Meaningful Use White Paper Series
Paper no. 5a: Measures Reporting for Eligible Providers
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Measures Reporting for Eligible Providers

The fourth paper in this series reviewed the EHR certification requirements related to the final rule on meaningful use. This paper returns the focus to the meaningful use rule, offering an overview of the health IT functional measures for eligible providers. A companion paper (5b) provides an overview of the requirements for hospitals.

Eligible providers (EPs) participating in the meaningful use program will be required to report on quality measures. The measures selected in the final regulation were developed to meet the stated objectives in support of the health outcome policy priorities.

The measures are grouped into two categories: health IT functionality measures and clinical quality measures. This paper focuses on the health IT functionality measures, which were developed to demonstrate the use of certified EHR technology in daily work processes.

Eligibility

Measures in stage 1 underline the importance of establishing functionalities in the EHR that will emphasize continuous quality improvement and ease of information exchange. Stage 1 is considered the foundation for EHR functionality that will expand in stages 2 and 3.

CMS originally put forward 27 required measures in the proposed rule. Based on reaction to the proposal, CMS made adjustments in the final rule allowing providers some flexibility in meeting the reporting requirements.

The measures are largely maintained from the proposed rule, but CMS divided them into two categories—core and menu. EPs must successfully meet the measures of each of the core set’s 15 objectives.

The menu set includes 10 additional objectives, of which eligible professionals will choose five. The items not chosen will be deferred to stage 2 of the program. An EP may select any five objectives, with the caveat that at least one of the menu objectives includes a population and public health measure. CMS encourages EPs to implement all of the functionalities listed in stage 1, though this is not mandatory.

The core and menu sets appear in an appendix at the end of this paper, with the changes between the proposed and final rules noted.

In addition, AHIMA offers the certification criteria and meaningful use objectives mapped against the content exchange standards, implementation specifications, and vocabulary standards. This is a member resource, and log in is required (see http://library.ahima.org/xpedio/groups/secure/documents/ahima/bok1_047867.pdf).
CMS anticipates all menu objectives in stage 1 to become a part of the core set in stage 2. In addition, it expects to raise the stage 1 thresholds and add new objectives. New goals will go beyond capturing data in electronic format to include the exchange of the data in structured formats. The intent of escalating measures “is to ensure that meaningful use encourages patient-centric, interoperable health information exchange across provider organizations regardless of provider’s business affiliation or EHR platform,” CMS writes.

The regulation acknowledges that not all EPs will be able to report on all objectives. In such cases EPs can still quality as meaningful users if they attest that they did not have a sufficient number of patients or actions on which to base a measurement. The attestation will remove the objective from consideration when determining the EP’s eligibility, assuming that other core set objective were met.

The same is true for the menus set. If an EP attests that it cannot measure one of the 10 objectives, the EP would then only have to satisfy 4 of the remaining 9 objectives.

CMS intends the measures to reflect the daily use of these EHR capabilities in meeting the program objectives. Further, CMS intends that EPs use the capabilities for all patients, not just for Medicare or Medicaid populations.

Hospital-based physicians do not qualify for the program. A physician is considered to be hospital-based if more than 90 percent of his or her services are provided under the place-of-service codes 21 (Inpatient Hospital) or 23 (Emergency Room, Hospital). If EPs practice at multiple locations, the measures are to be limited to actions taken at locations equipped with certified EHR technology.

CMS acknowledges that EPs who practice at multiple locations may not have access to certified EHR technology at each location. The rule’s intent is to include EPs who are able to meaningfully use certified EHR technology when it is available yet who also provide care to patients in other locations where it is not available.

To qualify as a meaningful user, 50 percent or more of an EP’s patient encounters during the EHR reporting period must occur at a location equipped with certified EHR technology. EPs who do not conduct 50 percent of their patient encounters in any one location would have to meet the 50 percent threshold through a combination of locations. CMS believes that this is a reasonable solution that advances the meaningful use priorities and provides some level of equity.

**Methods of Demonstration**

EPs will demonstrate that they satisfy the objectives and measures by providing an attestation through a secure mechanism, such as claims-based reporting or an online portal. This will not apply to the clinical quality measures, which CMS will require are reported electronically in 2012.
Through a one-time attestation following the completion of the EHR reporting period, EPs will identify the certified EHR technology used and the results of their performance on all the measures associated with the reported objectives for meaningful use.

