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Robert Wood Johnson Foundation



# Health Policy Brief

AUGUST 24, 2010

**'Meaningful Use' Of Electronic Health Records.** Hospitals and doctors will soon be eligible for federal incentives to help acquire and use health information technology.

## WHAT'S THE ISSUE?

Starting in May 2011, the federal government will begin paying bonuses to doctors, clinicians, and hospitals that have adopted the use of electronic health records (EHRs). From now until 2016 individual doctors and other providers may earn up to \$44,000 from Medicare or \$63,750 from Medicaid, and hospitals can earn millions of dollars, if they can demonstrate they are making "meaningful use" of EHR systems. The total cost of the incentive pool is now estimated at \$27 billion over six years.

When Congress created the EHR pool in 2009, lawmakers decreed that it was not enough to merely acquire such systems, but that health care providers also would have to make meaningful use of these systems. Rather than define meaningful use in the law, Congress left it up to the Department of Health and Human Services (HHS) to do so. In July 2010, HHS released a final regulation defining what constitutes meaningful use.

The question now is whether that 275-page regulation will accelerate or impede adoption of EHRs and, more important, if EHRs will advance the transformation of health care delivery that many experts deem necessary.

## WHAT'S THE BACKGROUND?

Electronic health records are far more than computerized versions of the charts and other records that health care providers must maintain for patients. Although EHRs reduce the volume of paperwork in health care, the government would not invest such large sums of money simply to computerize medical records. Instead, policy makers see EHRs as the core of an emerging health information technology (IT) infrastructure that will improve the nation's health care system and the health of Americans.

**MAKING RECORDS ACCESSIBLE:** Once information in patient records is available online, doctors can access and share important details about care, and patients can get thorough and up-to-date reports on their health status and care. A patient who falls sick while traveling can obtain his or her records in a distant city for the benefit of unfamiliar health care providers. More commonly, people who change doctors or receive care from more than one provider in the same city can easily and securely have their records forwarded and shared.

Meanwhile, the public and private organizations that pay for health care can analyze ag-

**\$27 billion**

#### EHR incentives

Estimated amount of federal funding to encourage meaningful use of electronic health records.

**“Unless a majority of health care providers use EHRs to track their patients’ health and treatments, the necessary information will not be generated.”**

gregated records to discern important trends. For example, they could determine that health care was more costly in some regions than others and determine why that was the case. They could also evaluate trends in medical errors, avoidable rehospitalizations of chronically ill patients, and so on. Federal officials from President Barack Obama on down have touted the power of health IT to reduce costs and improve the quality of care.

**CRITICAL MASS NEEDED:** Unless a majority of health care providers use EHRs to track their patients’ health and treatments, the necessary information across the broad health care system will not be generated. Yet providers have resisted adopting the technology, mostly because of the cost and the need to change their paper-based work habits.

A 2009 study by the Commonwealth Fund found that 46 percent of U.S. primary care providers use EHRs that are at least rudimentary systems and are possibly more sophisticated. That’s just half the share of primary care providers who are using such systems in several European nations. As for U.S. hospitals, only 2 percent of facilities surveyed in 2009 had an EHR system that would meet the federal government’s meaningful-use requirement.

**BILLING AND SCHEDULING:** The computer systems commonly found in U.S. hospitals and doctors’ offices today are mostly used for scheduling, billing, and other accounting tasks. This is especially true for physicians and other professionals who work in offices with two or three practitioners—and these are the majority of U.S. physicians. To meet the requirements of meaningful use, many providers will have to adopt far more advanced information technology systems than they now have. Two primary obstacles are widely cited: the costs of installing and operating these systems, and the changes they require in medical professionals’ work procedures and habits.

To jump-start health IT use, the federal and state governments have underwritten various pilot projects and model networks since at least 2005. These programs, however, have not made a large difference in the way most of the nation’s roughly 521,600 Medicare and Medicaid health care providers and approximately 5,000 hospitals do their work.

**CARROTS AND STICKS:** Persuaded that a major federal investment would break the logjam, in February 2009 Congress passed the

Health Information Technology for Economic and Clinical Health (HITECH) Act as part of the economic recovery, or stimulus, package known as the American Recovery and Reinvestment Act. The aim was to achieve nationwide use of health IT by 2014—a goal originally set in 2004 by President George W. Bush and re-affirmed by President Obama in 2009. The HITECH law provided for a mix of carrots and sticks to spur adoption of health information technology over the next ten years.

