

burden estimates for each particular measure, as well as what the incremental capital costs attributable to each measure might be. Estimates of total capital costs at the bottom of Table 33 are derived from the estimates used in the “Industry Costs” section in Section V.G.4.

TABLE 33: Burden and Capital Costs associated with Meaningful Use Objectives and Associated Measures

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
Set A	Implement drug-drug, drug-allergy, drug-formulary checks	Implement drug-drug, drug-allergy, drug-formulary checks	The EP/eligible hospital has enabled this functionality Reporting requirement: Attestation of implementation	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – costs associated with medication error e-prescribing functions
	Maintain an up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT®	Maintain an up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT®	At least 80% of all unique patients seen by the EP or admitted to the eligible hospital have at least one entry or an indication of none recorded as structured data Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of functionality that can incorporate diagnoses in coded format

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
	Maintain active medication list	Maintain active medication list	<p>At least 80% of all unique patients seen by the EP or admitted to the eligible hospital have at least one entry (or an indication of "none" if the patient is not currently prescribed any medication) recorded as structured data</p> <p>Reporting requirement: numerator and denominator data</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of functionality that can incorporate medication information in coded format
	Maintain active medication allergy list	Maintain active medication allergy list	<p>At least 80% of all unique patients seen, by the EP or admitted to the eligible hospital have at least one entry or (an indication of "none" if the patient has no medication allergies) recorded as structured data</p> <p>Reporting requirement: numerator and denominator data</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of functionality that can incorporate medication allergy information in coded format

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
	Record demographics <ul style="list-style-type: none"> ○ preferred language ○ insurance type ○ gender ○ race ○ ethnicity ○ date of birth 	Record demographics <ul style="list-style-type: none"> ○ preferred language ○ insurance type ○ gender ○ race ○ ethnicity ○ date of birth ○ date and cause of death in the event of mortality 	At least 80% of all unique patients seen by the EP or admitted to the eligible hospital have demographics recorded as structured data Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of functionality that can incorporate this information in coded format
	Record and chart changes in vital signs: <ul style="list-style-type: none"> ○ height ○ weight ○ blood pressure Calculate and display: BMI 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"> ○ height ○ weight ○ blood pressure Calculate and display: BMI Plot and display growth charts for children 2-20 years, including BMI.	For at least 80% of all unique patients age 2 and over seen by the EP or admitted to eligible hospital, record blood pressure and BMI; additionally plot growth chart for children age 2-20 Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of functionality that can incorporate this information in coded format
	Record smoking status for patients 13 years old or older	Record smoking status for patients 13 years old or older	At least 80% of all unique patients 13 years old or older seen by the EP or admitted to the eligible hospital have "smoking status" recorded Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of functionality that can incorporate this information in coded format

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
	Report ambulatory quality measures to CMS or the States	Report hospital quality measures to CMS or the States	For 2011, provide aggregate numerator and denominator through attestation as discussed in section II(A)(3) of this proposed rule For 2012, electronically submit the measures as discussed in section II(A)(3) of this proposed rule	For 2011, the burden associated with these measures is estimated to be (an additional) 0.5 hour to select the measures and to attest to the numerator and denominator for each. For 2012, the burden is estimated to be (an additional) 0.5 hour to e report and send the electronic submission.	TBD – Cost of the functionality to capture and report on quality measures
	Send reminders to patients per patient preference for preventive/ follow up care		Reminder sent to at least 50% of all unique patients seen by the EP that are age 50 or over Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost of having functionality to send reminders to patients
	Implement clinical 5 decision support rules relevant to specialty or high clinical priority, including diagnostic test ordering, along with the ability to track compliance with those rules	Implement 5 clinical decision support rules related to a high priority hospital condition, including diagnostic test ordering, along with the ability to track compliance with those rules	Implement 5 clinical decision support rules relevant to the clinical quality metrics the EP/Eligible Hospital is responsible for as described further in section II(A)(3). Reporting requirement: attest to the implementation	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – costs associated with clinical decision support functionality

