenges in the use of EHRs.
- 2.6 Beacon Communities are showing real-life examples of how greater health IT adoption can contribute to improvements in quality of care for patients.

## **BUDGET EXHIBITS**

### **Appropriations Language**

*For expenses necessary for the Office of the National Coordinator for Health Information Technology, including grants, contracts, and cooperative agreements for the development and advancement of interoperable health information technology, [\$26,246,000] \$20,576,000: Provided, That in addition to amounts provided herein, [\$40,011,000] \$56,307,000 shall be available from amounts available under section 241 of the PHS Act: Provided further, That health information technology user fees collected in FY 2014, as provided in this Act, shall be credited to this appropriation as offsetting collections to this account, to remain available until expended.*

*Note.--A full-year 2013 appropriation for this account was not enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 112-175). The amounts included for 2013 reflect the annualized level provided by the continuing resolution.*

## Language Analysis

Language Provision	Explanation
<p><i>Provided further, That health information technology user fees collected in FY 2014, as provided in this Act, shall be credited to this appropriation as offsetting collections to this account, to remain available until expended.</i></p>	<p>Provides ONC the authority to collect and spend user fees authorized in the general provision below.</p>
<p><i>SEC. 223. (a) Health Information Technology User Fees. The Secretary of HHS shall prescribe by regulation, for application in the current fiscal year and in subsequent fiscal years, a schedule of fees for certification of health information technology as established by Section 300jj-11(c)(5) of Title 42. The fees shall be paid by health information technology vendors based on the fee structure established by the Secretary and published in the Federal Register. The Secretary shall periodically update this schedule of fees through a notice in the Federal Register. This fee structure shall be designed to be sufficient to recover costs associated with the administration of certification programs authorized by Section 300jj-11(c)(5) of Title 42, including the costs for health information technology standards, testing and certification, and improving the efficiency of certification programs.</i></p> <p><i>(b) Collection Procedures. The Secretary shall prescribe procedures to collect the fees. The Secretary may, for the purpose of collecting fees, use the services of a department, agency, or instrumentality authorized by the National Coordinator to perform the certification of health information technology in accordance with Section 300jj-11(c)(5) of Title 42, and may reimburse such department, agency, or instrumentality a reasonable amount for its services.</i></p> <p><i>(c) Collection, Deposit, and Use.</i></p> <p><i>(1) Fees collected under this section shall be deposited in the HHS Office of the National Coordinator for Health Information Technology account as offsetting collections.</i></p> <p><i>(2) Such fees shall be collected and available only to the extent and in such amounts as provided in advance in appropriations acts.</i></p>	<p>Authorizes the Certified Electronic Health Record Technology user fee collections to the Office of the National Coordinator for Health Information Technology to use for EHR certification and standards development.</p>

## Amounts Available for Obligation

	FY 2012 Actual	FY 2013 Annualized CR	FY 2014 President's Budget
General Fund Discretionary Appropriation			
Appropriation (L/HHS, Ag, or, Interior).....	61,257,000	61,225,917	77,883,000
Across-the-board reductions (L/HHS, Ag, or Interior)	-31,083		
Across-the-board increase (P.L. 112-175).....		374,703	
Subtotal, Appropriation (L/HHS, Ag, or Interior)....	61,225,917	61,600,620	77,883,000
<b>Total, Discretionary Appropriation.....</b>	<b>61,225,917</b>	<b>61,600,620</b>	<b>77,883,000</b>
<u>Unobligated Balances :</u>			
Unobligated balance, Recovery Act start of year.....	3,740,000	1,526,277	0
Unobligated balance, Recovery Act end of year.....	1,526,277	0	0
<b>Total obligations .....</b>	<b>64,965,917</b>	<b>63,126,897</b>	<b>77,883,000</b>
<b>Obligations less ARRA.....</b>	<b>61,225,917</b>	<b>61,600,620</b>	<b>77,883,000</b>

## Summary of Changes

dollars in thousands

2012	Total estimated budget authority.....	16,415
2014	Total estimated budget authority.....	20,576
	Net Change budget authority.....	+4,161

	FY 2012 Enacted		FY 2014 PB		FY 2014 +/- FY 2012	
	FTE	BA	FTE	BA	FTE	BA <sup>1/</sup>
<b>Increases:</b>						
A. Program:						
1. Standards, Interoperability, and Certification.....	39	5,784	50	9,167	+11	+3,383
2. Agency Wide Support.....	50	10,631	59	11,409	+9	+778
<b>Subtotal, Program Increases.....</b>	<b>89</b>	<b>16,415</b>	<b>109</b>	<b>20,576</b>	<b>+20</b>	<b>+4,161</b>

1/ totals may not add due to rounding.

## Budget Authority by Activity

(dollars in thousands)

	FY 2012 Actual	FY 2013 Annualized CR	FY 2014 President's Budget
1. Policy Development and Coordination			
Budget Authority.....	-	-	-
PHS Evaluation Funds.....	11,161	14,210	16,014
<b>Total, Policy Development and Coordination</b>	<b>11,161</b>	<b>14,210</b>	<b>16,014</b>
2. Standards, Interoperability, and Certification			
Budget Authority.....	5,784	6,054	9,167
PHS Evaluation Funds.....	10,507	10,730	16,090
User Fee.....	-	-	1,000
<b>Total, Standards, Interoperability, and Certification</b>	<b>16,291</b>	<b>16,784</b>	<b>26,257</b>
3. Adoption, Utilization, and Meaningful Use			
Budget Authority.....	-	-	-
PHS Evaluation Funds.....	10,943	10,287	14,535
<b>Total, Adoption, Utilization, and Meaningful Use</b>	<b>10,943</b>	<b>10,287</b>	<b>14,535</b>
4. Agency-Wide Support			
Budget Authority.....	10,631	10,361	11,409
PHS Evaluation Funds.....	12,199	9,959	9,668
<b>Total, Agency-Wide Support</b>	<b>22,830</b>	<b>20,320</b>	<b>21,077</b>
Total, ONC			
Total Budget Authority.....	16,415	16,415	20,576
Total PHS Evaluation Funds.....	44,810	45,186	56,307
User Fee.....	-	-	1,000
<b>Total, Program Level</b>	<b>61,225</b>	<b>61,601</b>	<b>77,883</b>
FTE	159	191	191

**Authorizing Legislation**  
(dollars in thousands)

	FY 2012 Amount Authorized	FY 2012 Enacted	FY 2014 Amount Authorized	FY 2014 Pres. Budget
Health Information Technology				
Activity:				
1. Health Information Technology PHS Act 42 U.S.C. 201.....	Indefinite	\$16,415	Indefinite	\$20,576
2. PHS Evaluation Funds (non- add) PL 111-117.....	Indefinite	\$44,811	Indefinite	\$56,307
3. User Fee		\$0	Indefinite	\$1,000
Total request level.....		\$61,226		\$77,883

## Appropriations History Table

(dollars in thousands)

	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
<b>FY 2006</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$75,000	\$58,100	\$32,800	\$42,800
PHS Evaluation Funds.....	\$2,750	\$16,900	\$12,350	\$18,900
Rescissions (P.L. 109-148).....				-\$428
Transfer to CMS.....				-\$29
Subtotal.....	\$77,750	\$75,000	\$45,150	\$61,243
<b>FY 2007</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$89,872	\$86,118	\$51,313	\$42,402
PHS Evaluation Funds.....	\$28,000	\$11,930	\$11,930	\$18,900
Subtotal.....	\$117,872	\$98,048	\$63,243	\$61,302
<b>FY 2008</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$89,872	\$13,302	\$43,000	\$42,402
PHS Evaluation Funds.....	\$28,000	\$48,000	\$28,000	\$18,900
Rescissions (P.L. 110-160).....				-\$741
Subtotal.....	\$117,872	\$61,302	\$71,000	\$60,561
<b>FY 2009</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$18,151	\$43,000	\$60,561	\$43,552
PHS Evaluation Funds.....	\$48,000	\$18,900	\$0	\$17,679
ARRA (P.L. 111-5).....				\$2,000,000
Subtotal.....	\$66,151	\$61,900	\$60,561	\$2,061,231
<b>FY 2010</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$42,331	\$0	\$42,331	\$42,331
PHS Evaluation Funds.....	\$19,011	\$61,342	\$19,011	\$19,011
Subtotal.....	\$61,342	\$61,342	\$61,342	\$61,342
<b>FY 2011</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$78,334	\$69,842	\$59,323	\$42,331
PHS Evaluation Funds.....	\$0	\$0	\$19,011	\$19,011
Rescissions (Secretary's).....				-\$85
Subtotal.....	\$78,334	\$69,842	\$78,334	\$61,257



	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
<b>FY 2012</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$57,013	\$0	\$42,246	\$16,446
PHS Evaluation Funds.....	\$21,400	\$28,051	\$19,011	\$44,811
Rescissions (P.L. 112-74).....				-\$31
Subtotal.....	\$78,413	\$28,051	\$61,257	\$61,226
<b>FY 2013</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$26,246	\$16,415	\$16,415	
PHS Evaluation Funds.....	\$40,011	\$44,811	\$49,842	
Subtotal.....	\$66,257	\$61,226	\$66,257	
<b>FY 2014</b>				
<u>General Fund Appropriation:</u>				
Base.....	\$20,576			
PHS Evaluation Funds.....	\$56,307			
User Fee.....	\$1,000			
Subtotal.....	\$77,883			

## NARRATIVE BY ACTIVITY

### Policy Development and Coordination

(dollars in thousands)

	FY 2012 Actual	FY 2013 Annualized CR	FY 2014 President's Budget	FY 2014 (+/-) FY 2012
Budget Authority	-	-	-	+0
PHS Evaluation Funds	11,161	14,210	16,014	+4,853
Total Program Level	11,161	14,210	16,014	+4,853
FTE	27	35	35	+8

Authorizing Legislation:

PHS Act 42 U.S.C. 201

Allocation Method:

Contract, Cooperative Agreement, Grant

#### **Program Description and Accomplishments**

ONC coordinates the policies and activities necessary to develop a robust and interoperable health IT infrastructure that will enable the transformation of health care delivery in the United States. In consultation with a broad range of health IT stakeholders, ONC sets the direction of federal health IT policy and provides a policy framework for emerging activities that emanate from the use of electronic health information.

ONC ensures that health IT policies promote confidence and trust in health IT by protecting the privacy and security of health information and integrating clinical best practices in every phase of health IT development and implementation. ONC carries out these functions through its Chief Privacy Officer (CPO) and Chief Medical Officer (CMO). CPO has the statutory role of coordinating and implementing privacy and security protections found in the Health Insurance Portability and Accountability Act (HIPAA) as well as the HITECH Act. CMO ensures that federal policies on health IT incorporate a clinical perspective that promotes patient safety and health IT usability. Within their respective areas of expertise, CPO and CMO monitor current and emerging issues; identify weaknesses and gaps in existing policies; formulate solutions; and provide guidance to federal agencies and stakeholders.

#### Health IT Policy

ONC ensures a coordinated and effective approach to federal health IT policy. ONC maintains the *Federal Health IT Strategic Plan*, monitors progress towards the plan's objectives, and works with its partners to align their activities with national goals and priorities. Using its unique convening authority, ONC brings together diverse stakeholders to forge consensus-based solutions to key health IT policy issues. ONC provides analysis and subject-matter expertise to leaders and policy-makers at all levels of government, and supports a variety of White House, Congressional, and inter-departmental initiatives to leverage health IT to meet government-wide goals and objectives.

ONC ensures that federal health IT policies are transparent and responsive to input from the private and non-profit sector stakeholders in the health IT and health care communities. To this end, ONC maintains two Federal Advisory Committee Act (FACA) bodies (advisory committees), the Health IT Policy Committee (HITPC) and Health IT Standards Committee (HITSC). The members of the HITPC are appointed by the Comptroller General of the United States, the Secretary of HHS, the Majority and Minority leaders of the Senate, and the Speaker and Minority leader of the House of Representatives. The

HITECH Act further specified that the HITSC include providers, ancillary healthcare workers, consumers, purchasers, health plans, technology vendors, researchers, relevant federal agencies, and individuals with technical expertise on health care quality, privacy and security, and HIE. To further enrich the advice they provide, each advisory committee maintains several workgroups that incorporate the perspectives of additional stakeholders from government and the private sector. ONC solicits recommendations from the HITPC in order to inform its policy decisions and guide the development of pilots, studies, and other programs that are used to inform future stages of policy development. ONC works with the HITSC to ensure that the standards, implementation specifications, and certification criteria established by the Secretary through regulation support federal health IT policies and are responsive to the needs of the health IT community and marketplace.

Accomplishments include:

- In August 2012, the Secretary promulgated final rules governing Stage 2 of the Meaningful Use Programs (MU Stage 2), including the 2014 Edition Standards, Implementation Specifications, and Certification Criteria for EHR Technology. These rules, developed jointly by ONC and CMS, were heavily informed by the work of the advisory committees, CPO, and CMO. MU Stage 2 represents a major step forward in advancing the secure exchange of health information between providers and patients to support better care across the nation. Highlights of MU Stage 2 include:
  - Common standards and implementation specifications that will facilitate greater and more robust HIE. By 2014, providers will have to demonstrate, and vendors will have to support, the actual exchange of structured care summaries with other providers — including across vendor boundaries — and with patients.
  - New and enhanced clinical quality measures for the capture, calculation, and reporting of clinical quality measure data.
  - A new focus on patient safety that will require vendors to publicly identify a method of ensuring user-centered design of eight certification criteria that have a high likelihood of helping to prevent medical errors.
  - Enhanced privacy and security protections, including a new emphasis on encryption and securing mobile devices.
  - Greater patient access to health information through the requirement that patients be able to view, download, and transmit their health data electronically.
- In collaboration with the HITPC Meaningful Use Workgroup, ONC explored methods for integrating patient generated health data with CEHRT. ONC recently commissioned a report to better understand this emerging landscape.
- In 2012, ONC convened experts in the Long Term and Post Acute Care (LTPAC) community to assess and subsequently publish a whitepaper on the applicability of MU Stage 2 functionality for these providers and health IT vendors.

