

# Clinical Quality Measures for Hospitals

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Papers 5a and 5b in this series reviewed the health IT functionality measures for providers and hospitals as described in the meaningful use final rule. This paper offers an overview of the requirements for reporting clinical quality measures for eligible hospitals and critical access hospitals. A companion paper (6a) provides an overview of the requirements for eligible providers.

One of Congress's goals in developing the meaningful use program was to improve the quality and efficiency of care for the Medicare and Medicaid populations. Accordingly, hospitals and providers that choose to participate in the voluntary program will be required to capture and report clinical quality measures in addition to the functionality measures they must report to prove they are using EHR technology in a meaningful way.

For purposes of the incentive program, CMS defines clinical quality measures as the “processes, experience, and/or outcomes of patient care, observations or treatment that relate to one or more quality aims for health care such as effective, safe, efficient, patient-centered, equitable, and timely care.”

## Stage 1 Clinical Quality Measures for Eligible Hospitals

CMS recognized that “considerable work needed to be done by measure owners and developers” on the clinical quality measures it had put forth in its proposed rule. Such work included completing electronic specifications for measures, incorporating those specifications into EHR technology to capture and calculate the results, and implementing the systems. As a result, CMS identified only 15 clinical quality measures in which clearly defined electronic specifications were finalized by the date of the final rule.

All of the selected measures are endorsed by the National Quality Forum (NQF), a nonprofit organization that ensures clinical quality measures are developed and maintained through a consistent and collaborative process.

CMS did not finalize Medicaid-specific measures as part of the final rule. As a result, all 15 clinical quality measures apply uniformly across both the Medicare and Medicaid EHR incentive programs. The proposed measures for hospitals appear on table 10 of the final rule (beginning on p. 44418).

The table lists the measure identifier, title, description, and owner or developer as well as a link to the electronic specifications. These measures are to apply to all patients, not just those covered in the Medicaid or Medicare programs.

The electronic specifications may be found at <http://www.cms.gov/QualityMeasures/03ElectronicSpecifications.asp> and are derived from the certification specifications for EHRs.

Hospitals must report clinical quality measures results to CMS to meet the program requirements. Details on reporting specifications are available at [www.cms.gov/EHRIncentivePrograms](http://www.cms.gov/EHRIncentivePrograms).

The requirements take effect September 27, 2010, and no further changes will be made to the list except through further rulemaking. However, CMS may make “administrative and/or technical modification or refinements such as revisions to the clinical quality measures titles and code additions, corrections, or revisions to the detailed specifications for the 2011 and 2012 payment year measures.”

CMS writes that the measures it selected:

- Facilitate alignment with, or allow determination of satisfactory reporting in other Medicare programs, including Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU), Medicaid, and Children’s Health Insurance Program (CHIP) program priorities
- Are widely applicable to eligible hospitals based on the services provided for the population of patients seen
- Promote CMS and [Health and Human Services] policy priorities related to improved quality and efficiency of care for the Medicare and Medicaid populations that will allow the tracking of improvement in care over time
- Have been recommended to CMS for inclusion in the EHR incentive by federal advisory committees including the Health IT Policy Committee

### **Proof through Attestation in 2011**

In 2011 eligible hospitals will meet the reporting requirements through attestation. As described in the final rule, the process utilizes the same system used for meaningful use attestation.

In 2011 eligible hospitals will attest to the following:

- The information submitted was generated from an identified certified EHR technology.
- The information is accurate and complete to the knowledge and belief of the official submitting on behalf of the eligible hospital.
- The information submitted includes information on all patients to whom the measure applies, for all patients included in the certified EHR technology.
- The identifying information for the eligible hospital and [critical access hospital].
- The numerators, denominators, and exclusions for each clinical quality measure result reported, providing separate information for each clinical quality measure including the numerators, denominators, and exclusions for all applicable patients contained in the certified EHR technology irrespective third party payer or lack thereof.

- The beginning and end dates for which the numerators, denominators, and exclusions apply.

As noted, eligible hospitals are required to report clinical quality measure data on all patients regardless of payer type. Hospitals are only required to report results for each of the clinical quality measures and are not expected to satisfy minimum values for any of the measures. However, a value is required for each of the 15 clinical quality measures, even if the value is zero. For example, a children's hospital would report zero in instances where it did not have any patients as described in the measure.

### **Electronic Reporting to Begin in 2012**

CMS acknowledges that it cannot require program participants to submit measures electronically until it has the capacity to receive them. CMS does not anticipate it will have that capacity for the 2011 payment year (FY2011); however, it does anticipate that electronic reporting will begin in FY2012.

Any eligible hospital reporting in 2012 will be required to report electronically, whether or not the hospital is in its first or second year of participation in the program. In addition, CMS expects that states will have the capacity to accept electronic reporting of clinical quality measures by their second implementation year. However, if they do not, states may continue to rely on attestation methodology, subject to CMS prior approval via the State's Medicaid HIT plan.

### **Duplication of Reporting Requirements**

Within the final rule CMS clarifies its intent to avoid and address duplicate or redundant reporting of measures. The clinical quality measures selected for meaningful use stage 1 are not required measures under the RHQDAPU program; however, CMS will address and eliminate duplicative clinical quality measures in future rulemaking, as measures are defined for subsequent meaningful use stages.

CMS also expects to develop a process to solicit public input on Medicaid-specific clinical quality measures for future stages of meaningful use, if needed. However, because there are no Medicaid-specific measures in the stage 1 rule, and all measures apply uniformly across both the Medicare and Medicaid EHR incentive program, CMS did not propose a process at this time.

