

## Goal 1. Objective F: Improve health care and population health through the meaningful use of health information technology

At the heart of HHS’s strategy to modernize the healthcare system is the use of data to improve healthcare quality, reduce unnecessary healthcare costs, decrease paperwork, expand access to affordable care, improve population health, and support reformed payment structures. HHS has taken a leading role in realizing health information technology’s (HIT) potential benefits. Within the last few years there has been unprecedented investment in HIT propelled by a range of initiatives, including incentive payments for the adoption and meaningful use of health information technology and standards; and the funding of regional extension centers, state health information exchanges, and Beacon communities. The rapid “wiring” of American health care, will do more than simply digitize paper-based work. It will facilitate a new means of improving the quality and efficiency of care, as well as an enhanced focus on the patient’s needs.

HHS has identified the nationwide adoption and meaningful use of HIT as a top priority for changing the healthcare system and for making health care more accessible, affordable, and safe for all Americans. ONC serves as the Secretary’s principal advisor charged with coordinating nationwide efforts to implement and use the most advanced health information technology and the electronic exchange of health information. ONC is working closely with CMS to implement the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs, which encourage hospitals and health professionals to move from paper-based records systems to EHRs. In addition to ONC and CMS, many HHS agencies and offices play significant roles in advancing health information technology with the goal to improve healthcare quality and efficiency and reduce costs. These components, including AHRQ, ASPE, CDC, CMS, FDA, HRSA, IHS, NIH, OASH, OCR, ONC, and SAMHSA are contributing to this objective by integrating these principles at the program level. The Office of the Secretary led this Objective’s assessment as a part of the Strategic Review.

### Objective 1.F Table of Related Performance Measures

*Increase the number of eligible providers (professionals and hospitals) 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 (Lead Agency - ONC; Measure ID - 1.B.4)*

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>Target</b>	80,000 eligible professionals and hospitals	230,000 eligible professionals and hospitals	375,000 eligible professionals and hospitals	450,000 eligible professionals and hospitals	455,000 eligible professionals and hospitals	Discontinued
<b>Result</b>	156,758 eligible professionals and hospitals	325,124 eligible professionals and hospitals	414,914 eligible professionals and hospitals	471,561 eligible professionals and hospitals	Dec 31, 2016	
<b>Status</b>	Target Exceeded	Target Exceeded	Target Exceeded	Target Exceeded	Pending	

***Increase the percent of office-based primary care physicians who have adopted electronic health records (basic) (Lead Agency - ONC; Measure ID - 1.A.2)***

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Target</b>	45% of office-based primary care physicians	55% of office-based primary care physicians	65% of office-based primary care physicians	67% of office-based primary care physicians	70% of office-based primary care physicians	75% of office-based primary care physicians
<b>Result</b>	49% of office-based primary care physicians	53% of office-based primary care physicians	56% of office-based primary care physicians	Dec. 2016	Dec. 2017	Dec. 2018
<b>Status</b>	Target Exceeded	Target Not Met but Improved	Target Not Met but Improved	Pending	Pending	Pending

***Percent of office-based physicians who are electronically sharing patient information with any providers outside their organization (Lead Agency - ONC; Measure ID - 1.E.4)***

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Target</b>	Set Baseline	N/A	40% of office-based physicians	40% of office-based physicians	50% of office-based physicians	55% of office-based physicians
<b>Result</b>	10% of office-based physicians	14% of office-based physicians	26% of office-based physicians	Dec. 2016	Dec. 2017	Dec. 2018
<b>Status</b>	Baseline	Historical Actual	Target Not Met but Improved	Pending	Pending	Pending

***Percent of non-federal acute care hospitals that are electronically exchanging patient health information with any providers outside their organization (Lead Agency - ONC; Measure ID - 1.E.7)***

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Target</b>	Set Baseline	N/A	75% of non-federal acute care hospitals	78% of non-federal acute care hospitals	80% of non-federal acute care hospitals	85% of non-federal acute care hospitals
<b>Result</b>	58% of non-federal acute care hospitals	62% of non-federal acute care hospitals	76% of non-federal acute care hospitals	Dec. 2016	Dec. 2017	Dec. 2018
<b>Status</b>	Baseline	Historical Actual	Target Exceeded	Pending	Pending	Pending

***Increase the percentage of public health agencies that can receive production Electronic Laboratory Reporting (ELR) Meaningful Use compliant messages from certified Electronic Health Record (EHR) technology used by eligible hospitals (Lead Agency - CDC; Measure ID - 8.B.1.3a)***

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Target</b>	Set Baseline	33 %	54 %	54 %	72%	80%
<b>Result</b>	18 %	46 %	70 %	Mar 31, 2016	Mar 31, 2017	Mar 31, 2018
<b>Status</b>	Baseline	Target Exceeded	Target Exceeded	Pending	Pending	Pending

***Identify key design principles that can be used by health IT designers to improve Personal Health Information Management (PHIM) (Lead Agency - AHRQ; Measure ID - 1.3.60)***