#### Governance of Health Information Exchange

Effective governance “rules of the road” are essential to enabling trusted exchange of information to emerge. As providers and patients increasingly engage and seek benefit from interoperable health IT, governance and oversight entities will have a critical role in aligning regional and state exchange initiatives with national priorities; reducing implementation costs; ensuring privacy and security of electronic health information; and establishing the policies, interoperability requirements, and business practices that will allow information to follow patients between care settings and across organizational, vendor, and geographic boundaries. ONC works with states and communities, health information organizations (HIOs), and other entities currently serving in governance and oversight roles to promote emerging good governance practices.

Accomplishments include:

- Issued a request for information (RFI) to stakeholders seeking input on whether ONC should establish a regulatory framework for HIE governance. Based on responses that there are already organizations engaged in HIE governance activities, ONC decided to work with these entities rather than pursue a regulatory approach to governance.
- Issued a Funding Opportunity Announcement (FOA) that will allow ONC to work collaboratively with existing HIE governance entities to develop and adopt policies and practices that support robust, secure, and interoperable exchange.
- Hosted open listening sessions on governance of HIE to provide opportunities for a wide range of stakeholders to describe their issues, experience, priorities, and critical concerns.
- The HITPC and HITSC held a joint hearing to further discuss the current state of governance of HIE. The hearing highlighted, among other topics, the nature and scope of existing governance policies and practices, the impact of governance on HIE, and the opportunities to strengthen governance at multiple levels.

### Privacy and Security

Privacy and security are the foundation upon which trust in health information and participation in HIE is built.<sup>1</sup> Anticipating the need for clear and coordinated federal policy with respect to the privacy and security of electronic health information, Congress established the position of CPO to advise the National Coordinator and coordinate privacy, security, and data stewardship policy with state and regional efforts, federal agencies, and foreign countries. These entities frequently solicit CPO's expertise and assistance in navigating the multifarious legal and regulatory issues surrounding the privacy and security of electronic individually identifiable health information.

Privacy and security protections are a key component in the development of health IT policy, standards, and adoption strategies. Accordingly, CPO has developed a flexible, iterative process for assessing, prioritizing, and implementing privacy and security-related initiatives on behalf of ONC. CPO receives consensus recommendations on privacy and security from a broad range of stakeholders, including the advisory committees, the HHS Inter-Division Privacy and Security Task Force, and the Federal Interagency Health IT Task Force. CPO receives input from ONC's grantees; solicits feedback on emerging issues through public roundtables; and determines privacy and security priorities through the analysis of public surveys and government data. CPO prioritizes its privacy and security work to meet statutory deadlines for implementing the Meaningful Use Programs as well as Patient Protection and Affordable Care Act (ACA) initiatives.

To ensure that privacy and security policies are consistently and effectively implemented, ONC develops plain language guidance and toolkits that assist vendors, providers, and consumers in adopting and utilizing privacy and security practices. These efforts are supported by an aggressive communications campaign designed to educate providers, vendors, patients, business associates, and other stakeholders on important aspects of health IT privacy and security.

Accomplishments include:

- Contributed to HHS rulemaking on Modifications to the HIPAA Privacy and Security Rules. The final rule was promulgated in January 2013 and implements statutory amendments under the

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<sup>1</sup> Privacy refers to policies and practices that may restrict the use and disclosure of health information, such as requiring individuals' permission to share their health information. Privacy also encompasses individuals' rights to access their information, request corrections, and to have notice of how their information is being used and disclosed. Security refers to protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording, or destruction. Information security is primarily focused on ensuring the confidentiality, integrity, and availability of data, however and wherever it is transmitted, maintained, or received.

HITECH Act to strengthen the HIPAA privacy and security protections for individuals' health information maintained in EHRs.

- Worked closely with CMS to incorporate privacy, security, and data stewardship policies in the final rules governing new modes for exchanging and analyzing health information under the ACA.
- Provided input from the health sector perspective to the National Science & Technology Committee Subcommittee on Privacy and Internet Policy into the White House Internet Privacy Policy, *Consumer Data Privacy in a Networked World*.
- Coordinated with the State Department and the HHS Office of Global Affairs to provide input on the U.S. response to the European Commission draft Data Protection Regulation. HHS suggested a number of revisions that addressed the impact of proposed regulation on health research and public health efforts, which were incorporated in the final draft regulation.

### *Safeguarding Health Information*

ONC is charged with ensuring that electronic health information is secure and protected. ONC addresses security with multiple strategies, including provider education, assistance, and outreach; threat and vulnerability analysis; mitigation planning and implementation; and identification of breach prevention technology. ONC also monitors changes in consumers' perception of the privacy and security of health information, which is essential to developing trust in health IT and designing programs to safeguard health information. Accomplishments include:

- Working with the HITPC, CPO identified lost and stolen unencrypted mobile devices as a major source of health information breaches. To address this vulnerability, ONC undertook a multi-pronged approach designed to ensure the privacy and security of health information stored or accessed through mobile devices.
- Launched an initiative to educate clinicians on how to protect and secure health information when using a mobile device. To support this initiative, ONC developed a resource center<sup>2</sup> comprising educational videos, tips, and tools about HIPAA Privacy and Security Rule safeguards and other good privacy and security practices for mobile devices.
- Developed protocols to test the security of health information stored in popular mobile devices and determine what additional security measures are needed. This analysis was used to develop guidelines for configuring mobile devices to improve "out of the box" security. These device-specific guidelines were presented to stakeholders and made publicly available on HealthIT.gov.
- Fielded a national survey to measure consumer privacy and security concerns and analyze changes in consumer perception over time.

### *Provider and Patient Identity Management*

In close coordination with the advisory committees, ONC investigates and identifies potential means for providing a high level of assurance that providers and patients are who they represent they are (identity management) when they are accessing and exchanging health information. Accomplishments include:

- Hosted a hearing on patient credentialing, the process by which a patient's identity in an electronic environment is verified. To meet MU Stage 2 requirements, providers will need to give their patients the ability to electronically view, download, and transmit relevant parts of their health record stored in CEHRT. Protecting and securing patients' health information through electronic access and email is therefore a priority. ONC will address trusted remote access to health information and identify methods for implementing digital credentials without burdening providers or consumers.

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<sup>2</sup> Available at <http://www.HealthIT.gov/mobiledevices>.

### *Patient Control over Use and Disclosure of PHI*

To mitigate the risk of sharing information a patient does not want shared, CEHRT must be able to record patients' choices concerning the health information they wish to share, and must be able to segment patients' health records in order to effect those choices. As policies in this area evolve, ONC funds pilots to demonstrate the feasibility of proposed policy and technical solutions that have not been proven in the marketplace, and conducts an annual survey to measure consumer confidence. These activities bolster consumer confidence in the privacy and security of health IT and health information. Accomplishments include:

- Through the *eConsent Trial* initiative, ONC developed, piloted, and evaluated innovative ways to meaningfully inform individuals about their choices regarding how their health information is shared, and to electronically capture individuals' choices. Findings were incorporated in educational materials and tools distributed to providers and health IT implementers.
- Launched a *Data Segmentation for Privacy* initiative through the Standards and Interoperability (S&I) Framework to explore the ability of EHRs to segment health information (i.e., isolate and send only specific parts of a medical record). The initiative identified current standards that could be used to "tag" sensitive information protected by law or patient choices. Using these standards, ONC launched a pilot to exchange sensitive information (i.e., information related to substance and alcohol abuse treatment, protected by 42 CFR Part 2) that had been tagged to alert the receiving system not to further disclose the information without patient consent.

### Patient Safety and Health IT Usability

When fully integrated into health care delivery organizations, health IT has enormous potential to reduce medical errors and increase health care quality and safety. However, as with other new technologies, health IT creates new risks of harm that must be identified and mitigated. Using a comprehensive approach, ONC works to ensure that health IT is safely designed and implemented, that medical staff are properly informed and trained to use their health IT systems, and that processes are in place to identify and correct unsafe conditions or unsafe uses of health IT.

### *Patient Safety Interventions*

The Institutes of Medicine (IOM) published a report in November 2011 in which it presented recommendations on the roles of federal agencies and the private sector in ensuring the safety of EHRs and HIE. In response to this report, ONC worked with its HHS partners to develop the *Health IT Patient Safety Action and Surveillance Plan* (Health IT Safety Plan). The plan seeks to expand and strengthen patient safety efforts across government programs and the private sector. Accomplishments include:

- Launched the SAFER project to develop checklists (SAFER Guides) for safe and efficient health IT implementations based on existing research, expert opinion, stakeholder engagement, and field work. The Guides will enable everyone responsible for safety in health systems and ambulatory settings to implement safety programs for health IT in critical areas.
- Launched an S&I Framework initiative to refine and expand the AHRQ common formats, a technical standard for data capture, for capture of patient safety events related to health IT.

### *Health IT Usability*

Usability is an essential component of any safe system. The usability of health IT must be at the forefront of ONC's policy, program, and coordination activities as the agency begins implementing the Health IT Safety Plan. ONC works with NIST and other federal partners to better define the boundaries of usability measurement and methods for enhancing the usability of CEHRT. Accomplishments include:

- Incorporated new "Safety-Enhanced Design" and "Good Manufacturing Process" requirements in the standards and certification criteria for MU Stage 2.

- Co-sponsored the Annual Usability and Human Factors stakeholder meeting with NIST with goal of facilitating improvement of usability and safety of health IT.
- Funded a *Strategic Health IT Advanced Research Projects (SHARP)* initiative that enabled the creation of usability metrics, EHR usability assessment tools, and example toolkits to demonstrate optimal user experience to EHR developers.

### *Clinical Quality Improvement*

Health IT has the potential to drive enormous improvements in clinical quality by providing the tools providers need to identify high priority or high risk conditions, implement solutions, and measure impact. In particular, through clinical decision support (CDS) and clinical quality measures (CQMs), providers can benefit from the knowledge of clinical best practices learned from advances in digitally supported clinical, biomedical, and health services research. Electronically generated quality measures make it possible to quantify defined outcomes in terms of clinical best practices so that providers can monitor health outcomes. CDS encompasses a variety of tools to improve health outcomes by enhancing decision-making in the clinical workflow. ONC provides subject matter expertise and technical assistance to various federal programs that are working to improve the availability and utility of CDS and CQM. ONC also promotes the development and widespread implementation of interactive data technologies that will make it easier for providers to share CDS interventions and CQMs. Accomplishments include:

- Launched the “Health-eDecisions” initiative through the S&I Framework. This initiative will support efforts by ONC and AHRQ to standardize the publication of clinical guidance so that it can be readily consumed by CEHRT, thereby accelerating the delivery of knowledge from the bench to the bedside.
- Completed the “Advancing CDS” project to accelerate implementation and effective use of CDS interventions by improving CDS functionality and usability, sharing successful CDS interventions, and identifying CDS-related gaps and goals across specific clinical specialties.
- Developed a *Roadmap for National Action on Clinical Decision Support*, which recommends a series of activities to improve CDS development, implementation, and use throughout the United States.
- Collaborated with the National Library of Medicine (NLM) to create the Quality Data Element Catalog, which provides clear guidance to EHR developers on the data elements that they are required to capture so that providers can accurately measure their quality of care.
- Developed Cypress,<sup>3</sup> an open-source tool for certification and pre-certification testing of clinical quality measures in EHRs.

### Funding History

FY 2010	\$10,856,000
FY 2011	\$11,200,000
FY 2012	\$11,616,000
FY 2013	\$14,210,000

### **Budget Request**

ONC requests \$16.0 million for policy development and coordination activities, an increase of \$4.9 million above the FY 2012 enacted level. The request includes funding for 35 FTEs, an increase of 8 above the FY 2012 enacted level.

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<sup>3</sup> Available at <http://projectcypress.org>.

This request provides funding for continued support of the advisory committees and their work groups, as well as resources to support ONC's core regulatory, convening, and analysis activities. This request will also support emerging priority initiatives in the areas of HIE governance, privacy and security, and patient safety and usability.

#### Health IT Policy

In FY 2014, the advisory committees will continue to focus their efforts on ensuring widespread adoption of health IT and HIE, optimizing health IT systems for meaningful use, and advancing interoperability. As adoption rates continue to accelerate, the advisory committees will focus on pursuing policy and standards solutions that ensure privacy and security, increase consumer engagement, and promote widespread exchange of health information between providers, public health agencies, and payers. These policies will also provide the data infrastructure to increase patient safety, improve the effectiveness of health interventions and research, and provide for accountable payment models.

In FY 2014, ONC will be developing the notice of proposed rulemaking (NPRM) and final rule for MU Stage 3 standards, implementation specifications, and certification criteria for EHRs. MU Stage 3 will focus on transforming health care and population health through health IT and demonstrating improvements in care, efficiency, and population health.

#### Governance of Health Information Exchange

In FY 2014, ONC will convene key stakeholder governance entities through the National eHealth Collaborative to identify key issues and common problems in the governance of HIE and the best ways to address them. ONC will fund a number of emerging private-sector governance collaboratives, and publish a series of governance guidelines for effective and trusted HIE. Through these efforts, ONC will guide emerging governance models on the policies and practices that should be considered as part of their approach to governance. ONC will also launch a monitoring program to ensure the governance goals are being addressed. ONC will continue to use its existing authorities and convening powers to create consensus and provide guidance and tools to address specific barriers to interoperability and exchange, while continuing to evaluate how and what consumer protections can be appropriately applied to HIE through existing regulatory frameworks.