First, Congress created a set of incentives to adopt health IT, to be added to payments that providers would receive for treating patients on Medicare and Medicaid. The incentives have been estimated to total \$27 billion over six years. To ensure that EHRs would be effective, the incentives would go to providers who demonstrated meaningful use of the technologies—a term that Congress did not define at the time, but left to HHS to decide later. The law also spelled out that EHR systems installed by doctors and hospitals would have to be certified as functional, secure, and technically sound. These criteria, too, were left to HHS to flesh out later in regulations.

Second, Congress set penalties for providers who had not adopted electronic health records and related technologies by 2016. At that point, physicians and hospitals that are not using electronic health record systems will see their Medicare and Medicaid payments actually cut, rather than increased. Thus, those who adopt the technology soonest will reap the largest bonuses; those who wait until 2015 or after will see reductions in their payments.

**A GROUP EFFORT:** Since enactment of the legislation, implementation of the program has been the responsibility of two agencies in HHS: the Office of the National Coordinator for Health Information Technology (ONC), and the Centers for Medicare and Medicaid Services (CMS). The agencies, their advisory committees, and health industry representatives worked on the implementing regulations for months. Draft rules published for comment in January 2010 drew more than 2,000 comments.

The final regulations were issued in July 2010. Doctors and other providers can begin reporting that they use certified EHR systems on January 1, 2011, and can submit the data required to demonstrate compliance beginning in April 2011. Exhibit 1 describes some common health information technology applications.

## EXHIBIT 1

## Glossary Of Health Information Technology And Meaningful-Use Terms

Clinical decision support	Interactive computer programs or systems that help clinicians perform complex tasks associated with the care management process. Examples: checking drug interactions and adverse events, preventive care reminders.
Computerized physician order entry	Electronic entry of instructions from medical practitioner for communication to medical staff or other departments (such as pharmacy, radiology, laboratory) that are responsible for fulfilling the order.
Electronic health record	Electronic records of patient health information that can be shared across different health care settings through secure, networked information systems.
Electronic prescribing	Electronic transmission of prescription information from prescriber to pharmacy. May include checking for eligibility enforcing formularies, retrieving medication history, checking drug-drug and drug-allergy interactions.
Personal health record	A health record that is initiated and maintained by an individual by gathering data and making this information accessible online to those with the required credentials.

SOURCE Health Affairs research.

Although the long-term implications of this complex effort remain to be seen, some observers question whether the incentives will be sufficient to encourage providers to adopt the technology and whether the requirements will be sufficient to truly improve health care delivery and reduce costs. Alternatively, the program could be so demanding that many doctors and hospitals won't be able to comply—and may not even try.

## WHAT'S IN THE REGULATION?

The rules issued in July 2010 cover only the program's first two years. Two more stages of the program will follow in 2013 and beyond. Over time, HHS officials plan to expand the definition of *meaningful use* by adding IT functions that providers must use to get their incentive fees.

**REQUIRED CLINICAL FUNCTIONS:** For 2011 and 2012, meaningful use requirements include a number of clinical functions. One is prescribing medications electronically (that is, not written on paper), called "e-prescribing." Another is recording in the EHR whether each patient age 13 or older smokes, as well as measures of clinical quality, such as whether patients get appropriate immunizations or screening for diseases.

Hospitals and health care providers seeking incentive payments during the first stage of the program must each use a set of core functions—fourteen for hospitals and fifteen for providers. They also must select five other functions from a menu of ten optional ele-

ments. One of the five optional functions must address public health (Exhibit 2).

The hospitals and providers must use their systems to perform each function over a period of ninety days in the first year and meet numerical targets. For example, they must maintain lists of medications that their patients are using, and more than 80 percent of patients must have at least one entry recorded as data that can be analyzed by a computer. After 2011, they must demonstrate meaningful use for the entire year.

**HURDLES AND CONSTRAINTS:** To accomplish meaningful use, providers must use EHR systems that comply with technical standards laid out by the Office of the National Coordinator. The systems must be certified as compliant, functional, and secure. Certification will be done by HHS-authorized organizations. Existing EHR systems in hospitals and medical offices may need to be upgraded before they can be certified.