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
	Check insurance eligibility electronically from public and private payers	Check insurance eligibility electronically from public and private payers	Insurance eligibility checked electronically for at least 80% of all unique patients seen by the EP or admitted to the eligible hospital Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost administrative simplification functionality
	Submit claims electronically to public and private payers.	Submit claims electronically to public and private payers.	At least 80% of all claims filed electronically by the EP or the eligible hospital Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – costs associated with administrative simplification functionality
	Provide clinical summaries for patients for each office visit		Clinical summaries provided for at least 80% of all office visits Reporting requirement: numerator and denominator data	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost an EHR system capable of storing this information and transmitting it to patients

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
	Capability to exchange key clinical information (for example, problem list, medication list, 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, allergies, diagnostic test results), among providers of care and patient authorized entities electronically	<p>Performed at least one test of certified EHR technology’s capacity to electronically exchange key clinical information</p> <p>Reporting requirement: attestation that at least one test was performed</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – cost an EHR system capable of storing this information and transmitting it to providers and patient authorized entities
	Capability to submit electronic data to immunization registries and actual submission where required and accepted	Capability to submit electronic data to immunization registries and actual submission where required and accepted	<p>Performed at least one test of certified EHR technology’s capacity to submit electronic data to immunization registries</p> <p>Reporting requirement: attestation that at least one test was performed</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – costs associated with functionality that can capture immunization information and submit that information to immunization registries

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
		Capability to provide electronic submission of reportable lab results (as required by state or local law) to public health agencies and actual submission where it can be received	<p>Performed at least one test of the EHR system's capacity to provide electronic submission of reportable lab results to public health agencies (unless none of the public health agencies to which eligible hospital submits such information have the capacity to receive the information electronically)</p> <p>Reporting requirement: attestation that at least one test was performed or that no public agencies have the capacity to receive</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – costs associated with functionality that can capture lab results information and submit that information to public health agencies

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
	Capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice	Capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice	<p>Performed at least one test of certified EHR technology’s capacity to provide electronic syndromic surveillance data to public health agencies (unless none of the public health agencies to which an EP or eligible hospital submits such information have the capacity to receive the information electronically)</p> <p>Reporting requirement: attestation that at least one test was performed or that no public agencies have the capacity to receive</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	TBD – costs associated with functionality that can capture syndromic surveillance data and submit that information to public health agencies
	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	<p>Conduct or review a security risk analysis per 45 CFR 164.308 (a)(1) and implement security updates as necessary</p> <p>Reporting requirement: attestation that a risk analysis was conducted or reviewed</p>	The burden associated with this measures is included in the 0.5 hour attestation burden estimate	N/A as conducting or reviewing a security risk analysis does not necessarily hinge on the purchase of an EHR or particular EHR functionalities

	Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
	Eligible Professionals	Hospitals			
Total Burden and Incremental Capital Cost for Set A Measures				0.5 hours + 0.5 hour for quality measure attestation/reporting	TBD -- some increment of the total capital costs
SET B	Use CPOE	Use of CPOE for orders (any type) directly entered by authorizing provider (for example, MD, DO, RN, PA, NP)	For EPs, CPOE is used for at least 80% of all orders For eligible hospitals, CPOE is used for 10% of all orders Reporting requirement: numerator and denominator data	1 hour to manually derive the denominator (unless EHR is equipped with extra functionality to generate numerator and denominator data automatically) and attest to the measure. Total: 1 hour	TBD – cost of a CPOE module; additionally, the cost of extra functionality to generate numerator and denominator information automatically
	Generate and transmit permissible prescriptions electronically (eRx)		At least 75% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology Reporting requirement: numerator and denominator data	1 hour to manually derive the denominator (unless EHR is equipped with extra functionality to generate numerator and denominator data automatically) and attest to the measure. Total: 1.0 hour	TBD – cost of an e-prescribing system; additionally, the cost of extra functionality to generate numerator and denominator information automatically
	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, and outreach	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, and outreach	Generate at least one report listing patients of the EP or eligible hospital with a specific condition. Reporting requirement: attest that at least one report was generated	1 hour to generate the report and attest to the measure Total: 1.0 hour	TBD – cost of having an EHR registry function

Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
Eligible Professionals	Hospitals			
Incorporate clinical lab-test results into EHR as structured data	Incorporate clinical lab-test results into EHR as structured data	At least 50% of all clinical lab tests ordered whose results are in a positive/negative or numerical format are incorporated in certified EHR technology as structured data Reporting requirement: numerator and denominator data	1 hour to manually derive the denominator (unless EHR is equipped with extra functionality to generate numerator and denominator data automatically) and attest to the measure. Total: 1.0 hour	TBD – cost of extra functionality to generate numerator and denominator information automatically
Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, allergies), upon request	Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, allergies, discharge summary, procedures), upon request	At least 80% of all patients who request an electronic copy of their health information are provided it within 48 hours Reporting requirement: numerator and denominator data	1 hour to account for the burden associated with determining the denominator and attest to the measure Total: 1.0 hour	TBD – cost an EHR system capable of storing this information and transmitting it to patients
	Provide patients with an electronic copy of their discharge instructions and procedures at time of discharge, upon request	At least 80% of all patients who are discharged from an eligible hospital and who request an electronic copy of their discharge instructions and procedures are provided it Reporting requirement: numerator and denominator data	1 hour to account for the burden associated with determining the denominator and attest to the measure Total: 1.0 hour	TBD – cost an EHR system capable of storing this information and transmitting it to patients

Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
Eligible Professionals	Hospitals			
Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, allergies) within 96 hours of the information being available to the EP		At least 10% of all unique patients seen by the EP are provided timely electronic access to their health information Reporting requirement: numerator and denominator data	1 hour to account for the burden associated determining whether information is timely and attest to the measure Total: 1.0 hour	TBD – cost an EHR system capable of storing this information and making it continuously available to patients
Perform medication reconciliation at relevant encounters and each transition of care	Perform medication reconciliation at relevant encounters and each transition of care	Perform medication reconciliation for at least 80% of relevant encounters and transitions of care Reporting requirement: numerator and denominator data	1 hour to account for the burden associated with determining the denominator of all relevant encounters and transitions of care, and attest to the measure Total: 1.0 hour	TBD – cost an e-prescribing system capable of medication reconciliation
Provide summary care record for each transition of care and referral	Provide summary care record for each transition of care and referral	Provide summary of record for at least 80% of transitions of care and referrals Reporting requirement: numerator and denominator data	1 hour to account for the burden associated with determining the denominator of all relevant encounters and transitions of care and attest to the measure Total: 1.0 hour	TBD – cost an EHR system capable of storing this information and transmitting it to patients
Estimated Total Burden and Incremental Capital Cost per Respondent for Set B measures			7.0 hours for eligible hospitals 8.0 hours for EPs	TBD – some increment of the total capital costs

Stage 1 Objectives		Stage 1 Measures and Reporting Requirements	Burden Estimate per Respondent	Capital Cost (not net of EHR incentive payments)
Eligible Professionals	Hospitals			
<p>Estimated Total Burden and Total Capital Cost per Respondent for attestation to EHR technology, Set A Set B measures, and attestation and reporting of quality measures</p>			<p>8 hours for hospitals</p> <p>9 hours for EPs</p>	<p>Hospitals: \$5 million to install; \$1 million annual maintenance/training costs</p> <p>EPs: \$54,000 to install; \$10,000 annual maintenance/training costs</p>

*This burden estimate assumes that covered entities are already conducting and reviewing these risk analyses under current HIPAA regulations. Therefore, we have not accounted for additional burden associated with the conduct or review of such analyses.

First, we will discuss the burden associated with EP attestation to EHR technology and Meaningful Use Set A objectives/measures, and ambulatory quality measures. We estimate that it will take no more than 0.5 hour for an EP to attest that during the EHR reporting period, he or she used certified EHR technology and specify the technology, and satisfied each of the applicable Meaningful Use Set A objectives/measures. We also estimate that it will take an EP an additional 0.5 hour to select and attest to the ambulatory quality measures for CY 2011. The total burden hours for an EP to attest to the above is one hour. We estimate that there are about 442,600 non-hospital-based Medicare and Medicaid EPs (323,500 Medicare EPs, 80,900 dual Medicare/Medicaid EPs and 38,200 Medicaid-eligible-only EPs) who may attest to the above (after registration) in CY 2011 to receive an EHR incentive payment. We estimate the burden for the 28,000 MA EPs in the MAO burden estimate section. The total estimated annual attestation burden hours for EHR technology, Meaningful Use Set A objectives/measures, and ambulatory quality measures are 442,600 for all EPs (442,600 EPs x 1 hour). The cost burden for an EP to attest to the above information is \$79.33 (1