#### Privacy and Security

In FY 2014, ONC will continue to inspire confidence and trust in health IT by ensuring that electronic health information is private and secure wherever it is transmitted, maintained, or received. Through this request, ONC will continue working with the advisory committees and other federal partners, the states, and foreign countries to formulate and prioritize privacy and security policies by evaluating and addressing emerging privacy and security policy concerns. In FY 2014, ONC's work on Privacy and Security will include:

- *Safeguarding Health Information*: ONC will provide technical assistance to vendors, providers, consumers, and others on safeguarding health information through education and technical assistance to help them ensure that their health IT systems and workflows are protected by adequate safeguards.
- *Patient and Provider Identity Management*: ONC will continue its work on patient and provider identity management to assure that the correct health information is associated with the correct patients. ONC will monitor prevailing and new identity management practices to develop evidence about their effectiveness that will be distributed to stakeholders.
- *Patient Control Over Use and Disclosure of PHI*: ONC will continue work on data segmentation policies and standards that give consumers control over use and disclosure of their health information when it is stored and exchanged. This includes educating patients about their rights, and HIOs about their duties when participating in HIE.



### Patient Safety and Health IT Usability

In FY 2014, ONC will continue using a comprehensive approach to ensure that health IT is safely designed and implemented, that it is safely integrated into clinical workflows, and that processes are in place to identify and correct unsafe conditions or uses of CEHRT. Activities will include:

- *Patent Safety Interventions*: ONC will develop and administer policies and programs to enable health IT developers, implementers, and users to ensure that the use of health IT advances patient safety.
- *Health IT Usability*: ONC will continue to work with NIST, AHRQ, and other federal partners to better define the boundaries of usability measurement and methods for optimizing the usability, safety, and efficiency of health IT.
- *Clinical Quality Improvement*: ONC will continue to advance CQI with a focus on electronic reporting of CQMs and measurement gaps outlined in the *National Quality Strategy*.

### **Outputs and Outcomes Table**

<b>Measure</b>	<b>Recent Result / Target for Recent Result / (Summary of Result)</b>	<b>FY 2012 Target</b>	<b>FY 2014 Target</b>	<b>FY 2014 Target +/-FY 2012 Target</b>
1.A.1 Percent of office-based physicians who have adopted electronic health records (basic) <sup>4</sup>	FY 2012: 40% (Target Met)	40%	60%	+20 Percentage Points
1.A.2 Increase the percent of office-based primary care physicians who have adopted electronic health records (basic) (NAMCS)	FY 2012: 44% (Target Not Met but Improved)	45%	65%	+20 Percentage Points
1.F.1 Percent of Americans who have been given electronic access to any part of their health care record by their health care provider (ONC)	FY 2012: 19%	Baseline	35%	+16 Percentage Points
1.F.2 Percent of Americans who strongly or somewhat agree that the privacy and security measures taken by providers establish reasonable protections for their electronic health records (ONC) <sup>5</sup>	FY 2012: 80%	Baseline	82%	+2 Percentage Points

<sup>4</sup> National Electronic Health Records Survey (NEHRS) formerly entitled NAMCS Electronic Medical Records Supplement.

<sup>5</sup> ONC Privacy and Security Attitudes Survey.

**Standards, Interoperability, and Certification**  
(dollars in thousands)

	<b>FY 2012 Actual</b>	<b>FY 2013 Annualized CR</b>	<b>FY 2014 President's Budget</b>	<b>FY 2014 (+/-) FY 2012</b>
Budget Authority	5,784	6,054	9,167	+3,383
PHS Evaluation Funds	10,507	10,730	16,090	+5,583
User Fee	-	-	1,000	+1,000
Total Program Level	16,291	16,784	26,257	+9,966
FTE	39	50	50	+11

Authorizing Legislation:  
Allocation Method:

PHS Act 42 U.S.C. 201  
Contract, Cooperative Agreement, Grant

**Program Description and Accomplishments**

ONC leads a variety of efforts designed to accelerate progress towards the interoperability of health IT systems. Interoperability refers to the ability of two or more health IT systems or components to not only exchange information, but to be able to meaningfully incorporate and use the information that has been exchanged. Through investments in standards development and harmonization, ONC engages health care, technology, and standards stakeholders to accelerate industry consensus on the standardization of health data and HIE and establish the core standards, principles, vocabularies, and technical components that will enable the electronic exchange and use of health information. To maximize the impact of these investments, ONC convenes federal agencies and other partners to implement nationwide solutions to HIE, and provides direct technical and financial assistance to states and communities who have committed to developing interoperable health IT infrastructures that support national priorities. Finally, by providing a reliable testing and certification program for EHR technology, ONC builds trust in the health IT marketplace and supports providers' efforts to achieve interoperability and the meaningful use of health IT.

Standards Development and Harmonization

The health IT community looks to ONC to bring together stakeholders to develop scalable, consensus-based standards that solve core data capture, exchange, and interoperability issues. As health IT advances, so do the expectations that ONC will continue and expand its role as a leader and convener. ONC enables scientific innovation while promoting the adoption of interoperable, open, standards-based technologies and architectures that enable health IT users to capture and securely exchange health information with greater ease and at substantially lower cost. In the long term, coordinated standards-based innovation, combined with appropriate policies, will ensure the development of a national health IT infrastructure, providing the foundation for transforming health care.

Through the S&I Framework, ONC has successfully reduced the timeframe for developing standards in some cases as dramatically as from three years to under one year. Using the S&I Framework, ONC regularly convenes a broad community of almost 1,000 stakeholders from across the United States who are working to accelerate industry consensus on the standardization of health IT and HIE. Each year, a number of critical standards and interoperability challenges are resolved through this rigorous process that involves the development of clinically-oriented scenarios and robust use cases; harmonization of interoperability specifications and implementation guidance; provision of real-world experience and

implementer support through new initiatives, workgroups, and pilot projects; and mechanisms for feedback and testing of implementations.

Accomplishments include:

- Developed, balloted, and tested the *Transitions of Care* standard in 12 months, working with over 150 different organizations. This standard enables providers to exchange core summary data as patients move to different care settings when they leave hospitals.
- Launched the *Health-eDecisions* initiative to develop a set of standards to promote the interoperability and scalability of clinical decision support technology. The goal of this project is to allow clinical guidance to be published in a standardized form that EHR technologies can use, saving many thousands of hours and errors associated with manual entry and accelerating the delivery of new clinical knowledge to health providers.
- Developed a single standard for laboratory reporting that enables an EHR technology to accept data directly from reporting laboratories in a common format. This standard was included in the MU Stage 2 regulations.
- Launched the *Automate Blue Button Initiative (ABBI)* initiative that will result in standards and specifications that give patients and vendors access to structured health information for use in developing health IT solutions. CPO will ensure this standard incorporates applicable HIPAA regulations.
- Developed standards for exchanging Prescription Drug Monitoring Program (PDMP) data as well as tools for incorporating electronic PDMP data into prescriber and dispenser workflows.

#### Federal Health Architecture

The Federal Health Architecture (FHA) is a partnership among federal agencies, including the Office of Management and Budget (OMB), HHS, the Department of Defense (DoD), the Department of Veterans Affairs (VA), and the Social Security Administration (SSA). ONC acts as the managing partner, providing technical and administrative support. Through the FHA, federal agencies have joined together to rapidly and efficiently implement government-wide solutions for interoperable and secure HIE that addresses agency business priorities while protecting citizen privacy. The FHA serves the needs of more than 20 federal agencies in domains as diverse as military and veterans' healthcare, public health monitoring, long-term care and disability services, research, tribal health services, and many other critical federal priorities.

Accomplishments include:

- Restructured governance to facilitate strategic and operational alignment within and across federal partner agencies, and development of a strategic plan that articulates the vision of the FHA into the future and the specific program outcomes that will be achieved.
- Integrated standards to support the following federal programs through specification development and updates: DoD/VA Virtual Lifetime Electronic Record (VLER); SSA Disability Determination; CMS End Stage Renal Disease Program; and Electronic Signature for Medical Documentation.
- Implemented a new operating model for the CONNECT program with distinct software development, code maintenance, and community development functions in order to position the program for migration of the CONNECT gateway to full community-development engagement in the open source software community.

#### Nationwide Health Information Network (NwHIN)

The NwHIN is a “toolkit” developed by ONC comprising standards, policies, specifications, and legal arrangements that facilitate secure, trusted, and interoperable HIE. The NwHIN features a robust set of

implementable specifications and vendor-neutral test cases that allow for rapid deployment by HIOs and other entities that implement exchange services.

Using the NwHIN policies and standards, ONC partnered with other federal agencies and non-federal organizations to create a nationwide HIE network called the NwHIN Exchange. The Exchange has allowed participants to improve patient care, streamline disability benefit claims, and improve public health reporting, thus demonstrating the viability of nationwide HIE and serving as a model and source of practical lessons for states and organizations that are planning and implementing their own exchange services. In FY 2013, the Exchange transitioned to a public-private partnership that will manage exchange services going forward.

### Health Information Exchange

The ability to exchange health information electronically is at the core of efforts to improve health care through the use of interoperable health IT. In order for health IT to continue to advance the goals of meaningful use, improve population health, and support new care and payment models, a robust HIE infrastructure must be in place so that health information can follow patients between care settings and be exchanged across organizational, vendor, and geographic boundaries. ONC develops the technical components and building blocks for HIE and provides the leadership and resources needed to accelerate the nationwide adoption and utilization of HIE. These building blocks toolkits comprise predefined sets of standards, protocols, legal agreements, specifications, and services that can be readily deployed by HIOs and other entities to manage the exchange of health information or provide exchange-related services and solutions. ONC also administers two cooperative agreement programs under the Recovery Act that provide direct assistance to states and communities to build and strengthen their health IT infrastructure and exchange capabilities.

Accomplishments include:

- Issued a joint request for information (RFI) with CMS seeking input on ways to further accelerate and advance interoperability and HIE beyond what is currently being done through ONC programs and the Meaningful Use Programs. The RFI will allow ONC to explore potential policy and programmatic changes using existing HHS authorities in order to further drive HIE to support more person-centered, coordinated, and value-driven care.
- Increased the proportion of hospitals that have access to a health information exchange organization from 51 to 58 percent in FY 2012.
- Participated in an interagency project sponsored by the Office of National Drug Control Policy (ONDCP) to develop health IT solutions that can reduce prescription drug misuse and overdose. In partnership with the Substance Abuse and Mental Health Services Administration (SAMHSA), ONC launched a PDMP pilot to demonstrate the viability of real-time, electronic coordination among primary care providers, behavioral health specialists, and pharmacies. In order to implement this pilot, ONC developed standards for exchanging PDMP data as well as tools for incorporating electronic PDMP data into prescriber and dispenser workflows. An evaluation of the PDMP pilot will be published in Summer 2013.
- Commissioned and published five detailed reports on various technical and business-related HIE topics in order to provide HIE implementers and policy-makers with a heightened understanding of several high-impact services that can support the sustainability of HIE organizations.
- In collaboration with CPO, developed guidance on a common set of privacy and security rules that will ensure provider and public trust as states pursue rapid progress towards HIE.
- Promoted international HIE through a common set of standards between the U.S. and other countries and continued development of a health data interoperability implementation strategy with ONC's European counterparts, pursuant to a 2010 Memorandum of Understanding between

## HHS and the European Commission on Cooperation Surrounding Health Related Information and Communication Technologies.

### *State HIE Program*

This Recovery Act funded grant program mobilizes the efforts of states to increase the use of HIE by providing a cadre of on-the-ground implementers who are helping to advance and monitor standards adoption across the nation, shorten the timeline to achieve widespread adoption and implementation, and provide a rapid feedback loop to ONC about workflow, policy, and interoperability challenges.

Accomplishments include:

- Assisted 21 states to address exchange disparities by providing much needed assistance to critical access hospitals, long-term care facilities, rural providers, independent labs, and others participants in HIE.
- To date, 43 states have implemented directed exchange; 32 states have implemented query-based exchange (with 20 states achieving state-wide adoption); and 94 percent of the nation's pharmacies have implemented technologies that enable them to actively e-prescribe.<sup>6</sup>

### *Beacon Community Program*

Beacon Communities are areas where clinicians, hospitals, and consumers commit to using health IT and related care delivery tools, such as clinical decision support technologies. ONC has supported 17 Beacon Communities across the United States since 2010. Beacon Communities exchange information across affiliated practices to demonstrate the advantages and barriers to using interoperable EHR systems.

Recovery Act funding for this program will end in FY 2013. Accomplishments include:

- All Beacon Communities demonstrated improvements in care in at least two key measures of population health (e.g., increases in blood pressure control or improvements in cancer screenings), thereby enhancing understanding of how health IT-enabled interventions can support better health at lower cost.
- Beacon Communities extended existing interoperability and HIE infrastructure at the community level to include non-traditional care partners such as public health agencies, LTPAC providers, and schools. Seven communities implemented entirely new exchange solutions. In total, Beacon Communities served over eight million individuals and over 8,500 providers<sup>7</sup>.
- Insights from the Beacon Communities were widely disseminated through published materials, including 150 on-line media clips highlighting Beacon work, nearly 50 in-person and on-line speaking events, and fact sheets for each community published on HealthIT.gov.

### Certification and Accreditation

ONC administers the ONC Health IT Certification Program, a critical step in the rule and standards making process. The use of CEHRT is required in order for providers to demonstrate meaningful use and receive incentive payments under the Meaningful Use Programs. The Certification Program provides vendors and developers with clear criteria for developing their products and provides them with tools for testing their products prior to submitting them for certification.