As health IT matures, CMS expects to base demonstration of meaningful more on automated reporting, such as the direct electronic reporting of both clinical and nonclinical measures and documented participation in HIE. CMS advocates for uniformity and simplicity in this process and suggests that the Medicaid programs follow its lead.

**Definitions**

The final rule includes the following definitions, which are helpful in reviewing the objectives, measures, and reporting requirements.

**EHR reporting period:** The period in which the EP demonstrates meaningful use. In the first payment year (beginning January 1, 2011), this may be any continuous 90-day reporting period within the year. In subsequent years of the program, CMS requires a full year of EHR reporting period for demonstrating meaningful use.

**Qualified EHR:** CMS adopts this term as defined by the Office of the National Coordinator (ONC), which indicates that Congress intended to apply the definition found in section 3000 of the Public Health Service Act. “A qualified electronic health that is certified pursuant to section 3001(c)(5) of the PHS Act as meeting standards adopted under section 3004 of the PHS Act that are applicable to the type of record involved (as determined by the Secretary [of Health and Human Services]), such as an ambulatory electronic health record for office-based physicians or an inpatient hospital electronic health record for hospitals).

**Certified EHR technology:** The final rule also adopts the definition of certified EHR technology used by ONC in its rule on EHR standards and certification:

1. A Complete EHR that meets the requirements included in the definition of a Qualified EHR and has been tested and certified in accordance with the certification program established by the National Coordinator as having met all applicable certification criteria adopted by the Secretary; or

2. A combination of EHR Modules in which each constituent EHR Module of the combination has been tested and certified in accordance with the certification program established by the National Coordinator as having met all applicable certification criteria adopted by the Secretary, and the resultant combination also meets the requirements included in the definition of a Qualified EHR.

**Unique patients:** A patient may be counted only once during the EHR reporting period, even if seen by the EP multiple times. The meaningful use objective is not necessarily updated every time the patient is seen within the reporting period.

**Transition of care:** Within the final rule CMS modified its definition slightly to reflect an expansion of the descriptors as “the movement of a patient from one setting of care (hospital,
ambulatory primary care practice, ambulatory specialty care practice, long-term care, home health, rehabilitation facility) to another.” Additionally, CMS clarified that the receiving EP would conduct the medication reconciliation.

**Relevant encounter:** CMS finalized this definition as proposed, “an encounter during which the EP, eligible hospital, or CAH performs medication reconciliation due to new medication or long gaps in time between patient encounters or other reasons determined by the EP, or eligible hospital or CAH.”

*Measures reporting for eligible hospitals is covered in paper 5b of this series.*

**References**


Appendix
Meaningful Use: Review of Changes to Objectives and Measures in Final Rule

The proposed rule on meaningful use established 27 objectives that participants would meet in stage 1 of the program. The final rule largely maintains these objectives but divides them into “core” and “menu” sets.

Participants must achieve each objective in the core set. There are 15 objectives for eligible professionals and 14 for eligible hospitals and critical access hospitals.

The menu set includes 10 additional objectives, of which eligible professionals and hospitals will choose five. The items not chosen will be deferred to stage 2 of the program. (There are 12 objectives in total, with 10 applying to eligible professionals and 10 to hospitals.)

Participants may select any five objectives from the menu set, with one limitation. They must choose at least one population and public health measure, a requirement made to ensure these goals receive sufficient attention.

In all, two objectives were added—both to the menu set:

- Record advance directives for patients 65 years old or older
- Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate

Two objectives were removed, deferred to later stages:

- Check insurance eligibility electronically from public and private payers (at least 80 percent of all unique patients)
- Submit claims electronically to public and private payers (at least 80 percent of all claims filed electronically)

Overall, the final rule lowered the bar on most of the measures associated with the objectives.

