

## CLINICAL VIGNETTE

# Finding Meaning in the Electronic Health Records (EHR) Meaningful Use Incentive Program

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### *Introduction*

The widespread use of electronic health records (EHR) in the United States continues. However, the transition from paper to electronic health records, like most changes, is not simple. The Health Information Technology for Economic and Clinical Health (HITECH) Act was initiated in 2009 in order to catalyze the movement towards a meaningful electronic system by authorizing incentive payments through Medicare and Medicaid to eligible professionals.<sup>1</sup> The goal was not just the implementation of electronic health records, but also for the “meaningful use” utilizing electronic health records.

### *What is Meaningful Use?*

Meaningful use is using certified EHR technology to improve quality, safety, efficiency, and reduce health disparities. It is a rubric for the use of EHR defined by the Centers for Medicare and Medicaid Services (CMS). The incentive program allows for eligible health professionals and eligible hospitals to earn incentive payments by complying with the guidelines. The incentive program is meant to encourage eligible health professionals and institutions to adopt meaningful use with incentive payments over a maximum of five years if they demonstrate certain objectives and quality measures. An eligible professional will start at Stage 1 to initiate the use of EHR in their practice, and by Stage 3, will improve health outcomes on a larger population scale.

### *How to Enroll in Meaningful Use*

The first step in meaningful use is determining if you are an eligible professional (EP). Eligible professionals include doctors, dentists, nurse practitioners, physician assistants, and residents for Medicaid. Practices and hospital-based EPs cannot participate in the incentive program. The next step is to install and use a certified EHR (<http://healthit.hhs.gov/CHPL>). Then, the EP needs to determine whether or not they qualify for the Medicaid incentive program, rather than Medicare.

To be eligible for the Medicaid incentive program, an EP needs to have greater than a minimum of 30% Medicaid volume, or a pediatrician with greater than 20% minimum Medicaid volume. Why might an EP consider the Medicaid incentive program versus the Medicare incentive program? The Medicaid incentive program offers higher incentive payments, no penalties, longer timeline, and an upfront “signing bonus”.

For the Medicare program, the timeline for incentives ends in the year 2016. The payment is 75% of Medicare allowed charges up to the maximum annual cap. Penalties increase from 1% in 2015 to 5% in 2019. To avoid the penalties, EPs need to pass meaningful use attestation every year. For example, EPs who demonstrate meaningful use in 2014 would need to attest no later than October 1, to avoid a penalty in 2015. New EPs starting practice in 2015 would need to report for 90 days by 2016 to avoid a penalty in 2017. The timeline for Medicaid and Medicare depend on the year the EP starts the incentive program.

EP need to register on the Centers for Medicare and Medicaid Services (CMS) website at <http://ehrincentives.cms.gov> and at <http://medi-cal.ehr.cal.gov> for the Medi-Cal program. These systems were launched back in October 2011, and the first payments were distributed by December 2011. If the EP is not to receive the incentive money, only one institution may be authorized to receive the incentive payments. After registration, the EP will begin with Stage 1 Meaningful Use.

### *The Stages*

Meaningful Use is meant to span five years with a total of three stages, each with its own focus (Table 1)<sup>2</sup>.

Stage	Focus
1	Data Capture and Sharing
2	Advance Clinical Processes
3	Improved Outcomes

Stage 1 Meaningful Use focuses on establishing the foundation to effectively use EHRs in clinical practice. A report from CMS shows that only 10% of EPs attested to meaningful use stage 1 in 2011. To qualify for Stage 1 Meaningful Use, an EP must pass all 15 objective measures and 5 chosen menu measures (Table 2), as well as must electronically report on all quality measures (Table 3). Figure 1 illustrates the needed components to successfully achieve Meaningful Use stage 1.

Core Objectives	Menu Objectives
1. Computerized provider order entry (CPOE)	1. Submit electronic data to immunization registries
2. Drug-drug and drug-allergy checks	2. Submit electronic syndromic surveillance data to public health agencies
3. Maintain up-to-date problem list of current and active diagnoses	3. Drug formulary checks
4. E-prescribing (eRx)	4. Incorporate clinical lab-test results
5. Maintain active med list	5. Generate lists of patients by specific conditions
6. Maintain active medication allergy list	6. Send reminders to patients for preventive/follow-up care
7. Record demographics	7. Patient-specific education resources
8. Record and chart changes in vital signs	8. Electronic access to health information for patients
9. Record smoking status for patients 13 years +	9. Medication reconciliation
10. Report ambulatory clinical quality measures to states	10. Summary of care record for transitions of care
11. Implement clinical decision support	
12. Provide patients with an electronic copy of health info, upon request	
13. Provide clinical summaries for patients for each office visit	
14. Capability to exchange clinical information*	
15. Protect electronic health information	

*\*This objective was removed from meaningful use for attestations in 2013 and beyond*