The Certification Program develops testing procedures and data in accordance with the standards and certification criteria adopted by regulation. ONC accredits separate certification and testing bodies that provide an independent mechanism for vendors to determine if their EHR systems meet the standards and technical requirements for payments under the Meaningful Use Programs. ONC also maintains the Certified Health IT Product List (CHPL)<sup>8</sup>, a public website that uniquely identifies all certified health IT

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<sup>6</sup> ONC Performance Metric

<sup>7</sup> ONC Performance Metric

<sup>8</sup> Available at <http://oncchpl.force.com/ehrcert?q=chpl>

products. As of March 2013, the CHPL includes over 1,750 unique certified EHR products from 945 vendors and developers.

Accomplishments include:

- ONC issued the final rule establishing the Permanent Certification Program (PCP) for Health Information Technology. The PCP accredited five test labs and five certifying bodies through which vendors and developers can test and obtain certification for their health IT products.
- ONC collaborated with NIST to develop testing procedures and data for the certified testing bodies, allowing vendors to ensure their EHR technology is compliant with the regulatory requirements of MU Stage 2.

#### Funding History

FY 2010	\$16,417,000
FY 2011	\$16,809,000
FY 2012	\$16,291,000
FY 2013	\$16,784,000

#### **Budget Request**

ONC requests \$26.3 million to support its standards, interoperability, and certification activities in FY 2014. This represents an increase of \$10.0 million from the FY 2012 enacted level. The request includes funding for 50 FTEs, an increase of 11 above the FY 2012 enacted level.

#### Standards Development and Harmonization

In FY 2014, ONC will continue to develop and update standards that support an interoperable and secure health IT infrastructure. These efforts will build upon recent accomplishments and ensure continued progress towards modernizing the U.S. health IT infrastructure in order to support a transformed health care system. ONC will focus particularly on several high priority areas, including:

- Developing a standard for *Structured Data Capture* that builds on existing data directory standards to improve core interoperability functions;
- Developing a *Data Spigot* standard that will leverage existing standards to allow access to reports and data stored within EHR technology;
- Supporting consumer access through piloting a *Patient Data Portability* standard that allows patients to easily exchange summary level health information, such as immunization, basic medical information, and clinical care summaries; and,
- Continuing work on the *Data Provenance* standards, which allow for health IT to trust the source of information by developing metadata tools that identify the source of the health information (e.g., EHR, PHR).

#### Federal Health Architecture

ONC will continue to act as the managing partner of the FHA. This request will ensure continued coordination and alignment of HHS and ONC health IT investments in support of the FHA, including ongoing standards support and the creation of a shared repository of standards, service descriptions, and interoperability specifications within the S&I Framework to support federal agencies.

#### Health Information Exchange

A top priority for ONC and for the healthcare delivery system is to achieve the same steep adoption curve for standards-based HIE that has occurred for EHR adoption. As direct support of state and community programs closes out, ONC will leverage lessons, insights, and tools developed under the State HIE and

Beacon Community programs in order to support improved HIE. ONC will continue supporting nationwide exchange adoption and utilization by developing consensus-based and open source standards and specifications. ONC will package these technologies with relevant policies, guidance, and legal agreements, and publish the resulting exchange building blocks and toolkits through the National Learning Consortium<sup>9</sup> to assist implementers in rapidly deploying and utilizing HIE. ONC will also continue to work with its HHS partners to develop and align policies and programs to further accelerate HIE in support of new payment and delivery models that will deliver more person-centered, coordinated, and value-driven care.

- *State HIE Program:* In FY 2014, ONC will begin close out operations on schedule for the State HIE Program with direct support provided as part of the Recovery Act.

**Certification and Accreditation**

This request will allow ONC continue to monitor its accredited testing and certification bodies, and support further enhancements to the CHPL. As adoption of health IT has accelerated, ONC has seen a steady increase in both the number of health IT vendors and the volume of health IT products submitted for certification. This trend, coupled with the need to update and guide the development of standards and certification criteria that support new technologies and future stages of meaningful use will substantially increase ONC’s workload. ONC, in partnership with NIST, will continue to expand the Certification Program to ensure CEHRT functions in a manner that is compliant with the standards and certification criteria for the Meaningful Use Programs.

Due to ONC’s increasing workload, this request includes proposal for a new health IT user fee that would provide ONC with the necessary resources to meet the increasing demands of health IT vendors and sustain the impact of its certification and standards work on the health IT marketplace and the health care system. An initial fee level of \$1.0 million is suggested in FY 2014, reflecting the fact that collections would likely begin late in the fiscal year and would be phased in gradually (Appendix B).

**Outputs and Outcomes Table**

<b>Measure</b>	<b>Recent Result / Target for Recent Result / (Summary of Result)</b>	<b>FY 2012 Target</b>	<b>FY 2014 Target</b>	<b>FY 2014 Target +/-FY 2012 Target</b>
1.E.1 Percent of community pharmacies that are capable of exchanging health information electronically <sup>10</sup>	FY 2012: 94%	89%	97%	+8 Percentage Points
1.E.2 Percent of providers prescribing through an electronic health record (EHR)	FY 2012: 86%	Baseline	92%	+6 Percentage Points
1.E.3 Percent of office-based physicians who are electronically sharing any patient health information with other providers	FY 2012: 36%	Baseline	54%	+18 Percentage Points

<sup>9</sup> The National Learning Consortium is discussed below in connection with ONC’s Adoption, Utilization, and Meaningful Use of Health IT activities.

<sup>10</sup> Surescripts.

<b>Measure</b>	<b>Recent Result / Target for Recent Result / (Summary of Result)</b>	<b>FY 2012 Target</b>	<b>FY 2014 Target</b>	<b>FY 2014 Target +/-FY 2012 Target</b>
1.E.4 Percent of office-based physicians who are electronically sharing patient information with any providers outside their organization	FY 2012: 10%	Baseline	40%	+30 Percentage Points
1.E.5 Percent of physicians with capability for patients to view online, download, or transmit information from their medical record	FY 2013: TBD (Baseline)	N/A	TBD	--
1.E.6 Percent of office based physicians who are electronically sharing patient information using a Summary Care Record	FY 2012: 10%	Baseline	30%	+20 Percentage Points
1.E.7 Percent of non-federal acute care hospitals that are electronically exchanging patient health information with any providers outside their organization	FY 2012:58% (Baseline)	Baseline	75%	+17 Percentage Points
1.E.8 Percent of non-federal acute care hospitals that are electronically sharing clinical/summary care records with any providers outside their organization	FY 2012: 35%	Baseline	65%	+30 Percentage Points
1.E.10 Percent of non-federal acute care hospitals that are electronically sharing any patient health information with ambulatory providers that are outside their organization	FY 2012: 51%	Baseline	60%	+9 Percentage Points



**Adoption, Utilization, and Meaningful Use of Health IT**  
(Dollars in Thousands)

	<b>FY 2012 Actual</b>	<b>FY 2013 Annualized CR</b>	<b>FY 2014 President's Budget</b>	<b>FY 2014 (+/-) FY 2012</b>
Budget Authority	-	-	-	+0
PHS Evaluation Funds	10,943	10,287	14,535	+3,592
Total Program Level	10,943	10,287	14,535	+3,592
FTE	43	47	47	+4

Authorizing Legislation:  
Allocation Method:

PHS Act 42 U.S.C. 201  
Contract, Cooperative Agreement, Grant

**Program Description and Accomplishments**

The widespread adoption and meaningful use of health IT is essential to transforming the American health care system from a system that emphasizes transactions to a system that emphasizes improved care, improved population health, and reduced cost.

Prior to the HITECH Act, significant barriers — such as a lack of financing and a trained IT workforce in healthcare, and difficulties integrating EHR technologies with traditional provider workflows — threatened to slow acceptance of EHRs and prevent their utilization. Today, ONC is making substantial progress towards overcoming these barriers. Through strategic investments, effective leadership, and direct engagement with the health IT community, ONC has developed a national network of organizations that are focused on supporting individual providers in adopting and meaningfully using health IT. Through coordinated national strategies, ONC works directly with providers and consumers to improve the use of health IT and health information to make better and more coordinated care decisions.

As the trend towards widespread adoption and utilization of health IT continues, ONC continues to engage patients and other consumers of health care; monitors and evaluates economic data and market trends concerning the adoption and meaningful use of health IT; and works collaboratively with its advisory committees and CMS to raise the bar for subsequent stages of the Meaningful Use Programs by incorporating new objectives and requirements for CEHRT that will drive improvements in outcomes and quality of care.

Provider Adoption Support

ONC engages in a variety of efforts designed to accelerate and supports providers' adoption and utilization of health IT and assist them in achieving meaningful use. ONC also works directly with health IT providers to identify barriers to adoption and develop strategies to mitigate those barriers. By convening providers through the Health IT Research Center (HITRC), directly supporting them through the Regional Extension Centers (REC) Program, and monitoring their progress with the Customer Relations Management (CRM) Tool, ONC provides a full range of services to meet the challenges of utilizing and meaningfully using health IT and EHR technology in particular.

*REC Program*

The REC Program is a Recovery Act-funded grant program serviced by ONC. Recipients of grant funding represent a range of organizations that serve local communities in 62 states and territories throughout the nation. The primary mission of the RECs is to provide on-the-ground assistance for individual and small

providers, critical access hospitals, community health centers, and public providers that require assistance with implementing and maintaining CEHRT. Accomplishments include:

- As of March of this year, the 62 RECs are actively working with close to 132,000 primary care providers and more than 11,000 specialists, surpassing the goal of recruiting 100,000 primary care providers to achieve meaningful use by 2014. Of the providers working with the RECs, over 107,000 are live on an EHR system that had e-prescribing and quality measurement functionality.
- A Government Accountability Office (GAO) report found that Medicare providers working with RECs were over 2.3 times more likely to receive an EHR incentive payment than those who were not.
- The RECs are also working with over 1,164 critical access hospitals (CAHs) and regional hospitals (RHs) with 50 beds or less, which comprise approximately 67 percent of the practices of this size in the country. Of the CAHs and RHs working with RECs, 19 percent achieved meaningful use by the end of 2013.

### *HITRC*

The HITRC uses data and analysis to identify barriers and convene RECs and relevant stakeholders to identify and share best practices in health IT adoption, utilization, and meaningful use. The HITRC, which is funded by the Recovery Act, supports 20 Communities of Practice (CoPs) that focus on such topics as education and outreach, implementation and project management, workflow redesign, vendor selection and management, meaningful use, privacy and security, workforce issues, and public health.

Accomplishments include:

- In 2012, the CoPs had over 6,600 participants, who accessed the HITRC CoP portal over 200,000 times and identified over 200 best practices.
- The HITRC aggregated information from more than 23,000 practice-level barrier reports to identify the major challenges REC providers are experiencing as they work towards meaningful use. These reports were used to identify and address specific trends, such as issues with particular vendors or issues specific to particular practice types.

### *CRM Tool*

The CRM Tool is a nimble business intelligence tool distributed to more than 1,500 partner organizations and grantees that provides near real-time data about the adoption, utilization, and meaningful use of EHR technology. The CRM Tool supplements other provider data sources and tracks program performance and progress towards milestones. Combined with ONC's internal analytical capacity, this data provides feedback that is beyond the realm of anecdotal evidence and can be turned into concrete lessons learned that are used to focus policy and program efforts. Accomplishments include:

- Expanded the use of CRM Tool to federal partners working with the Health Resources and Services Administration (HRSA) in deploying the CRM Tool to track the progress of over 960 of the approximately 1,200 Federally Qualified Health Centers in achieving meaningful use.
- CRM data elements were used in multiple analyses and studies designed to identify barriers and best practices to health IT adoption, utilization, and meaningful use. The CRM Tool was used to collect over 11 million data elements from the over 143,000 providers currently registered with RECs.

### *Workforce Program*

The Workforce Program is a Recovery Act-funded grant program that assists in the establishment and expansion of education programs designed to train a highly skilled workforce of health and IT professionals to effectively establish and utilize secure, interoperable EHR systems. The workforce programs focused on several key resources needed to rapidly expand the availability of skilled health IT professionals who will facilitate the implementation and adoption of health IT in the provider community.

Direct support for the Workforce Program ended on schedule in FY 2013. Convening activities, work groups, and lessons learned were transitioned to the HITRC as a new CoP. Accomplishments include:

- As of December 2012, the program has exceeded its original goals of training more than 16,000 community college students and more than 983 students from the university based program.
- With assistance from CPO, ONC incorporated training exercises that meet the regulatory expectations and requirements for the HIPAA Privacy and Security Rule regulations. These trainings include a series of security-focused interactive games to be provided free of charge to providers and staff throughout the country. These interactive modules depict various real-world scenarios involving potential security breaches of patient health information. The curricula that were developed for the workforce program by 2012 have been downloaded by over 10,000 individuals.

### Consumer e-Health

The Consumer e-Health program is designed to increase consumers' engagement with their health information in health IT settings ranging from EHRs to PHRs to smart phone apps. By enabling better communication between consumers and their providers, consumers can be empowered to achieve or maintain better health, resulting in improved population health and reduced costs. ONC uses a number of techniques including sponsored contests and testimonials to spark consumer engagement. A goal of the *Federal Health IT Strategic Plan* is to ensure that consumers have a level of comfort in taking on the role of partner with their healthcare providers in achieving or maintaining better health. In fact, studies show that 90 percent of the actions associated with managing a chronic condition must come directly from the patient (CHCF 2010).

Accomplishments include:

- Supported consumer engagement with health information and tools made available as part of MU Stage 2. Consumers will have direct access to their health information electronically where it can be viewed, downloaded, and transmitted.
- Transitioned the "Blue Button" from the VA to ONC to expand the program into a nationwide effort reaching up to 80 million people in partnership with the public and private sectors. Blue Button provides a simple way for patients to download their health data securely and privately.
- As an outgrowth of "Text4Health" initiative, ONC conducted a series of focus groups in partnership with community based organizations to identify and explore consumer attitudes, concerns, and preferences on the privacy and security of health information via mobile devices. The study focused on underserved populations across the nation and included participants in urban and rural settings as well as in English and Spanish.
- Released an animated video showing the benefits of health IT to Americans in an engaging way.<sup>11</sup> Further engaged consumers by running a series of video contests encouraging consumers to create short videos sharing their stories about how health IT has made a difference in their lives.

