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			
Health	Stage 1	Objectives	
Outcomes Policy Priority	Eligible Professionals	Eligible Hospitals and CAHs	Stage 1 Measures
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 o preferred language o gender	Record demographics o preferred language o gender	More than 50% of all unique patients seen by the EP or admitted to the eligible hospital's or
	o raceo ethnicityo date of birth	 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 	CAH's inpatient or emergency department (POS 21 or 23) have demographics recorded as structured data

 Maintain an up-to-date	Maintain an up-to-date problem	More than 80% of all
problem list of current and active diagnoses	list of current and active diagnoses	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	Maintain active medication list	More than 80% of all
list		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	Maintain active medication	More than 80% of all
allergy list	allergy list	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
Descudend short shows as in	Describered about about an	structured data For more than 50% of all
Record and chart changes in vital signs:	Record and chart changes in vital signs:	unique patients age 2 and
• Height	o Height	over seen by the EP or
o Weight	o Weight	admitted to eligible
 Blood pressure 	 Blood pressure 	hospital's or CAH's
• Calculate and display	 Calculate and display 	inpatient or emergency
BMI	BMI	department (POS 21 or
• Plot and display	• Plot and display	23), height, weight and
growth charts for children 2, 20 years	growth charts for	blood pressure are recorded as structured data
children 2-20 years, including BMI	children 2-20 years, including BMI	recorded as structured data
Record smoking status for	Record smoking status for	More than 50% of all
patients 13 years old or older	patients 13 years old or older	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
	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

Improve care coordination	Capability to exchange key clinical information (for example, problem list, medication list, medication allergies, diagnostic test results), among providers o care and patient authorized entities electronically	f	Capability to exchange k clinical information (for example, discharge sum procedures, problem list medication list, medicati allergies, diagnostic test results), among provider care and patient authoriz entities electronically	mary, , ion rs of	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
		N	MENU SET		
Health Outcomes	Stage 1 Objectives			Q. 1	M
Policy Priority	Eligible Professionals	CA			Measures
Improving quality, safety, efficiency, and reducing health disparities	Implement drug- formulary checks	che		enabled access to external entire El	eligible hospital/CAH has this functionality and has o at least one internal or drug formulary for the HR reporting period
			cord advance directives patients 65 years old or er	patients admitted CAH's i 21) have	an 50% of all unique 65 years old or older I to the eligible hospital's or npatient department (POS e an indication of an 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		tests rest an author eligible patients emergen 23) duri: period w positive/ format a EHR tec	an 40% of all clinical lab ults ordered by the EP or by orized provider of the hospital or CAH for admitted to its inpatient or admitted to its inpatient or admitted to its inpatient or admitted to its inpatient or the generation (POS 21 or ing the EHR reporting whose results are either in a admitted or numerical re incorporated in certified chnology as structured data
	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach	spe for red	nerate lists of patients by cific conditions to use quality improvement, uction of disparities, earch or outreach	Generate patients	e at least one report listing of the EP, eligible hospital with a specific condition

	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
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 transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary	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 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	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 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
	of care record for each transition of care or referral	transition of care or referral	

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			
Stage 1 C	Stage 1 Maggung		
Eligible Professionals Eligible Hospitals and CAHs		Stage 1 Measures	

 $^{^{2}}$ 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.

Maintain an up-to-date problem list of current and active

	227	
Maintain an up-to-date problem	More than 80% of all unique patients seen	
list of current and active	by the EP or admitted to the eligible	
diagnoses	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	More than 80% of all unique patients seen	
	by the FD or admitted to the aligible	

list of current and active diagnoses	list of current and active diagnoses	by the EP or admitted to the eligible hospital's or CAH's inpatient or
ulagiloses	ulagiluses	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	Maintain active medication	More than 80% of all unique patients seen
allergy list	allergy list	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	Record demographics	More than 50% of all unique patients seen
 Preferred language 	 Preferred language 	by the EP or admitted to the eligible
o Gender	o Gender	hospital's or CAH's inpatient or
o Race	o Race	emergency department (POS 21 or 23)
 Ethnicity 	• Ethnicity	have demographics recorded as structured
• Date of Birth	• Date of Birth	data
	• Date and preliminary cause of	
	death in the event of	
	mortality in the eligible	
	hospital or CAH	
Provide patients with timely		More than 10% of all unique patients seen
electronic access to their health		by the EP are provided timely (available
information (including lab results,		to the patient within four business days of
problem list, medication lists,		being updated in the certified EHR
medication allergies) within four		technology) electronic access to their
business days of the information		health information subject to the EP's
being available to the EP		discretion to withhold certain information
Use certified EHR technology to	Use certified EHR technology to	More than 10% of all unique patients seen
identify patient-specific education	identify patient-specific education	by the EP or admitted to the eligible
resources and provide those	resources and provide those	hospital's or CAH's inpatient or
resources to the patient if	resources to the patient if	emergency department (POS 21 or 23) are
appropriate	appropriate	provided patient-specific education
		resources
Measures with a Denominator of Using Certified EHR Technology	8	ients whose Records are Maintained
	Dbjectives	
Ŭ	•	Stage 1 Measures
Eligible Professionals	Eligible Hospitals and CAHs	

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 Generate and transmit permissible prescriptions electronically (eRx)	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 More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology
Record and chart changes in vital signs: • Height • Weight • Blood pressure • Calculate and display • Plot and display growth • charts for children 2-20 years, including BMI Record smoking status for patients 13 years old or older	Record and chart changes in vital signs: • Height • Weight • Blood pressure • Calculate and display BMI • Plot and display growth charts for children 2-20 years, including BMI Record smoking status for patients 13 years old or older	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 More than 50% of all unique patients 13 years old or older seen by the EP or
	Record advance directives for patients 65 years old or older	admitted to the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) have smoking status recorded as structured data 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
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
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
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	Hemitele	Stage 1 Measures
Eligible Professionals Implement drug-drug and drug- allergy interaction checks	Hospitals 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

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
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
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
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 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)
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)

Protect electronic health	Protect electronic health	Conduct or review a security risk analysis
information created or maintained	information created or maintained	per 45 CFR 164.308 (a)(1) and implement
by the certified EHR technology	by the certified EHR technology	security updates as necessary and correct
through the implementation of	through the implementation of	identified security deficiencies as part of
appropriate technical capabilities	appropriate technical capabilities	its risk management process

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.