The first four columns in the following review are reproduced from table 2 of the final rule. The final column offers a description of the change from the proposed rule. Not noted here are changes to wording that add critical access hospitals (CAHs) to the hospital objectives and measures.
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<tr>
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| Improving quality, safety, efficiency, and reducing health disparities | Use CPOE for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines | More than 30% of unique patients with at least one medication in their medication list seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one medication order entered using CPOE | • Clarified terms of order entry within objective  
• Reduced threshold for EPs from 80% of all orders  
• Increased threshold for hospitals from 10% of all orders |
| Implement drug-drug and drug-allergy interaction checks | Implement drug-drug and drug-allergy interaction checks | The EP/eligible hospital/CAH has enabled this functionality for the entire EHR reporting period | • Moved drug formulary check to menu set |
| Generate and transmit permissible prescriptions electronically (eRx) | Record demographics:  
  o preferred language  
  o gender  
  o race  
  o ethnicity  
  o date of birth | More than 50% of all unique patients seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) have demographics recorded as structured data | • Deleted requirement to record insurance type  
• Reduced threshold from 80%  
• Clarified reporting of cause of death |
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<tr>
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<tr>
<td></td>
<td>Eligible Professionals</td>
<td>Eligible Hospitals and CAHs</td>
<td>More than 80% of all unique patients seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one entry or an indication that no problems are known for the patient recorded as structured data</td>
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<td>Maintain an up-to-date problem list of current and active diagnoses</td>
<td>Maintain an up-to-date problem list of current and active diagnoses</td>
<td>More than 80% of all unique patients seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data</td>
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<td>Maintain active medication list</td>
<td>Maintain active medication list</td>
<td>More than 80% of all unique patients seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one entry (or an indication that the patient has no known medication allergies) recorded as structured data</td>
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<td>Eligible Professionals</td>
<td>Eligible Hospitals and CAHs</td>
<td>For more than 50% of all unique patients age 2 and over seen by the EP or admitted to eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23), [record] height, weight and blood pressure are recorded as structured data</td>
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<td>Record and chart changes in vital signs:</td>
<td>Record and chart changes in vital signs:</td>
<td>• Reduced threshold from 80%</td>
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<tr>
<td></td>
<td>o Height</td>
<td>o Height</td>
<td>• Added height and weight to measure</td>
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<td>o Weight</td>
<td>o Weight</td>
<td>• Removed BMI and growth chart from measure</td>
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<td>o Blood pressure</td>
<td>o Blood pressure</td>
<td>• Added structured data to measure</td>
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<td></td>
<td>o Calculate and display BMI</td>
<td>o Calculate and display BMI</td>
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<td>o Plot and display growth charts for children 2-20 years, including BMI</td>
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<td>Record smoking status for patients 13 years old or older</td>
<td>Record smoking status for patients 13 years old or older</td>
<td>More than 50% of all unique patients 13 years old or older seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) have smoking status recorded as structured data</td>
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<td>Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance with that rule</td>
<td>Implement one clinical decision support rule related to a high priority hospital condition along with the ability to track compliance with that rule</td>
<td>• Added structured data to measure</td>
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<td>Implement one clinical decision support rule</td>
<td>Implement one clinical decision support rule</td>
<td>• Reduced threshold from 5</td>
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<td><strong>CORE SET</strong></td>
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<td><strong>Eligible Professionals</strong></td>
<td>Report ambulatory clinical quality measures to CMS or the States</td>
<td>For 2011, provide aggregate numerator, denominator, and exclusions through attestation as discussed in section II(A)(3) of this final rule</td>
<td>(no change)</td>
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<td><strong>Eligible Hospitals and CAHs</strong></td>
<td>Report hospital clinical quality measures to CMS or the States</td>
<td>For 2012, electronically submit the clinical quality measures as discussed in section II(A)(3) of this final rule</td>
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<td><strong>Engage patients and families in their health care</strong></td>
<td>Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies), upon request</td>
<td>More than 50% of all patients of the EP or the inpatient or emergency departments of the eligible hospital or CAH (POS 21 or 23) who request an electronic copy of their health information are provided it within 3 business days</td>
<td>• Amended objective to read “medication allergies” • Reduced threshold from 80% • Lengthened time requirement from 48 hours</td>
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<td>Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies, discharge summary, procedures), upon request</td>
<td>More than 50% of all patients who are discharged from an eligible hospital or CAH’s inpatient department or emergency department (POS 21 or 23) and who request an electronic copy of their discharge instructions are provided it</td>
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<td>Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request</td>
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<td>• Removed requirement to provide copy of procedures • Reduced threshold from 80% • Specified both inpatient and emergency department discharges</td>
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<td>Eligible Professionals</td>
<td>Eligible Hospitals and CAHs</td>
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| Improve care coordination       | Provide clinical summaries for patients for each office visit | Clinical summaries provided to patients for more than 50% of all office visits within 3 business days | ● Reduced threshold from 80%  