### Health IT Monitoring and Evaluation

ONC uses economic analysis and modeling to describe and understand the factors driving the adoption, utilization, and meaningful use of health IT, including the costs and benefits of health IT implementation. Studies and reports generated from these activities help to inform policies and decisions not only within ONC, but also by Congress, the White House, federal agencies, state and local governments, and the private sector. ONC uses statistical methods to analyze data from numerous internal and external sources in order to provide accurate and reliable information. To ensure that up-to-date data is available, ONC sponsors and advises the development of health IT data elements for a number of surveys conducted by the American Hospital Association Survey of Hospitals, National Ambulatory Medical Care Survey,

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<sup>11</sup> Available at <http://www.HealthIT.gov/4uvideo>.

Critical Access Hospital Survey, and the Privacy and Security Attitudes Survey. Further, ONC uses data from internal Operations, HITECH Programs, the CRM Tool, and the Meaningful Use Programs.

Accomplishments include:

- Worked with the REC Program to create data analytics strategies. These reports found that 52 percent of Comprehensive Primary Care Initiative (CPCI) and 82 percent of Advanced Primary Care Initiative (APCI) participants are working with RECs. ONC developed practices in conjunction with the RECs to leverage their meaningful use work to improve their services and monitor the success of providers as they move through the program.
- Launched the ONC Intranet Dashboards and public Health IT Dashboard website.<sup>12</sup> Within the first year of launch, these innovative projects have provided ONC the unique capability to create and multi-purpose hundreds of impactful research datasets as user-interactive graphs and maps covering some of ONC's most-valued information assets.
- Fielded national surveys collecting data on consumers' perception of the privacy and security of their health information. The surveys assess consumer confidence in the handling of their health information and their concerns with the further introduction of health IT.
- Secured cooperation and co-sponsorship from international partners and a U.S.-based charitable foundation to facilitate progress toward the availability and international recognition of health IT adoption and use metrics that will be directly comparable and applicable for benchmarking across nations engaged in health IT. This will support policy research and identification of best practices, which in turn, supports health system performance. These measures will be refined for development of international consensus via the Organization for Economic Cooperation and Development with support from Europe.

#### Provider and Consumer Engagement and Outreach

ONC maintains a coordinated communication and public outreach strategy. Core communications functions include planning, implementation, media relations, public affairs, stakeholder engagement, legislative affairs, and executive secretariat. In addition, ONC supports its various programs and initiatives by developing messaging, branding, and internet specific content centered on HealthIT.gov, a sophisticated web presence that integrates media outreach, interactive social media, and the National Learning Consortium.

Accomplishments include:

- Developed materials to educate providers on the benefits of and processes for adopting and utilizing health IT as well as ways in which they can use health IT more meaningfully.
- Coordinated with federal partners, including CMS and OCR, to implement a multi-pronged communications strategy to educate patients and caregivers about the ways in which health IT can empower them to become partners in their health care.

#### Funding History

FY 2010	\$8,874,000
FY 2011	\$10,657,000
FY 2012	\$10,943,000
FY 2013	\$10,287,000

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<sup>12</sup> Available at <http://dashboard.HealthIT.gov>.

## **Budget Request**

ONC requests \$14.5 million in FY 2014 for activities relating to the adoption, utilization, and meaningful use of health IT, an increase of \$3.6 million from the FY 2012 enacted level. The request includes funding for 47 FTEs, an increase of four above the FY 2012 enacted level.

### Provider Adoption Support

In FY 2014, ONC will continue to support provider adoption through innovative means to address critical barriers to adoption and implementation of health IT. With the ending of direct support to the RECs, HITRC, and Workforce programs in FY 2014, ONC will begin building on and expanding the lessons learned from these programs. The investments in adoption support have provided a strong national network of organizations working to provide better health, improved population management, and reduced costs. As ONC continues to develop policies and standards, provider adoption support efforts ensure that the certification specifications, building blocks, and toolkits are successfully distributed to providers.

- *National Learning Consortium (NLC)*: ONC will begin transitioning the HITRC infrastructure into a one stop shop where providers can use an expanded number of CoP and experts from across the health care sector to gain insight and strategies to accelerate adoption and utilization via making the tools and data publically available on the healthIT.gov internet portal.
- *CRM Tool*: ONC will increase support for new users and enhancements that are critical to meet the on-going data collection efforts in ONC and partner organizations. The funding will support continued use of the CRM Tool by federal partners in working to support the adoption and utilization of CEHRT.
- *REC Program*: In FY 2014, ONC will begin close out operations on schedule for the 62 RECs with direct support provided as part of the Recovery Act.
- *HITRC*: In FY 2014, ONC will begin to close out operations of the HITRC and transition existing convening activities, toolkits, and CoPs to the NLC. The HITRC was funded as part of the Recovery Act.

### Consumer e-Health

Through this request, ONC will continue to convene stakeholders, identify barriers, and develop strategies to increase consumer adoption and utilization of health IT. ONC will focus on consumers' access to their health information, the actions they can take with their health information, and shifting consumer attitudes about using health IT. ONC will increase consumer access to data through outreach and support to stakeholders, including continued support for the Blue Button. ONC will help consumers take action with their health information by catalyzing the development of innovative consumer health IT tools and resources through application developer contests to spur market innovation in areas that align with federal health priorities. ONC will also work to shift attitudes about the role of consumers as partners in health care by developing tools and guidance on specific ways that consumers can use health IT to manage their health and care.

### Health IT Monitoring and Evaluation

This request will maintain ONC's internal capacity for providing the analytical tools, data, and expertise necessary to measure and analyze the impact of federal health IT efforts and inform decisions about health IT policy. ONC will continue to implement a longitudinal data-collection strategy that exploits low-cost methods of data collection, synthesizing and communicating data to the public and provider community through the health IT dashboard, HealthIT.gov, blog posts, data briefs, and peer-reviewed literature. ONC will enhance the existing HealthIT.gov dashboard to provide a richer information environment that will lead to a better understanding of the role of health IT in delivering better and more cost effective health care. ONC will study and model specific aspects of health IT, including how proposed MU Stage 3 criteria could be used to address barriers to adoption and utilization of HIE. ONC

will also examine market responses to the increasing interoperability of CEHRT and analyze the impact of this trend on HIE and health care delivery.

#### Provider and Consumer Engagement and Outreach

This request includes funding to develop ONC’s communications strategy, enabling ONC to better identify, capture, and cultivate relationships with external stakeholders in a way that extends the ONC message and promotes engagement. In FY 2014, ONC’s communications activities will also provide policy-focused content development and dissemination support to meet the health IT policy information needs of varying stakeholder audiences, in keeping with the vision, mission, and goals of ONC. Funding for operating ONC’s website, HealthIT.gov, is also included in this request.

### **Outputs and Outcomes Table**

<b>Measure</b>	<b>Recent Result / Target for Recent Result / (Summary of Result)</b>	<b>FY 2012 Target</b>	<b>FY 2014 Target</b>	<b>FY 2014 Target +/-FY 2012 Target</b>
1.A.1 Percent of office-based physicians who have adopted electronic health records (basic) <sup>13</sup>	FY 2012: 40% (Target Met)	40%	60%	+20 Percentage Points
1.A.2 Increase the percent of office-based primary care physicians who have adopted electronic health records (basic) (NAMCS)	FY 2012: 44% (Target Not Met but Improved)	45%	65%	+20 Percentage Points
1.A.3 Percent of non-federal acute care hospitals that have adopted electronic health records (AHA) <sup>14</sup>	FY 2012: 44% (Target Not Met but Improved)	45%	65%	+20 Percentage Points
1.B.1 Percent of eligible hospitals receiving meaningful use incentive payments (ONC)	FY 2012: 68% (Target Exceeded)	38%	85%	+43 Percentage Points
1.B.2 Percent of eligible professionals receiving meaningful use incentive payments (ONC)	FY 2012: 33% (Target Exceeded)	15 %	65%	+35 Percentage Points
1. B.3 Percent of eligible primary care professionals receiving meaningful use incentive payments <sup>15</sup>	FY 2012: Not calculated	--	Retire	N/A
1.B.4 Increase the number of eligible providers who receive an incentive payment from the CMS Medicare and Medicaid EHR Incentive Programs for the successful adoption or meaningful use of certified EHR technology (ONC)	FY 2012: 156,958 (Target Exceeded)	80,000	314,000	+234,000 health care providers
1.C.1 Establish a network of Regional Extension Centers covering 100% of the U.S. population by the end of FY 2010 (ONC)	FY 2012: 100% (Target Met)	100%	Retire	--

<sup>13</sup> National Electronic Health Records Survey (NEHRS) formerly entitled NAMCS Electronic Medical Records Supplement.

<sup>14</sup> American Hospital Association (AHA) Annual Survey, IT Supplement

<sup>15</sup> Eligibility standards are for stage I of the CMS EHR Incentive Program.

<b>Measure</b>	<b>Recent Result / Target for Recent Result / (Summary of Result)</b>	<b>FY 2012 Target</b>	<b>FY 2014 Target</b>	<b>FY 2014 Target +/-FY 2012 Target</b>
1.C.2 Number of priority primary care providers registered to receive services from ONC Regional Extension Centers (ONC)	FY 2012: 137,795 (Target Exceeded)	100,000	Retire	--
1.C.3 Electronic health record adoption rate among providers registered and working with ONC Regional Extension Centers for at least 10 months (ONC)	FY 2012: 74% (Target Exceeded)	60%	76%	+16 Percentage Points
1.C.4 Number of providers registered with ONC RECs that achieve Meaningful Use (ONC)	FY 2012: 21,900 (Baseline)	Baseline	100,000	+78,100 health care providers
1.D.1 Number of students enrolled in Health IT training programs at Community College Consortia participants (ONC)	FY 2012: 12,135 (Target Exceeded)	6,500	Discontinue (Goal Achieved)	--
1.D.2 Cumulative number of students completing Health IT training programs at Community College Consortia participants (ONC)	FY 2012: 15,461 (Target Exceeded)	10,500	Discontinue (Goal Achieved)	--
1.E.9 Percent of non-federal acute care hospitals with capability for patients to view online, download, or transmit information from their medical record	FY 2012: 26%	Baseline	55%	+29 Percentage Points
2.A.1 Number of physicians participating in Beacon Community interventions (ONC)	FY 2012: 8,500	7,430	Discontinue (Program Complete)	--
2.A.2 Proportion of eligible providers in Beacon Communities that receive meaningful use incentive payments (ONC)	FY 2012: 24%	60%	Discontinue (Program Complete)	--

## Agency-wide Support

(dollars in thousands)

	FY 2012 Actual	FY 2013 Annualized CR	FY 2014 President's Budget	FY 2014 (+/- ) FY 2012
Budget Authority	10,631	10,361	11,409	+778
PHS Evaluation Funds	12,199	9,959	9,668	-2,531
Total Program Level	22,830	20,320	21,077	-1,753
FTE	50	59	59	+9

### Program Description and Accomplishments

ONC's program support offices provide central services and are responsible for the efficient and effective operation of ONC's numerous programs. Activities include budget formulation and execution; procurement and grants management; facilities and internal IT management; human capital planning; and financial and programmatic oversight. Through these activities, the program support offices provide ONC with a dynamic, flexible support system that works to provide ONC's programs with the tools and resources necessary to respond to emerging health IT issues.

Program support activities include:

- *Grants Management:* ONC continues to enhance its grants management efforts by implementing best practices to ensure grantee compliance. ONC uses a risk-based financial monitoring framework to foster program success and financial accountability. In FY 2012, ONC instituted a comprehensive year-in-review process for grantees, bringing together the program offices and the grants management office to assess and document financial and programmatic compliance of every ONC grantee. This process documented grantee performance against milestones, program objectives, and compliance with grants and financial management requirements. ONC also collaborated with its program offices and the budget office to implement OMB Memorandum M-11-34,<sup>16</sup> which requires accelerated spending in Recovery Act Discretionary Grant Programs. ONC has developed and posted more than 15 Grants Management Advisories for its grantees, covering a wide variety of topics. These concise documents, written in plain language, provide clarification to ONC grantees on grants management issues.
- *Program Integrity:* ONC coordinates and tracks Government Accountability Office (GAO) and Office of the Inspector General (OIG) reports and monitors corrective action as necessary. ONC carries out financial and programmatic oversight responsibilities by employing a robust internal review methodology to produce high-impact results using qualitative and quantitative assessment techniques. In FY 2012, ONC conducted two program integrity reviews, identifying risks and risk response strategies. These reviews are designed to increase the overall effectiveness and efficiency of ONC.
- *Human Capital:* ONC's human capital experts provide leadership, oversight, and guidance to ONC in hiring a talented workforce. The hiring of new staff in FY 2012 was performed at a rate consistent with ONC's goals and objectives. In an effort to optimize an already strong, high-performing organization, ONC implemented a reorganization in 2012 that included strategic plan development, talent, and professional development planning, and external review of existing

<sup>16</sup> Available at <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-34.pdf>.



structures. As part of the FY 2012 reorganization, the following offices were created to improve ONC's ability to coordinate and provide meaningful guidance in the area of health IT: OCMO, OST, OCEH, OCert, and OHC. In planning for expiration of the HITECH Act hiring authority, ONC conducted a thorough review of its HITECH Act positions to determine which positions were central to ONC's mission, and utilized traditional hiring authorities to retain those employees.