With HHS backing, electronic health record system certification began several years ago as an attempt to convince wary health IT purchasers that they were getting value for their money. Now certification will be used to ensure that providers are installing quality systems—and data outputs—in return for the estimated \$27 billion in incentive payments paid for by the nation's taxpayers.

Until now, one organization, the Certification Commission for Health Information Technology, has done all the certification work in

## 20

## Meaningful-use objectives

Doctors and clinicians must accomplish 20 out of 25 electronic health record objectives to receive the bonus.

# 19

## Meaningful-use objectives

Hospitals must accomplish 19 out of 24 electronic health record objectives to receive the bonus.

connection with HHS programs. To speed the certification process and add competition, the Office of the National Coordinator is seeking to authorize more organizations as official certification bodies. They will be certifying that systems meet the new meaningful-use requirements and newly issued technical standards. Because of time constraints, HHS has launched a temporary certification program that will be succeeded by a more robust one later this year.

The time constraints are very real. As of August 15 there were no authorized EHR certification organizations. Officials in the Office of the National Coordinator say that they expect authorized organizations to begin testing and certifying EHRs in late summer 2010. Then certified products could be on the market in the fall of 2010.

**SCALED-BACK REQUIREMENTS:** The regulations originally proposed in January listed twenty-three requirements for hospitals and twenty-five for other providers to establish meaningful use. After receiving numerous complaints that the requirements were too onerous, CMS decided to allow more flexibility by dividing them: the mandatory “core” requirements (referred to as “objectives” in the regulation) and a menu of ten optional items from which providers must choose five to implement in the next two years if they are to receive incentive payments.

The final regulation makes critical-access hospitals (small, mostly rural hospitals) eligible for the Medicaid EHR incentive program. It delays requirements for certain administra-

tive functionality in EHRs, such as checking a patient’s eligibility for insurance benefits, acceding to arguments that these functions have not been included in EHR software in the past and could not be added quickly.

In the final regulation, CMS also reduced requirements for implementing clinical decision support. That is a system capability that alerts practitioners of a clinical rule or best practice, such as ordering a mammogram for a woman of a certain age or prescribing an annual flu shot for an adult. Just one such rule must be implemented in the system in stage 1, but more will be required later.

Although most of the changes to the proposed rule involved relaxing requirements, CMS added optional requirements for recording older patients’ advance care directives in hospital EHR systems and for giving patients educational materials. To receive their payments, providers must submit reports to CMS or the states. The report in 2011 can be a simple written attestation, but after that they must submit more detailed reports electronically.

## WHAT’S THE DEBATE?

The reduction in mandatory requirements drew praise from organizations representing doctors, hospitals, and the health IT industry. Software industry groups told Congress that the shorter list was an improvement and that the requirements were ambitious but achievable for stage 1. HHS officials characterized the reduction as a deferral, saying that the requirements originally proposed for stage 1 would be included in stage 2.

## EXHIBIT 2

### Meaningful-Use Implementation Objectives For Health Care Providers And Hospitals, Stage 1: 2011-2012

Basic requirements	More than 80% of patients must have records in certified EHR technology Eligible professionals (physicians and clinicians) must report on 20 of 25 meaningful-use objectives <sup>a</sup> Eligible hospitals must report on 19 of 24 meaningful-use objectives <sup>b</sup>
Sample objectives for physicians and clinicians	Generate and transmit prescriptions electronically Provide patients with an electronic copy of their records upon request Implement drug-drug and drug-allergy interaction checks Implement capability to electronically exchange key clinical data among providers and patient-authorized entities Protect electronic health information
Sample objectives for hospitals	Implement computerized physician order entry Report hospital clinical quality measures to CMS or the states Protect electronic health information Record advance directives for patients age 65 and older Provide a summary of the care record for each transition of care or referral

**SOURCE** Centers for Medicare and Medicaid Services. <sup>a</sup>Physician and clinician objectives include 15 “core” and 5 out of 10 “menu” objectives, at least one of which involves public health. <sup>b</sup>Hospital objectives include 14 “core” and 5 out of 10 “menu” objectives, at least one of which involves public health.

# \$44,000

## Bonus to physicians

The amount of money each eligible doctor or clinician can receive from Medicare for implementing meaningful use.

**“Debate is likely to continue as more practical implications of the regulation surface.”**

Despite the generally favorable reaction to the final regulation, nearly every group noted that achieving meaningful use will be challenging—especially because of other major changes under way in the health care sector. As of mid-summer 2010, no EHR products for doctors’ offices on the market met all meaningful-use requirements. But software companies are promising that such systems will be available in the fall of 2010.