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Target</b>	Award research grants to identify key design principles	Gather first year report from grantees	Gather second year report from grantees.	Continue gathering reports from grantees.	2 additional reports from PHIM grantees	3 additional reports from PHIM grantees
<b>Result</b>	Awarded research grants to identify key design principles.	Gathered first year reports from grantees.	Gathered second year reports from grantees.	3 preliminary findings for PHIM healthit.ahrq.gov	Sep 30, 2016	Sep 30, 2017
<b>Status</b>	Target Met	Target Met	Target Met	In Progress	In Progress	In Progress
<b>Target</b>		Report preliminary results of grantees in Health IT's Annual Report	Report preliminary results of grantees in Health IT's Annual Report and summarize any early findings from PA-11-99 identifying key design principles for PHIM.	Report preliminary results of grantees in Health IT's Annual Report and summarize any ongoing findings from PA-11-99 identifying key design principles for PHIM in preparation for final report in FY 2016.		
<b>Result</b>		Preliminary results will be posted on healthit.ahrq.gov and in Health IT's Annual report (under development).	Preliminary results posted on healthit.ahrq.gov	3 preliminary findings for unique personal health information management needs and preferences based on 1) condition, setting, health information management activity; 2) age; and 3) how health information is shared between elderly patients and their caregivers.		
<b>Status</b>		Target Met	Target Met	Target Met		

***Analysis of Results***

To promote the use of health information technology, the Medicare and Medicaid EHR Incentive Programs provide incentive payments to eligible professionals, eligible hospitals, and critical access hospitals as they adopt, implement, upgrade, or demonstrate “meaningful use” of certified EHR technology. Because the EHR Incentive Program is seen as key to HHS’s goal to strengthen healthcare, it was one of HHS’s recently completed FY 2014 - 2015 Priority Goals. This increased focus has led to the pursuit of coordinated strategies that have resulted in a dramatic increase in the number of eligible providers who received EHR incentive payments. ONC exceeded its target in FY 2015 of 450,000 providers, making payments to 464,634 eligible professionals and hospitals. The Recovery Act helped to set the groundwork for the expansion of electronic health care records and HHS used a variety of

strategies to increase the number of providers using electronic health care systems by funding Health IT Regional Extension Centers, by working with state Health Information Exchanges and with Beacon Communities.

The wide scale adoption of appropriate health information technology will enable providers to communicate with fewer errors to pharmacies, better coordinate care across settings, alert physicians and caregivers of preventive care options that would benefit the patient, and reduce duplicative testing results—among many other potential benefits. HHS measures the percentage of office-based primary care physicians who have adopted electronic health records. A basic EHR system would be expected to include: patient demographics, patient problem lists, medications, clinical notes, prescriptions, ability to view laboratory results, and the ability to view imaging results. By FY 2014, 56 percent of office-based primary care physicians had systems that met the basic EHR standard, falling short of the target but improving over the previous year's result.

Electronic exchange of patient health information is a core component of Stage 2 Meaningful Use of electronic health records. Measure 1.E.4 estimates nation-wide office-based physicians' electronic sharing of any patient information with providers outside of the physician's organization. The information for this measure is gathered in partnership between the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) and the Office of the National Coordinator for Health IT (ONC). Each year since 2008, NCHS has included in its National Ambulatory Medical Care Survey (NAMCS) questions pertaining to electronic health record (EHR) adoption. Office-based physicians' electronic exchange of patient health information with external providers continued to grow as FY 2014 witnessed a near tripling of the rate to 37 percent of office-based physicians, not meeting the target but improving. Through FY 2014, 76 percent of non-federal acute care hospitals electronically exchange patient health information with external providers. This exceeds the goal of 75 percent.

CDC tracks the contribution of the informatics program and CDC program partners through the Electronic Health Records Meaningful Use (EHR-MU) initiative. CDC works to assess and ensure readiness of three key systems in each state: Electronic Laboratory Reporting, Immunization Information Systems, and Syndromic Surveillance. Public health agencies will assess their capability to receive data in a Meaningful Use-compliant format (i.e., Health Level 7 (HL7) 2.5.1 standard) from eligible hospitals and providers, meaning those with certified EHRs participating in the Centers for Medicare & Medicaid Services' Meaningful Use program. In FY 2014, Meaningful Use stage two required eligible providers to use only the latest format (HL7 version 2.5.1). However, if the public health agency approves, providers currently using the older format (HL7 2.3.1) could be grandfathered in. In FY 2014, CDC demonstrated significant capability gains for Electronic Laboratory Reporting as healthcare and public health agencies strove to meet Meaningful Use stage one and two requirements. Electronic Laboratory Reporting capability continues to grow, with an increase from 46 percent in FY 2013 to 70 percent in FY 2014.