- *Mission Support:* ONC's mission support staff provides budget formulation and execution functions, facilities and internal IT management, and procurement services for ONC. In FY 2012, ONC established a refined budget baseline in order to meet its dynamic operational needs. A comprehensive study of ONC's procurement activities was conducted and identified opportunities to improve the procurement process. ONC moved several staff to new facilities, arranged internal moves as necessary, and conducted ongoing planning for consolidation of all ONC's staff members in 2013. ONC increased the number of its staff who are certified as Contracting Officer's Technical Representatives to ensure that every ONC contract is monitored with at least one-back-up individual.

### Funding History

FY 2010	\$5,976,000
FY 2011	\$19,502,000
FY 2012	\$22,830,000
FY 2013	\$20,319,000

### **Budget Request**

In FY 2014, ONC requests \$21.1 million for Agency-Wide Support, a decrease of \$1.8 million from the FY 2012 enacted level. The request includes funding for 59 FTEs, an increase of nine above the FY 2012 enacted level.

This request includes funding for critical central costs such as information technology, space, human capital, acquisition, and other shared services. These shared services, which are not attributed to a specific office, but rather are used by ONC as a whole, include financial and grants management systems, as well as contract management fees and legal counsel. ONC has been actively working to reduce agency-wide support costs and realized savings from reduced costs through improved efficiencies, in-sourcing, and consolidation of office space. This request also funds the personnel costs for the Immediate Offices of the National Coordinator and the Deputy National Coordinators.

**PHYSICIANS' COMPARABILITY ALLOWANCE (PCA)**

**Office of the National Coordinator for Health Information Technology**

		<b>PY 2012 (Actual)</b>	<b>CY 2013 (Estimates)</b>	<b>BY 2014* (Estimates)</b>
1) Number of Physicians Receiving PCAs		1	3	3
2) Number of Physicians with One-Year PCA Agreements		1	3	3
3) Number of Physicians with Multi-Year PCA Agreements		0	0	0
4) Average Annual PCA Physician Pay (without PCA payment)		\$155,500	\$155,500	\$155,500
5) Average Annual PCA Payment		\$13,000	\$13,000	\$13,000
6) Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position	0	0	0
	Category II Research Position	0	0	0
	Category III Occupational Health	0	0	0
	Category IV-A Disability Evaluation	0	0	0
	Category IV-B Health and Medical Admin.	1	3	3

\*FY 2013 data will be approved during the FY 2015 Budget cycle.

In 2012, Office of the National Coordinator for Health Information Technology (ONC) needed a qualified individual with a strong medical background to take the lead on Health IT innovations and quality measures.

In 2014, ONC will need additional physicians with a strong medical background to work in ONC's Office of the Chief Medical Officer as they engage with a wide array of clinical stakeholders and provide a clinically based perspective on ONC policies and activities. This includes clinical issues around EHR safety, usability, clinical decision support, and quality measures.

Without PCA, it is not likely that ONC could have recruited its current physician, nor is it likely that ONC will be able to recruit without PCAs in future years. PCAs were awarded at the maximum amount allowed in all of these cases.

## SUPPORTING EXHIBITS

### Budget Authority by Object Class

(dollars in thousands )

Object Class	FY 2012 Enacted	FY 2014 President's Budget	Increase or Decrease
<b>Direct Obligations</b>			
Personnel compensation: .....			
Full-time permanent (11.1).....	2,236		(2,236)
Other than full-time permanent (11.3).....	1,309		(1,309)
Other personnel compensation (11.5).....	24		(24)
Military personnel (11.7).....	22	-	(22)
Special personnel services payments (11.8).....			
<b>Subtotal personnel compensation .....</b>	<b>3,591</b>	-	<b>(3,591)</b>
Civilian benefits (12.1).....	944		(944)
Military benefits (12.2).....	12		(12)
Benefits to former personnel (13.0).....			
<b>Subtotal Pay Costs.....</b>	<b>4,547</b>		<b>(4,547)</b>
Travel and transportation of persons (21.0).....			
Transportation of things (22.0).....			
Rental payments to GSA (23.1).....	1,890	2,349	459
Communication, utilities, and misc. charges (23.3.) .....			
Printing and reproduction (24.0) .....			
Other Contractual Services :			
Advisory and assistance services (25.1) .....		2,450	2,450
Other services (25.2).....	1,941	8,344	6,403
Purchase of goods and services from.....			
government accounts (25.3).....	5,808	5,726	(82)
Operation and maintenance of facilities (25.4) .....	1,769	1,247	(522)
Research and Development Contracts (25.5).....			
Medical care (25.6).....			
Operation and maintenance of equipment (25.7).....			
Subsistence and support of persons (25.8).....			
<b>Subtotal Other Contractual Services .....</b>	<b>11,408</b>	<b>20,116</b>	<b>8,708</b>
Supplies and materials (26.0) .....			
Equipment (31.0).....	460	460	-
Land and Structures (32.0) .....			
Investments and Loans (33.0).....			
Grants, subsidies, and contributions (41.0) .....			
Interest and dividends (43.0).....			
Refunds (44.0).....			
<b>Subtotal Non-Pay Costs . .....</b>	<b>11,868</b>	<b>20,576</b>	<b>8,708</b>
<b>Total Direct Obligations .....</b>	<b>16,415</b>	<b>20,576</b>	<b>4,161</b>

## Salaries and Expenses

(dollars in thousands)

Object Class 1/	FY 2012 Enacted	FY 2014 President's Budget	Increase or Decrease
Personnel compensation: .....			
Full-time permanent (11.1) .....	2,236		(2,236)
Other than full-time permanent (11.3) .....	1,309		(1,309)
Other personnel compensation (11.5) .....	24		(24)
Military personnel (11.7) .....	22		(22)
Special personnel services payments (11.8) .....			-
<b>Subtotal personnel compensation .....</b>	<b>3,591</b>	-	<b>(3,591)</b>
Civilian benefits (12.1) .....	944		(944)
Military benefits (12.2) .....	12		(12)
Benefits to former personnel (13.0) .....			-
<b>Subtotal Pay Costs .....</b>	<b>4,547</b>	-	<b>(4,547)</b>
Travel and transportation of persons (21.0) .....			
Transportation of things (22.0) .....			
Communication, utilities, and misc. charges (23.3) .....			
Printing and reproduction (24.0) .....			
Other Contractual Services : .....	9,518		8,249
Advisory and assistance services (25.1) .....		2,450	2,450
Other services (25.2) .....	1,941	8,344	6,403
Purchase of goods and services from .....			
government accounts (25.3) .....	5,808	5,726	(82)
Operation and maintenance of facilities (25.4) .....	1,769	1,247	(522)
Research and Development Contracts (25.5) .....			
Medical care (25.6) .....			
Operation and maintenance of equipment (25.7) .....			
Subsistence and support of persons (25.8) .....			
<b>Subtotal Other Contractual Services .....</b>	<b>9,518</b>	<b>17,767</b>	<b>8,249</b>
Supplies and materials (26.0) .....	-	-	-
<b>Subtotal Non-Pay Costs .....</b>	<b>9,518</b>	<b>17,767</b>	<b>8,249</b>
<b>Total Salary and Expenses .....</b>	<b>14,065</b>	<b>17,767</b>	<b>3,702</b>
Rental payments to GSA (23.1) .....	1,890	2,349	459
<b>Total Salary, &amp; Expenses and Rent .....</b>	<b>15,955</b>	<b>20,116</b>	<b>4,161</b>

1/ Excludes 'Equipment' Object Class 31.

## Detail of Full-Time Equivalent Employment (FTE)

	2012			2013			2014		
	Actual Civilian	Actual Military	Actual Total	Est. Civilian	Est. Military	Est. Total	Est. Civilian	Est. Military	Est. Total
<b>ONC</b>									
Direct:.....	0	0	0	0	0	0	0	0	0
Reimbursable:.....	158	1	159	190	1	191	190	1	191
<b>OPDIV FTE Total.....</b>	<b>158</b>	<b>1</b>	<b>159</b>	<b>190</b>	<b>1</b>	<b>191</b>	<b>190</b>	<b>1</b>	<b>191</b>

### Average GS Grade

	Grade:	Step:
FY 2010.....	13	3
FY 2011.....	13	3
FY 2012.....	13	4
FY 2013.....	13	5
FY 2014.....	13	6

## Detail of Positions

	2012	2013 Base	2014 Budget
	Actual		
Total, SES	8	9	9
Total, SES Salary	1,423,383	1,639,620	1,639,620
GS-15.....	38	43	43
GS-14.....	30	42	42
GS-13.....	39	64	64
GS-12.....	22	27	27
GS-11.....	16	6	6
GS-10.....	1	1	1
GS-9.....	11	7	7
GS-7.....	<u>2</u>	<u>0</u>	<u>0</u>
Subtotal .....	159	191	191
Total - GS Salary	16,325,137	21,490,069	21,682,453
Average SES salary.....	177,923	182,180	182,180
Average GS grade.....	13	13	13
Average GS salary.....	97,936	100,904	103,872

## Crosswalk of Budget Activity by Office

(dollars in thousands)

	FY 2012		FY 2013		FY 2014	
	Actual		Annualized CR		President's Budget	
	<u>FTE</u>	<u>\$</u>	<u>FTE</u>	<u>\$</u>	<u>FTE</u>	<u>\$</u>
<b>1. Policy Development and Coordination</b>						
Office of Policy and Planning.....	12	4,335	16	5,347	16	3,926
Office of the Chief Privacy Officer.....	9	5,405	10	5,405	10	5,405
Office of the Chief Medical Officer.....	6	1,421	9	2,457	9	4,517
Office of State and Community Programs.....		-	0	1,000	0	2,166
<b>Total, Policy Development and Coordination</b>	<b>27</b>	<b>11,161</b>	<b>35</b>	<b>14,209</b>	<b>35</b>	<b>16,014</b>
<b>2. Standards, Interoperability, and Certification</b>						
Office of Science and Technology.....	17	10,459	22	10,886	22	20,187
Office of Certification.....	3	1,750	5	1,242	5	2,520
Office of State and Community Programs.....	19	4,083	23	4,656	23	3,550
<b>Total, Standards, Interoperability, and Certification</b>	<b>39</b>	<b>16,292</b>	<b>50</b>	<b>16,784</b>	<b>50</b>	<b>26,257</b>
<b>3. Adoption, Utilization, and Meaningful Use</b>						
Office of Provider Adoption Support.....	23	4,887	24	4,594	24	8,800
Office of Consumer e-Health.....	3	937	4	1,043	4	1,150
Office of Economic Analysis and Evaluation.....	11	3,107	11	2,831	11	2,700
Office of Communications.....	6	2,012	8	1,820	8	1,885
<b>Total, Adoption, Utilization, and Meaningful Use</b>	<b>43</b>	<b>10,943</b>	<b>47</b>	<b>10,288</b>	<b>47</b>	<b>14,535</b>
<b>4. Agency-Wide Support</b>						
Office of Mission Support.....	27	17,949	34	16,547	34	16,820
Office of Human Capital.....	4	591	5	722	5	631
Office of Grants Management.....	16	3,552	17	2,549	17	3,046
Office of Program Integrity.....	3	740	3	502	3	580
<b>Total, Agency-Wide Support</b>	<b>50</b>	<b>22,832</b>	<b>59</b>	<b>20,320</b>	<b>59</b>	<b>21,077</b>
<b>Total, Program Level</b>	<b>159</b>	<b>61,228</b>	<b>191</b>	<b>61,601</b>	<b>191</b>	<b>77,883</b>

## **Programs Proposed for Elimination**

No programs are proposed for elimination in FY 2014.



## APPENDIX A – PERFORMANCE APPENDIX

### 1. TRENDS IN EHR ADOPTION AND HIE ACTIVITY

#### *1.1 EHR ADOPTION IS ACCELERATING HEALTH IT-ENABLED DELIVERY SYSTEM REFORM*

The health care industry is undergoing a transformational, disruptive and over-due shift as health care providers adopt and integrate EHRs and HIE technologies into their health care practice at greater rates than ever before. ONC estimates that by FY 2014 a majority of health care providers will have adopted EHRs, compared to about 20 percent in 2008.

For example, in 2012, nearly 45 percent of office-based physicians had adopted a basic EHR compared to just 12 percent in 2007.<sup>17</sup> ONC estimates that that number will rise to around 60 percent by FY 2014. Showing further evidence that compelling change is underway, 40 percent of rural office-based providers have adopted at least a basic EHR system in 2011, compared to 14 percent in 2009. Adoption patterns among small practices also show marked increases, up to 35 percent in 2011 compared to 15 percent in 2009.

Among hospitals, in 2012 56 percent of non-federal acute care hospitals had implemented at least a basic EHR system, compared to 13 percent in 2008.<sup>18</sup> In 2012, 47percent of rural hospitals had implemented at least basic EHRs, compared to 8 percent in 2008. Respectively, the rate of adoption in small hospitals grew from 9 percent to 48 percent.

#### *1.2 EHR SYSTEMS THAT ARE BEING IMPLEMENTED NOW INCLUDE MORE FUNCTIONALITIES*

Alongside the widespread adoption of EHR and HIE technologies, there is also mounting evidence that the EHR systems that are being implemented are becoming more comprehensive in the range of functionalities and benefits that they provide to the patient, provider, and health system users.

The EHR system functionalities being implemented by non-federal acute care hospitals are increasing, including hospital selection of comprehensive EHR systems. Comprehensive systems, in contrast to basic systems, include relatively advanced CDS features that help providers identify risks associated with drug-drug interactions, or provide the ability to order, view, and share lab and imaging results easily with other providers, hospitals, and entities.

Certain HIE activities, enabled by the adoption of increasingly sophisticated EHRs, are taking place at higher rates among office-based providers than before as well. Two particular areas of EHR systems and provider HIE capability that ONC is monitoring are e-prescribing and health information exchange capabilities.

