

After consideration of the public comments received, we are modifying the meaningful use measure for EPs at §495.6(d)(15)(ii) and eligible hospitals and CAHs at §495.6(f)(14)(ii) of our regulations “Conduct or review a security risk analysis per 45 CFR 164.308(a)(1) of the certified EHR technology, and implement security updates and correct identified security deficiencies as part of its risk management process”.

Table 2: Stage 1 Meaningful Use Objectives and Associated Measures Sorted by Core and Menu Set

| CORE SET | | | |
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| Health Outcomes Policy Priority | Stage 1 Objectives | | Stage 1 Measures |
| | Eligible Professionals | Eligible Hospitals and CAHs | |
| 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 | 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 |
| | 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 |
| | Generate and transmit permissible prescriptions electronically (eRx) | | More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology |
| | Record demographics <ul style="list-style-type: none"> o preferred language o gender o race o ethnicity o date of birth | Record demographics <ul style="list-style-type: none"> o preferred language o gender o race o ethnicity o date of birth o date and preliminary cause of death in the event of mortality in the eligible hospital or CAH | 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 |

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| | Maintain an up-to-date problem list of current and active diagnoses | Maintain an up-to-date problem list of current and active diagnoses | 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 |
| | Maintain active medication list | Maintain active medication list | 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 |
| | Maintain active medication allergy list | Maintain active medication allergy list | 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 |
| | Record and chart changes in vital signs: <ul style="list-style-type: none"> o Height o Weight o Blood pressure o Calculate and display BMI o Plot and display growth charts for children 2-20 years, including BMI | Record and chart changes in vital signs: <ul style="list-style-type: none"> o Height o Weight o Blood pressure o Calculate and display BMI o Plot and display growth charts for children 2-20 years, including BMI | 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), height, weight and blood pressure are recorded as structured data |
| | Record smoking status for patients 13 years old or older | Record smoking status for patients 13 years old or older | 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 |

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| | | | as structured data |
| | Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance that rule | Implement one clinical decision support rule related to a high priority hospital condition along with the ability to track compliance with that rule | Implement one clinical decision support rule |
| | Report ambulatory clinical quality measures to CMS or the States | Report hospital clinical quality measures to CMS or the States | For 2011, provide aggregate numerator, denominator, and exclusions through attestation as discussed in section II(A)(3) of this final rule |
| | | | For 2012, electronically submit the clinical quality measures as discussed in section II(A)(3) of this final rule |
| Engage patients and families in their health care | Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies), upon request | 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 | 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 |
| | | Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request | 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 |
| | 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 |

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| Improve care coordination | 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 | Performed at least one test of certified EHR technology's capacity to electronically exchange key clinical information |
| 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 |

MENU SET

| Health Outcomes Policy Priority | Stage 1 Objectives | | Stage 1 Measures |
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| | Eligible Professionals | Eligible Hospitals and CAHs | |
| Improving quality, safety, efficiency, and reducing health disparities | Implement drug-formulary checks | 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 |
| | | 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 |
| | 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 |
| | Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach | Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach | Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition |

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| | Send reminders to patients per patient preference for preventive/ follow up care | | 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 |
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| Engage patients and families in their health care | Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, medication allergies) within four business days of the information being available to the EP | | 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 |
| | 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 |
| Improve care coordination | 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 | 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 | 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) |
| | 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 | 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 | 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 |

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| Improve population and public health ² | Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice | Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice | 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) |
| | | 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 | 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) |
| | Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice | Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice | 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) |

Table 3: Stage 1 Meaningful Use Objectives and Associated Measures Sorted by Method of Measure Calculation

| Measures with a Denominator of Unique Patients Regardless of Whether the Patient's Records Are Maintained Using Certified EHR Technology | | |
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| Stage 1 Objectives | | Stage 1 Measures |
| Eligible Professionals | Eligible Hospitals and CAHs | |

² Unless an EP, eligible hospital or CAH has an exception for all of these objectives and measures they must complete at least one as part of their demonstration of the menu set in order to be a meaningful EHR user.