Individuals are the end users of consumer health information technology; however, there is still a lack of basic research around these end users' personal health information management (PHIM) practices and needs and how these methods are influenced by a multitude of other contextual factors (e.g., care settings, demographics, motivations, user capabilities and limitations, informal care-giving networks, technology sophistication, and access to Internet) that, typically, represent a mixture of facilitators or barriers to adequate PHIM. The potential of health information technology to improve the quality of health care lies in providing information to people about their health in ways that are meaningful and useful to them. AHRQ's health information technology portfolio will build the evidence on what works

for people when they manage their health information. Preliminary results are revealing key principles for useful health IT design. Innovative researchers are using consumer gaming devices to capture doctor's workflow, and are discovering what happens to clinical care when electronic health records "go down" temporarily.

### *Plans for the Future*

ONC, CMS, CDC, AHRQ and their partners will promote the meaningful use of technology and the development of health IT standards designed to improve quality and lower health care costs. More specifically, ONC and its partners will continue to analyze EHR Incentive Program registration, attestation, and payment data to evaluate the characteristics of providers at each of the different program milestones. Analysis of the program data will enable states and Health Information Technology for Economic and Clinical Health (HITECH) Act grantees to establish goals and accelerate progress to meaningful use of electronic health records and health IT. Monthly analyses of program participation and related policy-relevant data are available in the following internet locations: CMS EHR Incentive Program data and reports - <http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/DataAndReports.html>; Health IT Policy Committee Meeting Archive - <http://www.healthit.gov/facas/FACAS/health-it-policy-committee>. CMS will continue to work to develop electronically specified measures that can be used to collect clinically relevant quality data for patient safety and improvement and will use available regulatory vehicles such as the inpatient prospective payments system rule and the physician fee schedule rule to continually improve upon data collection that supports the meaningful use of electronic health information.

CDC is partnering with the Association of State and Territorial Health Officers (ASTHO) to assess the feasibility of a Public Health Community Platform (PHCP), intended to be a shared infrastructure for common information exchange and development of innovative and interoperable systems to support state and local public health departments. A platform is a common architecture that is a base upon which other synergistic applications, processes, or technologies are developed. As the amount of data and expectation to use that data increase, informatics solutions are needed at the state and local level to efficiently transform data into public health action, ultimately improving health outcomes by providing decision makers with timely, accurate, and complete information. The PHCP will provide a space to generalize solutions to common public health informatics problems.

CDC is also partnering with Association of State and Territorial Health Officials (ASTHO) on an assessment state policy and practices to better understand the barriers and facilitators to health department access to healthcare facilities EHR in responding to a public health emergency, such as an infectious disease outbreak. The information and lessons learned from this study will be compiled in a report and toolkit to provide states with a list of barriers, suggestions to mitigate those barriers, best practices and policies that support EHR access, a menu of legal options, and may include practical tools such as templates for cooperative agreements, memorandums of understanding (MOUs) or policies.

In FY 2015, HRSA supported two national cooperative agreements to provide specialized training and technical assistance to health centers with health information technology and data. The cooperative agreement(s) will help health centers: adopt, optimize, and implement meaningful use of electronic health records and related information technology; develop and improve data quality, aggregation, and analytic capacity; use data to support clinical and operational quality improvement; and support effective recruitment and retention strategies of informatics and information management staff.

## ***FY 2014 Strategic Review Objective Progress Update Summary***

*Please note that this section summarizes the result of the FY 2014 HHS Strategic Review process, limiting the scope of content to that available prior to spring of 2015. Due to this constraint, the following may not be the most current information available.*

**Conclusion:** Progressing

**Analysis:** HHS has made progress improving health care and population health through meaningful use of health IT since the release of the HHS Strategic Plan. As of March 2015 more than 447,000 health care providers have received an incentive payment from the Medicare and Medicaid Electronic Health Records (EHR) incentive Programs. Seventy-six percent of hospitals have adopted a basic EHR system, and 48 percent of office-based physicians have adopted a basic EHR system. This progress has laid a strong base for health IT adoption and created a growing demand for its interoperability that not only supports the care continuum, but also supports health generally.

Electronic health information is not yet sufficiently standardized to allow seamless interoperability, as it is still inconsistently expressed through technical and medical vocabulary, structure, and format, thereby limiting the potential uses of the information to improve health and care. Additionally, health IT adoption remains a lower priority among providers that are not eligible for incentive payments under the Medicare and Medicaid EHR Incentive Programs, such as long-term care, post-acute care, and behavioral health settings. Effective communication and information sharing across all health care providers is essential for improving care quality and community health.

Issues identified during the review include observations that costs and workload are expected to increase going forward because of ever-growing and more complex requirements for health information technology. In addition, how the Electronic Health Records incentives sunset could potentially impact participation by new providers in EHR needs to be better understood. Finally, new models for collecting patient information could help to reduce data collection time, increase uniformity, and garner provider enthusiasm.

HHS plans to pivot the focus of the review in upcoming years to assess progress on interoperable electronic health information exchange in support of the HHS Delivery System Reform initiative. It will use available regulatory vehicles such as inpatient prospective payment system rule to improve upon data collection that supports meaningful use of electronic health information. HHS will assess the feasibility of a Public Health Community Platform to support state and local health departments. In addition, HHS will implement the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), particularly Title 1, to help providers use data and certified health IT so they can successfully participate in alternative payment models.