Early adoption of HIE technologies, such as e-prescribing, has had especially strong leadership from the vendor and community pharmacy groups. An established ONC performance measure is related the percentage of community pharmacies that have the capability for e-prescribing, and it is reported in the President's Budget and the ARRA Implementation Plan. From 2008 and 2012, national rates of

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<sup>17</sup> Office-based provider adoption of basic EHRs includes specific functionalities in the following areas of health care and administrative data: patient demographics, patient problem lists, electronic lists of medication taken by patients, clinical notes, orders for prescriptions, laboratory results viewing, and imaging results viewing.

<sup>18</sup> "Adoption" of an inpatient electronic health record is defined as at least "basic" adoption, without notes, as in Jha et al. 2009 in the New England Journal of Medicine article *Use of Electronic Health Records in U.S. Hospitals* <http://www.nejm.org/doi/pdf/10.1056/NEJMsa0900592>. This measure excludes federal hospitals, and hospitals located outside of the 50 states and the District of Columbia. It encompasses all non-federal general acute care hospitals in the American Hospital Association annual survey, including critical access hospitals.

e-prescribing have soared, growing from about 70 percent in the beginning of 2009 to nearly 94 percent in FY 2012. At the community-level, measures of e-prescribing show that the growth in e-prescribing activity is roughly equal across rural and urban boundaries.

What's more, the number of providers using e-prescribing tools has increased significantly since ONC began tracking the activity in 2009. The increases are especially notable among specialist providers, and alongside the increases in provider participation in e-prescribing, providers are most likely to make the decision to begin providing e-prescribing services through an EHR system, as opposed to through stand-alone e-prescribing systems.

Other areas of EHR adoption and HIE activity where ONC will continue promotion and monitoring include: patient engagement through electronic access to health information; provider capability to share patient care summaries between systems; and growth of EHR system features functionalities related to clinical care coordination like ordering and viewing lab and imaging tests and results. Accordingly, beginning in 2012 ONC has established the following performance measures and baselines in this area.

These measures track important facets of HIE activity with regard to EHR functionalities and interoperability and are also closely related to the future of Meaningful Use of EHRs. Finally, these measures are also important candidates because they can inform ONC about the extent that additional regulatory activity may be necessary to further promote HIE or remove its barriers, particularly barriers that inhibit exchange between the various health care provider groups.

#### *1.2 LEVERAGING EXISTING INVESTMENTS AND STAKEHOLDER NETWORKS TO ENABLE ONC TO GOVERN AT THE PACE OF TECHNOLOGY*

As EHR and HIE technologies evolve, consumers and patients will expect more control and continued protection of their health information. ONC will continue to monitor consumer and provider attitudes and activities with regard to EHRs and HIE activity.

Two ONC-managed FACA committees provide particularly valuable input related to policies promoting the adoption and meaningful use of EHRs as well as Standards & Interoperability (S&I) related to the EHR and HIE market places. The FACAs have over a thousand stakeholders and the following highlights from 2012:

- The HITPC approved recommendations on a security policy framework for EHR, approved recommendations on the initial set of policies developed by ONC to govern its Query Health pilot project, and provided recommendations to the National Coordinator on issues raised by an Advanced Notice of Proposed Rulemaking (ANPRM) (published July 26, 2011, Human Subjects Research Protections) regarding secondary uses of EHR data for research uses. The recommendations were developed by the HITPC Privacy and Security Tiger Team.
- The HITSC has provided recommendations regarding the development of the Certification Process for Stage 2 Meaningful Use, which recommendations were approved on November 16. The HITSC also endorsed recommendations of its Privacy and Security Workgroup on security-related certification criteria, standards and implementation specifications for EHR certification. These recommendations were complementary to those endorsed on September 28. In particular, the recommendations included detail about patient matching.
- The HITPC and the HITSC both assessed and made recommendations related to the need for privacy and security conditions for trusted exchange as elements of a proposed governance model.

### 1.3 EHR AND HIE MARKETPLACES ARE ROBUST AND ACTIVE

#### *Certified Health Information Technology Product List (CHPL)*

Stage 1 of the CMS Medicare and Medicaid EHR Incentive Programs succeeded in motivating large numbers of health care providers to begin implementing EHRs. An important part of the Program's success relates to the establishment of the EHR Certification Program, which implemented a regulatory and technical framework for protecting and standardizing HIE and promoting the interoperability of EHRs. The Certification Program provides also establishes a public listing of certified health IT products through the CHPL website.

A sign that the EHR Certification Program and CHPL were welcomed by the vendor and health care provider communities and effective at defining initial standards upon which the market could build is the strong participation rate in the CMS EHR Certification Program. The expectation among ONC program managers was that approximately 150 products would be submitted for certification to the affiliated and then become part of the CHPL. As of August 2012, there were 2,520 certified EHR products from 800 EHR Vendors/Developers.<sup>19</sup> Of the certified products listed in the CHPL, 1,528 were for unique products (e.g., when a new "version" of an existing EHR product is released it is not double-counted).

**Figure:** Number of Vendor Products (Versions) on the Certified Health IT Product List, Sept. 2012

	<b>Ambulatory</b>	<b>Inpatient</b>	<b>Total</b>
<b>Complete EHR</b>	748 (1,266)	99 (291)	847 (1,557)
<b>Modular EHR</b>	461 (799)	450 (707)	911 (1,506)
<b>Total</b>	1,209 (2,065)	549 (998)	1,758 (3,063)

Source: ONC Certification Division

While all of the certified products listed on the CHPL meet criteria for use in the CMS EHR Incentive programs, the market is still newly defined and will likely experience the effects of competitive forces that will result in the market consolidation around certain vendors/products. As this occurs, and providers adopt, update, and change between EHR vendors/products in large numbers, ONC's continued work related to the establishment of regulations and standards for governing interoperability and information exchange standards will be integral and overdue.

#### *Consumer Attitudes and Engagement*

In addition to monitoring the development of a robust EHR vendor and product marketplace, ONC is actively monitoring a variety of consumer attitudes and health information engagement measures. Tracking these measures enables the office to give general contextual descriptions about the extent that these EHR technologies are becoming routine parts of patients' personal behaviors as well as the efficacy of government policy and outreach activities of topics related to access to and uses of health information.

Beginning with baseline data obtained in 2012, ONC's consumer attitudes and patient engagement efforts will be evaluated by monitoring the following survey data as reference points:

- percentage of Americans who have been given electronic access to any part of their health care record from the 2012 baseline of 10 percent;

<sup>19</sup> Certified Health IT Products List, April 2012 Program Report

- percentage of Americans who strongly or somewhat agree that the privacy and security measures taken by providers establish reasonable protections for their electronic health records above the 2012 baseline of 80 percent; and
- percentage of Americans who are very concerned about the security of electronic health records from the 2012 baseline of 52 percent.

## 2. SUCCESS OF ONC AND HITECH PROGRAMS AS HEALTH SYSTEM MODERNIZATION CHANGE AGENTS.

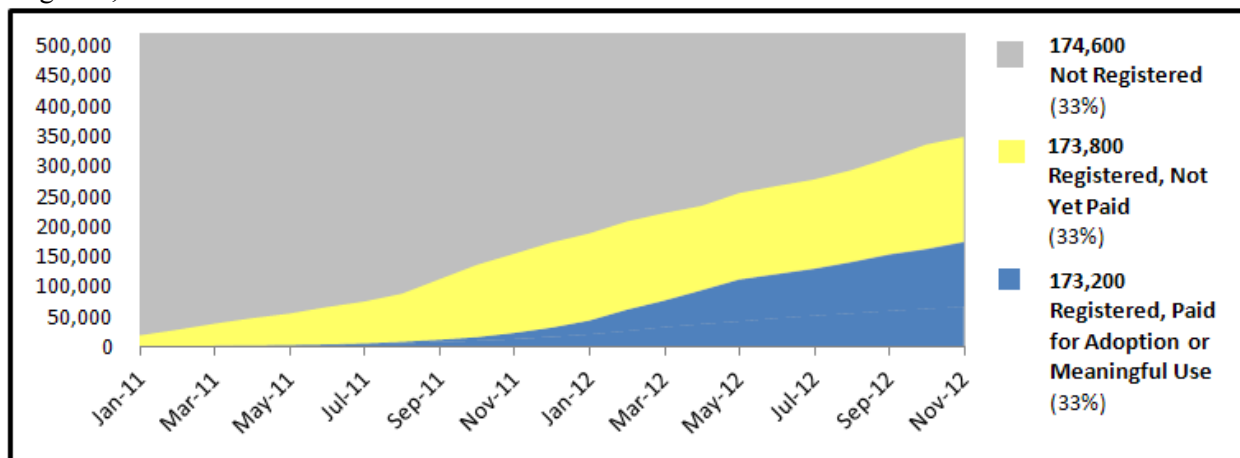
The collective implementations of HITECH Act programs, including the CMS EHR Incentive programs along with ONC grant programs, has contributed to the momentum in the health system transformation movement currently underway.

### 2.1 CMS MEDICARE AND MEDICAID EHR INCENTIVE PROGRAMS

The initial implementation of the CMS EHR Incentive Programs has shown strong signs of success in terms of provider registration and intent to participate in the programs. As of September 2012, two thirds of eligible professionals (almost half of the estimated total 521,000 eligible professionals) and 3,750 eligible hospitals (almost 75 percent of the estimated total 5011 eligible hospitals) had successfully registered for the EHR Incentive programs.<sup>20</sup> The number of providers who received incentive payments has been steadily increasing – as of June 2012, more than \$7.7 billion dollars in financial incentives have been distributed to over 150,000 health care providers for implementing EHRs and achieving meaningful use according to the CMS Medicare and Medicaid EHR Incentive Programs’ Meaningful Use criteria.

A large number of providers remain in the pipeline for meaningful use - as of November 2012, about 174,000 providers had successfully registered for the Medicare or Medicaid EHR Incentive Programs but had not yet received payment or attested. The number of providers registered for the incentive programs will continue to grow. Continued investment in outreach, education, and support services will help to ensure these providers successfully implement and meaningfully use certified EHR technology to improve patient care.

**Figure:** Eligible professionals participating in the CMS Medicare and Medicaid EHR Incentive Programs, November 2012



Source: Centers for Medicare and Medicaid Services, EHR Incentive Programs

<sup>20</sup> Federal programs began AAA. States are implementing the Medicaid programs at various schedules and BBB have implemented as of May 2012.

Between now and FY 2014, HHS/ONC estimates that an additional 15 percent of the eligible providers will meet criteria to receive incentive payments. The HHS/ONC estimate for eligible provider participation in EHR Incentive Programs is that about 85 percent of eligible hospitals and 50 percent of eligible professionals will qualify for and receive incentive payments from CMS or their state Medicaid program in FY 2014.

## *2.2 ONC HEALTH IT REGIONAL EXTENSION CENTERS PROGRAM*

The REC program has achieved remarkable success since its establishment in FY 2010. Already, more than 140,000 primary care and specialist providers have registered with RECs to receive technical assistance with the steps necessary to implement EHRs and work towards Meaningful Use. With the assistance of RECs, almost 100,000 health care providers have implemented EHRs with important functionalities related to patient quality reporting and e-prescribing, and more than 30,000 had already demonstrated Meaningful Use.

Among the provider groups where the RECs are having particular success, rural primary care providers, Federally Qualified Health Centers (FQHC), and Critical Access Hospital each stand out. RECs are working with 40 percent of primary care providers in the nation; 80 percent of Federally Qualified Health Centers, and 70 percent of the nation's Critical Access Hospitals.

The RECs have been particularly successful in reaching rural providers, reaching over 70 percent of providers in rural areas receiving technical assistance from a REC by the end of FY 2012. A recent Government Accountability Office report found that providers who work with a REC are 2.3 times more likely to obtain an incentive payment from CMS for the successful implementation and meaningful use of an EHR system than those providers that do not work with a REC. The GAO report is available at: <http://gao.gov/assets/600/593078.pdf>.

Alongside the progress that RECs have had with enrolling and assisting providers to “go-live” with an EHR, the HITRC and NLC projects are leveraging the technical assistance materials so that they have the broadest impact possible. The HITRC and NLC are particularly valuable for assisting providers in rural and remote areas and for ensuring that providers who register for the EHR Incentive Programs have sufficient resources to successfully adopt and become meaningful users of EHRs.

## *2.3 STATE HEALTH INFORMATION EXCHANGE PROGRAM*

The State HIE program is accelerating and improving coordination among states to promote health information exchange and the meaningful use of health IT. Since the State HIE Program's HITECH inception, ONC has assisted all States with their development of comprehensive plans to enable and accelerate the development of their own health IT infrastructures. There is early evidence of momentum and success resulting from the State Plans and coordination efforts. Recent gains in pharmacy capability to e-prescribe, for example, are in part attributable to the initiatives that the State HIE Program has implemented.

Moreover, the State HIE Program has contributed significantly to the effectiveness of collaborations among health care and technology groups within states and nationwide around the effective development of HIE infrastructures and technologies. Some of the innovations programs and monitoring efforts sponsored by the State HIE Program include the “Challenge Grants<sup>21</sup>,” the “Program Information Notice (PIN) Priority Measures,” and a forthcoming survey to establish the national baseline estimate for laboratory health information exchange capability.

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<sup>21</sup> Challenge Grant program has goals to develop scalable solutions in the following key areas: (1) Achieving health goals through health information exchange; (2) Improving long-term and post-acute care transitions; (3) Consumer-mediated information exchange; (4) Enabling enhanced query for patient care; (5) Fostering distributed population-level analytics

#### 2.4 *HEALTH IT WORKFORCE PROGRAMS ARE MEETING THE GROWING DEMAND*

Popular media outlets and ONC studies examining the job market related to health care and IT have surfaced multiple points of evidence demonstrating a strong demand for health care and IT professionals that are cross-trained and capable to help the health system realize the expected benefits from the meaningful use of EHRs.<sup>22</sup>

The HITECH Workforce Programs have built a solid foundation of curricula and training capacity within a network of over 90 of the nation's community college and universities. Since establishment in August 2012, over 30,000 health care and IT professionals have enrolled in training programs, and more than 15,000 had completed training programs by the end of FY 2012.