*The next paper in this series will finalize coverage of the final rule and will discuss the processes for demonstrating meaningful use.*

### **Reference**

Centers for Medicare and Medicaid Services. "Medicare and Medicaid Programs; Electronic Health Record Incentive Program; Final Rule." *Federal Register* 75, no. 144 (July 28, 2010): 44314–588. Available online at <http://edocket.access.gpo.gov/2010/pdf/2010-17207.pdf>.

**TABLE 10: Clinical Quality Measures for Submission by Eligible Hospitals and CAHs for Payment Year 2011-2012<sup>5</sup>**

Measure Number Identifier	Measure Title, Description & Measure Steward	Electronic Measure Specifications Information
Emergency Department (ED)-1 NQF 0495	<p><b>Title:</b> Emergency Department Throughput – admitted patients Median time from ED arrival to ED departure for admitted patients</p> <p><b>Description:</b> Median time from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department</p> <p><b>Measure Developer:</b> CMS/Oklahoma Foundation for Medical Quality (OFMQ)</p>	<p><a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a></p>
ED-2 NQF 0497	<p><b>Title:</b> Emergency Department Throughput – admitted patients Admission decision time to ED departure time for admitted patients</p> <p><b>Description:</b> Median time from admit decision time to time of departure from the emergency department of emergency department patients admitted to inpatient status</p> <p><b>Measure Developer:</b> CMS/OFMQ</p>	<p><a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a></p>
Stroke-2 NQF 0435	<p><b>Title:</b> Ischemic stroke – Discharge on anti-thrombotics</p> <p><b>Description:</b> Ischemic stroke patients prescribed antithrombotic therapy at hospital discharge</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<p><a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a></p>
Stroke-3 NQF 0436	<p><b>Title:</b> Ischemic stroke – Anticoagulation for A-fib/flutter</p> <p><b>Description:</b> Ischemic stroke patients with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<p><a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a></p>
Stroke-4 NQF 0437	<p><b>Title:</b> Ischemic stroke – Thrombolytic therapy for patients arriving within 2 hours of symptom onset</p> <p><b>Description:</b> Acute ischemic stroke patients who arrive at this hospital within 2 hours of time last known well and for whom IV t-PA was initiated at this hospital within 3 hours of time last known well.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<p><a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a></p>
Stroke-5 NQF 0438	<p><b>Title:</b> Ischemic or hemorrhagic stroke – Antithrombotic therapy by day 2</p> <p><b>Description:</b> Ischemic stroke patients administered antithrombotic therapy by the end of hospital day 2.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<p><a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a></p>

<sup>5</sup> \* In the event that new clinical quality measures are not adopted by 2013, the clinical quality measures in this Table would continue to apply.

<b>Measure Number Identifier</b>	<b>Measure Title, Description &amp; Measure Steward</b>	<b>Electronic Measure Specifications Information</b>
Stroke-6 NQF 0439	<p><b>Title:</b> Ischemic stroke – Discharge on statins</p> <p><b>Description:</b> Ischemic stroke patients with LDL <math>\geq</math> 100 mg/dL, or LDL not measured, or, who were on a lipid-lowering medication prior to hospital arrival are prescribed statin medication at hospital discharge.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
Stroke-8 NQF 0440	<p><b>Title:</b> Ischemic or hemorrhagic stroke – Stroke education</p> <p><b>Description:</b> Ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and symptoms of stroke.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
Stroke-10 NQF 0441	<p><b>Title:</b> Ischemic or hemorrhagic stroke – Rehabilitation assessment</p> <p><b>Description:</b> Ischemic or hemorrhagic stroke patients who were assessed for rehabilitation services.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
Venous Thromboembolism (VTE)-1 NQF 0371	<p><b>Title:</b> VTE prophylaxis within 24 hours of arrival</p> <p><b>Description:</b> This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
VTE-2 NQF 0372	<p><b>Title:</b> Intensive Care Unit VTE prophylaxis</p> <p><b>Description:</b> This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer).</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>

Measure Number Identifier	Measure Title, Description & Measure Steward	Electronic Measure Specifications Information
VTE-3 NQF 0373	<p><b>Title:</b> Anticoagulation overlap therapy</p> <p><b>Description:</b> This measure assesses the number of patients diagnosed with confirmed VTE who received an overlap of parenteral (intravenous [IV] or subcutaneous [subcu]) anticoagulation and warfarin therapy. For patients who received less than five days of overlap therapy, they must be discharged on both medications. Overlap therapy must be administered for at least five days with an international normalized ratio (INR) <math>\geq 2</math> prior to discontinuation of the parenteral anticoagulation therapy or the patient must be discharged on both medications.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
VTE-4 NQF 0374	<p><b>Title:</b> Platelet monitoring on unfractionated heparin</p> <p><b>Description:</b> This measure assesses the number of patients diagnosed with confirmed VTE who received intravenous (IV) UFH therapy dosages AND had their platelet counts monitored using defined parameters such as a nomogram or protocol.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
VTE-5 NQF 0375	<p><b>Title:</b> VTE discharge instructions</p> <p><b>Description:</b> This measure assesses the number of patients diagnosed with confirmed VTE that are discharged to home, to home with home health, home hospice or discharged/transferred to court/law enforcement on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>
VTE-6 NQF 0376	<p><b>Title:</b> Incidence of potentially preventable VTE</p> <p><b>Description:</b> This measure assesses the number of patients diagnosed with confirmed VTE during hospitalization (not present on arrival) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date.</p> <p><b>Measure Developer:</b> The Joint Commission</p>	<a href="http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage">http://www.cms.gov/QualityMeasures/03_ElectronicSpecifications.asp#TopOfPage</a>