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| Maintain an up-to-date problem list of current and active diagnoses | Maintain an up-to-date problem list of current and active diagnoses | 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 |
| Maintain active medication list | Maintain active medication list | 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 |
| Maintain active medication allergy list | Maintain active medication allergy list | 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 |
| Record demographics <ul style="list-style-type: none"> o Preferred language o Gender o Race o Ethnicity o Date of Birth | Record demographics <ul style="list-style-type: none"> o Preferred language o Gender o Race o Ethnicity o Date of Birth o Date and preliminary cause of death in the event of mortality in the eligible hospital or CAH | 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 |
| Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, medication allergies) within four business days of the information being available to the EP | | 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 |
| 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 |
| Measures with a Denominator of Based on Counting Actions for Patients whose Records are Maintained Using Certified EHR Technology | | |
| Stage 1 Objectives | | Stage 1 Measures |
| Eligible Professionals | Eligible Hospitals and CAHs | |

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| <p>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</p> | <p>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</p> | <p>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</p> |
| <p>Generate and transmit permissible prescriptions electronically (eRx)</p> | | <p>More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology</p> |
| <p>Record and chart changes in vital signs:</p> <ul style="list-style-type: none"> o Height o Weight o Blood pressure o Calculate and display BMI o Plot and display growth charts for children 2-20 years, including BMI | <p>Record and chart changes in vital signs:</p> <ul style="list-style-type: none"> o Height o Weight o Blood pressure o Calculate and display BMI o Plot and display growth charts for children 2-20 years, including BMI | <p>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), height, weight and blood pressure are recorded as structured data</p> |
| <p>Record smoking status for patients 13 years old or older</p> | <p>Record smoking status for patients 13 years old or older</p> | <p>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</p> |
| | <p>Record advance directives for patients 65 years old or older</p> | <p>More than 50% of all unique patients 65 years old or older admitted to the eligible hospital have an indication of an advance directive status recorded</p> |
| <p>Incorporate clinical lab-test results into certified EHR technology as structured data</p> | <p>Incorporate clinical lab-test results into certified EHR technology as structured data</p> | <p>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</p> |
| <p>Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies), upon request</p> | <p>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</p> | <p>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</p> |

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| | Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request | 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 |
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| 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 |
| Send reminders to patients per patient preference for preventive/ follow up care | | 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 |
| 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 | 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 | 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) |
| 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 | 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 | 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 |
| Measures Requiring Only a Yes/No Attestation | | |
| Stage 1 Objectives | | Stage 1 Measures |
| Eligible Professionals | Hospitals | |
| 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 |
| Implement drug-formulary checks | 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 |

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| <p>Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach</p> | <p>Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach</p> | <p>Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition</p> |
| <p>Implement one clinical decision support rule relevant to specialty or high clinical priority along with the ability to track compliance that rule</p> | <p>Implement one clinical decision support rule related to a high priority hospital condition along with the ability to track compliance with that rule</p> | <p>Implement one clinical decision support rule</p> |
| <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</p> | <p>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</p> | <p>Performed at least one test of certified EHR technology's capacity to electronically exchange key clinical information</p> |
| <p>Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice</p> | <p>Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice</p> | <p>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)</p> |
| <p></p> | <p>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</p> | <p>Performed at least one test of certified EHR technology capacity's 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)</p> |
| <p>Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice</p> | <p>Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice</p> | <p>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)</p> |

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| 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 |
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3. Sections 4101(a) and 4102(a)(1) of the HITECH Act: Reporting on Clinical Quality

Measures Using EHRs by EPs, Eligible Hospitals, and CAHs³

a. General

As discussed in the meaningful use background in section II.A.2.a. there are three elements of meaningful use. In this section, we discuss the third requirement: using certified EHR technology, the EP, eligible hospital, or CAH submits to the Secretary, in a form and manner specified by the Secretary, information for the EHR reporting period on clinical quality measures and other measures specified by the Secretary. The submission of other measures is discussed in section II.A.2.c of this final rule. The two other elements of meaningful use are discussed in section II.A.2.d.1 of this final rule.

b. Requirements for the Submission of Clinical Quality Measures by EPs, Eligible Hospitals, and CAHs

Sections 1848(o)(2)(B)(ii) and 1886(n)(3)(B)(ii) of the Act provide that the Secretary may not require the electronic reporting of information on clinical quality measures unless the Secretary has the capacity to accept the information electronically, which may be on a pilot basis.

In the proposed rule, we stated that we do not anticipate that HHS will complete the necessary steps for us to have the capacity to electronically accept data on clinical quality

³ For purposes of this final rule, the term “eligible hospital” for the Medicaid EHR incentive program is inclusive of Critical Access Hospitals (CAHs) as defined in this final rule.