● Added time requirement of 3 business days |
<p>|                                 | Capability to exchange key clinical information (for example, problem list, medication list, medication allergies, diagnostic test results), among providers of care and patient authorized entities electronically | Capability to exchange key clinical information (for example, discharge summary, procedures, problem list, medication list, medication allergies, diagnostic test results), among providers of care and patient authorized entities electronically | Perform at least one test of certified EHR technology’s capacity to electronically exchange key clinical information | ● Amended objective to read “medication allergies” |
| Ensure adequate privacy and security protections for personal health information | Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities | Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities | Conduct or review a security risk analysis per 45 CFR 164.308 (a)(1) and implement security updates as necessary and correct identified security deficiencies as part of its risk management process | ● Added requirement to correct deficiencies |</p>
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| Improving quality, safety, efficiency, and reducing health disparities | Implement drug-formulary checks | The EP/eligible hospital/CAH has enabled this functionality and has access to at least one internal or external drug formulary for the entire EHR reporting period | • Separated from CPOE objective  
• Added access requirement |
| | Implement drug-formulary checks | | |
| | Record advance directives for patients 65 years old or older | More than 50% of all unique patients 65 years old or older admitted to the eligible hospital’s or CAH’s inpatient department (POS 21) have an indication of an advance directive status recorded | New objective |
| Incorporate clinical lab-test results into certified EHR technology as structured data | Incorporate clinical lab-test results into certified EHR technology as structured data | More than 40% of all clinical lab tests results ordered by the EP or by an authorized provider of the eligible hospital or CAH for patients admitted to its inpatient or emergency department (POS 21 or 23) during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in certified EHR technology as structured data | • Reduced threshold from 50%  
• Further specified lab tests |
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<td>Eligible Professionals</td>
<td>Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach</td>
<td>Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition</td>
<td>(no change)</td>
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| Eligible Hospitals and CAHs    | Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach | More than 20% of all unique patients 65 years or older or 5 years old or younger were sent an appropriate reminder during the EHR reporting period | • Reduced threshold from 50%  
• Modified age requirements from 50 years or older |
| Engage patients and families in their health care | Send reminders to patients per patient preference for preventive/follow up care | More than 10% of all unique patients seen by the EP are provided timely (available to the patient within four business days of being updated in the certified EHR technology) electronic access to their health information subject to the EP’s discretion to withhold certain information | • Amended objective to read “medication allergies”  
• Modified time requirement to specify business days |
<p>| Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate | Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate | More than 10% of all unique patients seen by the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23) are provided patient-specific education resources | New objective |</p>
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<td>Improve care coordination</td>
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<td>● Specified triggers</td>
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<td>The EP, eligible hospital or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation</td>
<td>The EP, eligible hospital or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation</td>
<td>The EP, eligible hospital or CAH performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23)</td>
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<td>The EP, eligible hospital or CAH who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary of care record for each transition of care or referral</td>
<td>The EP, eligible hospital or CAH who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary of care record for each transition of care or referral</td>
<td>The EP, eligible hospital or CAH who transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50% of transitions of care and referrals</td>
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<td>● Reduced threshold from 80%</td>
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<td>Improve population and public health</td>
<td>Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice</td>
<td>Performed at least one test of certified EHR technology’s capacity to submit electronic data to immunization registries and follow-up submission if the test is successful (unless none of the immunization registries to which the EP, eligible hospital or CAH submits such information have the capacity to receive the information electronically)</td>
<td>• Added immunization information systems • Added follow-up requirement</td>
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<td>Capability to submit electronic data on reportable (as required by state or local law) lab results to public health agencies and actual submission in accordance with applicable law and practice</td>
<td>Performed at least one test of certified EHR technology’s capacity to provide electronic submission of reportable lab results to public health agencies and follow-up submission if the test is successful (unless none of the public health agencies to which eligible hospital or CAH submits such information have the capacity to receive the information electronically)</td>
<td>• Amended objective to specify applicable law and practice</td>
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<td>Eligible Professionals</td>
<td>Eligible Hospitals and CAHs</td>
<td>Performed at least one test of certified EHR technology's capacity to provide electronic syndromic surveillance data to public health agencies and follow-up submission if the test is successful (unless none of the public health agencies to which an EP, eligible hospital or CAH submits such information have the capacity to receive the information electronically)</td>
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<td>Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice</td>
<td>Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice</td>
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**MENU SET**