The broad interest in the materials developed by the Health IT Workforce Program's Curriculum Development Centers is also remarkable and interesting. In addition to the curricula's pervasive use and adaptation among the Community College Consortia, the materials have also been widely available and distributed publicly over the internet to individuals and educational groups in more than 100 countries across six continents.

Coupled with the development of health IT curriculum materials, HITECH authorized ONC and its grantees to establish a Competency Exam Program that could be used by employers to assess the readiness of employees for the health IT workforce. As of August 2012, more than 3,700 health IT professionals had taken exams across the 6 workforce roles for which competency exams were developed. Among these professionals, the following demographics were observed:

#### 2.5 *STRATEGIC HEALTH IT ADVANCED RESEARCH PROJECTS (SHARP) PROGRAM IS DEVELOPING INNOVATIVE SOLUTIONS TO ADDRESS MAJOR CHALLENGES IN THE USE OF EHRs.*

The SHARP Program is helping America's universities lead the way in creating a new generation of innovative technologies to improve health care quality and delivery system performance. The SHARP program is led by major collaborative efforts at the University of Illinois at Urbana-Champaign, the University of Texas at Houston, Harvard University, the Mayo Clinic of Medicine, and Massachusetts General Hospital.

Since the SHARP Program's inception: the University of Illinois at Urbana-Champaign has been helping develop technologies and policy recommendations that reduce privacy and security risks and increase public trust; the University of Texas, Houston is undertaking innovative cognitive research to harness the power of health IT to integrate and support physician reasoning and decision-making as providers care for patients; Harvard University has been leading platform-based research to create new and improved system designs that facilitate information exchange while ensuring the accuracy, privacy, and security of electronic health information; and, the Mayo Clinic of Medicine has been developing strategies to improve the overall quality of healthcare by leveraging existing EHR data to generate new, environmentally appropriate, best practice suggestions.

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<sup>22</sup> Online job posting data are from the Job Data Mart, a proprietary database of O'Reilly Media, Inc. The database captures weekly snapshots of open jobs from a national job aggregator web site and represents approximately 85-90% of all U.S.-based online job postings. Jobs are uniquely identified and de-duplicated to the extent possible. Persistent postings are recorded only at the date of first post, and companies that advertise multiple positions are counted as a single job. The number of online job postings are reported monthly based on a 3-month moving average. Prior research has shown that job openings correlate with actual employment trends

## 2.6 *BEACON COMMUNITIES PROGRAM*

Since the Beacon Communities were established they have flourished into 17 diverse communities of health care provider networks that are participating in community building and health IT-based clinical interventions across an impressive range of health care areas. In FY 2011, there were 5,678 health care providers participating with Beacon Communities interventions and by FY 2012. Several early successes have been demonstrated among the Beacon Communities and are being reported publicly during the summer 2012. Quarterly performance reviews of grantee data shows that 7 of the 17 Beacons area already reporting improvements in clinical care measures associated with the health IT interventions that are being implemented within their community.

## **Description of ONC's Performance Management Process**

The performance management process at ONC is an embedded and appreciated part of all program and policy management activities. The process includes a range of activities that provide ONC executives, managers, and staff the opportunity to develop clear and common goals, monitor progress towards goal attainment, and when necessary, revise established plans appropriately.

The ONC performance management process is largely enabled by a common government-wide framework of performance processes and standards, including targeted activities that focus ONC performance management around: (1) priority-setting, (2) measurement and analysis, (3) regular performance reviews, and (4) priority, strategic, and/or operational updates based on findings from performance reviews.

### **I. PRIORITY-SETTING**

ONC's authorizing legislation, appropriations, and implemented budgets form the basis for the multi-year and annual priority setting processes. In addition, ONC regularly receives and integrates into its priority set requests from Congress that pertain to updates on ONC activities or to renewed or reformed focus on health IT promotion and implementation.

#### *1.1 STRATEGIC PLANNING*

Establishing multi-year strategic plans is a critical step in the process for formulating and advancing a long-term vision for the coordination of an EHR- and HIT-enabled health system. According to the HITECH Act, the Federal Health IT Strategic Plan (FY 2011-2015) addresses the following priority areas:

- Use of electronic exchange, health information, and the enterprise integration of such information;
- Utilization of an EHR for each person in the United States;
- Incorporation of privacy and security protections for the electronic exchange of an individual's individually identifiable health information;
- Use of security methods to ensure appropriate authorization and electronic authentication of health information and specifying technologies or methodologies for rendering health information unusable, unreadable, or indecipherable;
- Specification of a framework for coordination and flow of recommendations and policies under this subtitle among the Secretary, the National Coordinator, the HITPC, the HITSC, and other health information exchanges and relevant entities;
- Use of methods to foster the public understanding of health IT;
- Employment of strategies to enhance the use of health IT to improve health care quality, reduce medical errors, reduce health disparities, improve public health, increase prevention and

coordination with community resources, and improve the continuity of care among health care settings; and,

- Implementation of specific plans for ensuring that populations with unique needs, such as children, are appropriately addressed in the technology design, as appropriate, which may include technology that automates enrollment and retention for eligible individuals.<sup>23</sup>

Access the Health IT Strategic Plan

here: [http://healthit.hhs.gov/portal/server.pt/community/federal\\_health\\_it\\_strategic\\_plan\\_-\\_overview/1211](http://healthit.hhs.gov/portal/server.pt/community/federal_health_it_strategic_plan_-_overview/1211)

Following the best practices established in the Government Performance and Results Act Modernization Act of 2011, partners will begin a process for reviewing and, if necessary, revising the strategic plan beginning in FY 2013, which is 3 years into the current plan's implementation. The process for updating the plan will necessarily include extensive planning within ONC, consultation with Federal partners, and outreach to providers and the health care community. In FY 2014, ONC's strategic direction will be guided by its authorizing legislation and the appropriated budget.

### *1.2 ANNUAL PLANS*

In addition to multi-year strategic plans, ONC undertakes a number of management planning exercises that develop, revise, and enact annual plans. The ONC Organizational and National Coordinator's Annual Plans are established according to the Department's Senior Executive Service performance planning schedule, which is aligned to the fiscal year calendar. In practice, the method for establishing these plans involves disciplined and detailed-oriented series of conversations wherein the National Coordinator, ONC's executives, and subject matter experts define ambitious milestones and goals for accomplishing the upcoming fiscal year's program, policy, and operational objectives.

Each year's Annual Plan includes priority goals, discreet milestones, and key measures related to organization and program-level financial and performance management priorities. The plan also establishes an important cultural tone and emphasis on core values expressing the National Coordinator's workplace and performance management philosophies.

After the National Coordinator's plan is finalized, the core performance elements are integrated into the annual performance plans for ONC's Senior Executives. Each ONC senior executive has a performance plan that includes critical elements of performance that are related to the achievement of the organization's program and policy goals, as well as the on-going exhibition of core management and leadership competencies. Once the National Coordinator and Senior Executive Service performance plans are in place, the process of aligning employee performance plans begins. Staff performance plans align with the expectations of ONC senior executives as well as the overarching goals of the organization and they also include specific goal statements expressing the exact contributing actions that the staff will champion during the performance period.

## **2. MEASUREMENT AND ANALYSIS**

### *2.1 RESEARCH AND ANALYSIS OF PRIORITY HEALTH IT ADOPTION INDICATORS*

Through a variety of research projects into the development and diffusion of a national market around health IT, ONC's teams of researchers, program evaluators, and program and policy analysts support a cross-cutting research, analysis, and adoption modeling agenda. This agenda focuses on identifying barriers to health IT adoption, patterns of successful implementation, and gaps where additional research is needed to further motivate health systems change. Together, these activities enable ONC to assess

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<sup>23</sup> P.L. 111-5, Sec. 3001(c)(3)(A)



nationwide, regional, and state-level patterns of EHR adoption and HIE activity to the advantage of HHS programs and pertaining to priority groups of health care providers.

#### *2.2 ANALYSIS AND REPORTING OF PROGRAM INFORMATION:*

ONC's performance-based policy and program management philosophies are supported by numerous information management systems that enable the consistent collection and analysis of ONC data. Program and operations data are regularly captured, analyzed, and presented across staff and manager groups through tools such as the: ONC Intranet; Health IT Research Center; Customer Relationship Management Tools; and Health IT Dashboards.

ONC also has several Open Government projects that provide public access to the results of these activities:

- Health IT Dashboards: <http://dashboard.healthit.gov>
- Health IT Research Council, National Learning Consortium: <http://www.healthit.gov/providers-professionals/about-national-learning-consortium>

#### *2.3 SUMMATIVE FEEDBACK ON HITECH PROGRAM EFFECTIVENESS THROUGH PROGRAM EVALUATIONS:*

According to HITECH requirements and implementation plans, ONC is conducting program evaluations of the: (1) overall implementation of HITECH, (2) Health Information Technology Extension Program, (3) Health IT Workforce Program, (4) State Health Information Exchange (HIE) Program, and (5) Beacon Community Program. In addition to providing summative assessments of ONC's HITECH program implementations, these evaluations also generate useful materials for routine analyses that can impact the implementation of the programs. For example, several of the HITECH evaluations are developing grantee typologies that help ONC project officers and grantees understand and address common problems.

### **3. REGULAR PERFORMANCE REVIEWS**

The regular review of performance is engrained at all levels of ONC in a number of ways, including the Annual Organizational Assessment and Performance Report; Mid-Year Senior Executive and Employee Performance Reviews; Quarterly Reviews; and, Monthly Meetings.

### **4. PRIORITY, STRATEGIC AND/OR OPERATIONAL UPDATES BASED ON FINDINGS FROM THE REVIEWS**

The processes for planning, reviewing progress, and re-establishing priorities in a place where change is the expectation is necessarily robust and on-going. Through a predictable set of managers meetings, senior leadership team meetings, cross-cutting priority group meetings, and planning exercises, each ONC office has an important contribution to leading the planning and monitoring exercises that are needed to ensure that objectives are met.

## APPENDIX B – HEALTH INFORMATION TECHNOLOGY USER FEE

The FY 2014 Budget introduces a health IT user fee to support ONC's certification and standards activities. The proposed fee would be assessed on health IT vendors who certify their products through the ONC Health IT Certification Program.<sup>24</sup>

The health IT industry relies on ONC to administer a timely and reliable testing infrastructure and certification process for health IT products. Since the establishment of ONC's Health IT Certification Program, the number of health IT vendors and the volume of health IT products submitted for certification has steadily increased.<sup>25</sup> This trend, coupled with the need to update and guide the prioritization and adoption of standards and certification criteria to support new technologies, future stages of meaningful use, and delivery reform activities has resulted in a substantial increase in ONC's workload. This workload is expected to increase in the coming years as ONC's responsibilities associated with administering the Certification Program expand.

In addition to the expanding marketplace and corresponding increase in workload for ONC, much of the work to date has been funded using Recovery Act funds scheduled to expire at the end of FY 2013. Consequently, a new revenue source is necessary to ensure that ONC can continue to fully administer the Certification Program as well as invest resources to improve its efficiency. Such improvements are envisioned to include, among other improvements, additional testing tools and resources, less time between revisions to testing tools, and other forms of technical assistance. These service level improvements would be expected to reduce the cost and time associated with developing health IT products, preparing products for testing, and completing the certification process, thereby enabling vendors to expeditiously bring their products to market.

The user fee will provide ONC with the resources necessary to meet the increasing demands of health IT vendors and sustain the impact of its certification and standards work on the health IT marketplace and the health care system.

In particular, the proceeds of the user fee could fund:

- Administration of the ONC Health IT Certification Program and maintenance of the Certified Health IT Product List (CHPL).<sup>26</sup>
- Development of implementation guides and other forms of technical assistance for incorporating standards and specifications into products.
- Development of health IT testing tools that are used by both developers, testing laboratories, and certification bodies.
- Development of consensus standards, specifications, and policy documents related to health IT certification criteria.

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<sup>24</sup> Section 3001(c)(5) of the Public Health Service Act, as amended by the Recovery Act, directs the National Coordinator to oversee the testing and certification of health IT products as being in compliance with standards, implementation specifications, and other criteria established by the Secretary.

<sup>25</sup> The number of providers using health IT has grown rapidly over the past several years, creating a robust marketplace for health IT products and services. As of March 2013, ONC's Health IT Certification Program had tested and certified more than 1,750 unique EHR products, up from about 250 products certified at the start of 2011. The number of vendors with certified products increased from 200 to 945 over the same period.

<sup>26</sup> The CHPL is a public website maintained by ONC that uniquely identifies all certified health IT products. See <http://oncchpl.force.com/ehrcert?q=chpl>.

- Post-market surveillance, field testing, and monitoring of certified products to ensure they are meeting applicable performance metrics in the clinical environment.

For FY 2014, a fee level of \$1 million is estimated, reflecting the fact that collections would likely begin late in the fiscal year and would be phased in gradually. User fees would be collected from Health IT vendors, who are the primary beneficiaries of ONC's Certification Program, including testing tools, standards, implementation specifications, guidance, and other services that support the program. Fees would be assessed based on a fee structure established by the Secretary and published in the Federal Register. Fees would be collected on ONC's behalf by ONC-Authorized Certification Bodies (ONC-ACBs).<sup>27</sup> In setting fees, the Secretary would have the flexibility to reflect differences among health IT products, vendors, and the number of certification criteria. For example, fees for an electronic prescribing module could be less than fees for a complete EHR system.

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<sup>27</sup> Under the ONC Health IT Certification Program, certification is conducted by independent certification bodies that are authorized by ONC.