Table 3: Meaningful Use Stage 1 Quality Measures				
Core Quality Measures	Clinical Quality Measures	Alternative Core Clinical Quality Measures	Menu Quality Measures	Clinical Quality Measures
1. Hypertension: Blood Pressure Measurement	1. Weight Assessment and Counseling for Children and Adolescents	1. Diabetes: Hemoglobin A1c Control (<8.0%)	1. Diabetes: Hemoglobin A1c Control (<8.0%)	1. Diabetes: Hemoglobin A1c Control (<8.0%)
2. Preventive Care and Screening Measure Pair: a) Tobacco Use Assessment b) Tobacco Cessation Intervention	2. Preventative Care and Screening: Influenza Immunization for Patients 50 Years Old or Older	2. Diabetes: Blood Pressure Management	2. Diabetes: Blood Pressure Management	2. Diabetes: Blood Pressure Management
3. Adult Weight Screening and Follow-up	3. Childhood Immunization Status	3. Diabetes: Urine Screening	3. Diabetes: Urine Screening	3. Diabetes: Urine Screening
		4. Diabetes: Hemoglobin A1c Poor Control	4. Diabetes: Hemoglobin A1c Poor Control	4. Diabetes: Hemoglobin A1c Poor Control
		5. Diabetes: Low Density Lipoprotein (LDL-C) Management	5. Diabetes: Low Density Lipoprotein (LDL-C) Management	5. Diabetes: Low Density Lipoprotein (LDL-C) Management
		6. Ischemic Vascular Disease (IVD): Blood Pressure Management	6. Ischemic Vascular Disease (IVD): Blood Pressure Management	6. Ischemic Vascular Disease (IVD): Blood Pressure Management
		7. IVD: Complete Lipid Panel and LDL Control	7. IVD: Complete Lipid Panel and LDL Control	7. IVD: Complete Lipid Panel and LDL Control
		8. IVD: Use of Aspirin of Another Antithrombotic	8. IVD: Use of Aspirin of Another Antithrombotic	8. IVD: Use of Aspirin of Another Antithrombotic
		9. Controlling High Blood Pressure	9. Controlling High Blood Pressure	9. Controlling High Blood Pressure

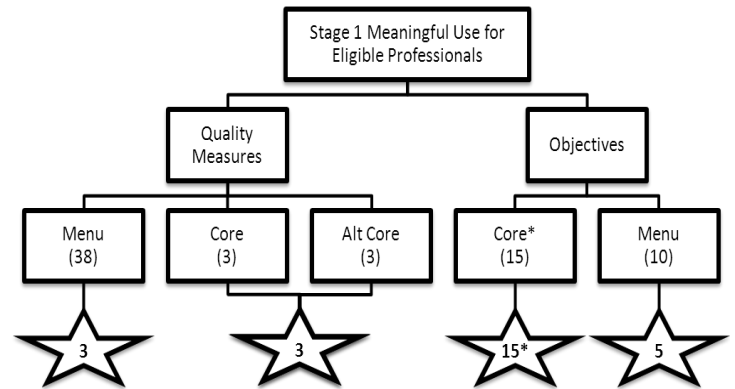


Figure 1: Stage 1 Meaningful Use for Eligible Providers. The number in the stars indicate the number of measures or objectives that need to be satisfied from each category. \**Capability to exchange key clinical information was eliminated for 2013, making 14 core objectives for attestations in 2013 and beyond.*

Later stages will focus on other complex issues of the healthcare system. As an EP progresses from Stage 1 to Stage 2, there are a few differences in the requirements of meaningful use attestation. Stage 2 includes an increase to 17 core objectives, a decrease to 3 out of 10 menu objectives, and the same core quality measures.

Stage 3 will focus on improving quality, safety, and efficiency, leading to improved health outcomes on a population scale<sup>3</sup>. It will provide decisions support for national high-priority conditions, patient access to self-management tools, access to comprehensive patient data, and improve population health.

### Challenges

Due to the very ambitious goals of meaningful use, several changes took place between 2013 and 2014 to balance the ambitious goals and what EPs can realistically accomplish. A study in 2010 showed that only 43.1% of office-based physicians could potentially meet meaningful use core criteria<sup>4</sup>. Barriers to the adoption of meaningful use included high expenses - not only to purchase EHR technology, but also lost revenue associated with the lower productivity during implementation<sup>5</sup>. By 2012, many physicians still had questions about registering, reporting, and attesting to meaningful use<sup>6</sup>. Changes were made to the attestation process for meaningful use. Some objectives do not have any thresholds in order to attest meaningful use. In 2014, EPs must report on 9 out of the 64 quality measures, as long as

at least 3 of the National Quality Strategy domains are covered. Another example of a change is the removal of core and menu subsections.

### **Conclusion**

Although the road to a complete meaningful electronic health records system is complex, the effort and progress seen nationally is a good sign. The hope is that electronic health record systems will improve workflows, health policy, and patient care, among other characteristics of our healthcare system. Although more time is needed to establish whether or not EHR will significantly alter outcomes, a few studies have already found positive impacts with EPs attaining meaningful use. One study concluded that the achievement of composite studies for diabetes care was 35.1% higher at sites with a certified EHR system<sup>7</sup>. Positive results like this are possible if more eligible professionals achieve meaningful use in their practices.

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