**NO CLEAR ANSWERS:** Debate is likely to continue as more practical implications of the regulation surface. But there will be no clear answers for many years to the fundamental questions about long-term effects. Are the meaningful use requirements too stringent, too loose, or just right to accomplish their goals? And will EHRs truly transform the way health care is delivered in the United States?

The American Medical Association and American Hospital Association, along with EHR system vendors and many other groups, pushed hard to relax some of the draft regulations, which they said took an all-or-nothing approach to the requirements. They said it would take too long to get systems operational in view of the gaps in some of the needed infrastructure. They won delays, but the Obama administration has made clear its intention to require the elements of a comprehensive health IT environment in the course of the incentive program.

- **RULES TOO TOUGH:** Practitioner resistance came from concerns that the incentives will not pay for the cost of installing EHR systems. At a time when their Medicare and Medicaid fees are shrinking or have the potential to do so, practitioners object to paying for systems they would not choose to acquire on their own. CMS has estimated the cost of an EHR system for a physician at \$54,000 in direct cash outlays. There are also additional costs, such as time spent in learning the system instead of treating patients. But the government has never promised to pay the entire cost. And there is no other U.S. industry for which the government paid for much of the cost of transition to sophisticated information technology.

- **RULES TOO LOOSE:** Other experts and some politicians believe that the meaningful use rules might not be stringent enough. They share the concerns of the Office of the National Coordinator, CMS, and others that unless the requirements are robust, a significant amount of taxpayer money will be spent on systems that will not do the job. Some Repub-

licans accused the administration of watering down the rules too much. Rep. Wally Herger (R-CA) called the final regulation a “missed opportunity to improve patient care and reduce waste.”

- **RULES JUST RIGHT:** Many observers, however, say the rules are neither too stringent nor too lax. They express optimism that the money will spur change, at least in larger practices and in hospitals. Getting individual doctors in small practices to change will be tougher. They have less to gain from using EHRs and can’t employ full-time IT specialists to help them with technical issues. Some specialist physicians doubt that their practices can benefit from EHRs.

Many of the nation’s older physicians may be more set in their ways than their younger, tech-savvy counterparts, and may be less likely to invest in EHRs for the remaining years of their careers. Nevertheless, the administration’s hope is that the incentives will induce a greater number of practicing clinicians to adopt EHRs so that the nation need not wait for the next generation of practitioners to gain the benefits of health IT. A critical mass of providers must adopt EHRs and coordinate care through data exchanges to increase the quality of care in the ways intended by Congress and the administration.

## WHAT’S NEXT?

Implementation is the focus now at HHS as officials prepare to name authorized certification organizations, ramp up to process claims for incentive payments, work with the states to coordinate Medicaid programs with federally administered Medicare incentives, continue to develop health IT policies, and much more.

Health care providers pleaded with HHS for more advance notice of the stage 2 meaningful-use requirements—which are likely to be announced sometime in 2012—than the few months they were given to prepare for stage 1. Observers expect the Office of the National Coordinator and CMS to spend much of the coming year working on the next set of requirements. The agencies also have promised to use the experience gained in stage 1 when making future decisions.

Meanwhile, some are wondering whether the health IT industry will rise to the challenge and create software that truly makes it possible for providers to achieve meaningful use. The health software industry is now

**“The program could be so demanding that many doctors and hospitals won’t be able to comply—and may not even try.”**

rushing to deliver products that will qualify. Once the software is widely available, health care providers will have to learn new ways of making, keeping, and sharing patient records.

In the final analysis, however, backers of health IT say the point isn’t just to install technology, but to be able to use the information generated through EHRs to transform health

care. “Broad use of [health IT] has the potential to improve health care quality, prevent medical errors, increase the efficiency of care provision and reduce unnecessary health care costs, increase administrative efficiencies, decrease paperwork, expand access to affordable care, and improve population health,” according to the HHS health IT website. Actions in the coming months will help to determine if that optimistic vision can become reality. ■

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Health Policy Briefs are produced under a partnership of *Health Affairs* and the Robert Wood Johnson Foundation.

Cite as:

“Meaningful Use’ of Electronic Health Records,” *Health Affairs*, August 24, 2010.

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