Improving quality and safety

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Clinical Decision Support	**Eligible Professionals (EPs)/Eligible Hospitals (EH) Core Objective:** Use clinical decision support to improve performance on high-priority health conditions **Measure:** 1. Implement five clinical decision support interventions related to four or more clinical quality measures at a relevant point in patient care for the entire EHR reporting period. Absent four clinical quality measures related to an EP, eligible hospital or CAH's scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions. It is suggested that one of the five clinical decision support interventions be related to improving healthcare efficiency. 2. The EP, eligible hospital, or CAH has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.	**Core: Eligible Professionals/Eligible Hospitals/Critical Access Hospitals** demonstrate use of *multiple CDS interventions* that *apply to quality measures* ***in at least 4 of the 6 National Quality Strategy priorities*****.** Recommended intervention areas: 1. Preventive care 2. Chronic disease management (e.g., diabetes, coronary artery disease) 3. Appropriateness of lab and radiology orders (e.g., medical appropriateness, cost-effectiveness - high cost radiology) 4. Advanced medication-related decision support* (e.g., renal drug dosing, condition-specific recommendations). 5. Improving the accuracy/completeness of the problem list, medication list, drug allergies 6. Drug-drug and drug-allergy interaction checks *CEHRT should have the functionality to enable intervention tools (the intention is not to be overly prescriptive, but to encourage innovation in these areas):* 1. Ability to track "actionable" (i.e., suggested action is embedded in the alert) CDS interventions and user responses to interventions, such as: a) How often an alert has fired b) What immediate actions the user took (when those options are presented in the context of the alert) c) Optional reason for overriding alert 2. Perform age-appropriate maximum daily-dose weight based calculation 3. Ability to consume external CDS rules to support CDS interventions, using for example, standards from Health eDecisions. *Kuperman, GJ. (2007)Medication-related clinical decision support in computerized provider order entry systems a review. *Journal of the American Medical Informatics Association*: JAMIA, 14(1):29-40.	

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Care Planning	**Menu EH Objective:** Record whether a patient 65 years old or older has an advance directive. **Measure:** More than 50 percent of all unique patients 65 years old or older admitted to the eligible hospital's or CAH's inpatient department (POS 21) during the EHR reporting period have an indication of an advance directive status recorded as structured data.	• **Core for Eligible Hospitals**, introduce as **Menu for Eligible Professionals** • Record whether a patient 65 years old or older has an advance directive • Threshold: Medium • **Certification Criteria**: CEHRT has the functionality to store the document in the record and / or include more information about the document (e.g., link to document or instructions regarding where to find the document or where to find more information about it).	
Reminders	**Objective:** Use clinically relevant information to identify patients who should receive reminders for preventive/follow-up care and send these patients the reminders, per patient preference. **Measure:** More than 10 percent of all unique patients who have had 2 or more office visits with the EP within the 24 months before the beginning of the EHR reporting period were sent a reminder, per patient preference when available.	• **No Change** • **Core: Eligible Professionals** use relevant data to identify patients who should receive reminders for preventive/follow-up care • Threshold: Low • Reminders should be shared with the patient according to their preference **(e.g., online, printed handout), if the provider has implemented the technical capability to meet the patient's preference**	
eMAR	**Objective:** Automatically track medications from order to administration using assistive technologies in conjunction with an electronic medication administration record (eMAR). **Measure:** More than 10 percent of medication orders created by authorized providers of the eligible hospital's or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period for which all doses are tracked using eMAR.	• **Core: Eligible Hospitals** automatically track medications from order to administration using assistive technologies in conjunction with an electronic medication administration record (eMAR) • Threshold: Medium • **Certification criteria:** CEHRT provides the ability to **generate report on discrepancies between what was ordered and what/when/how the medication was actually administered to use for quality improvement**	

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Imaging	**Objective:** Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through CEHRT. **Measure:** More than 10 percent of all tests whose result is one or more images ordered by the EP during the EHR reporting period are accessible through CEHRT.	• For both **Eligible Professionals (menu) and Hospitals (core)**, imaging results should be included in the EHR. **Access to the images themselves should be available through the EHR (e.g., via a link).** • Threshold: Low	
Family History	**Objective:** Record patient family health history as structured data. **Measure:** More than 20 percent of all unique patients seen by the EP during the EHR reporting period have a structured data entry for one or more first-degree relatives.	• **No Change in objective** • **Menu: Eligible Professionals and Hospitals** record patient family health history as structured data for one or more first-degree relatives • Threshold: Low • **Certification criteria:** CEHRT have the capability to take family history into account for CDS interventions	
Electronic Notes	**Objective:** Record electronic notes in patient records. **Measure:** Enter at least one electronic progress note created, edited and signed by an EP for more than 30 percent of unique patients with at least one office visit during the EHR Measure reporting period. The text of the electronic note must be text searchable and may contain drawings and other content	• **Core: Eligible Professionals** record an electronic progress note, authored by the eligible professional. • Electronic progress notes (excluding the discharge summary) should be authored by an authorized provider of the **Eligible Hospital or CAH** – Notes must be text-searchable – Non-searchable scanned notes do not qualify but this does not mean that all of the content has to be character text. Drawings and other content can be included with text notes under this measure • Threshold: Low • **Certification Criteria:** Help the reader understand the origin of any copied text and identify relevant changes made to the original text. – Example method: provide functionality analogous to “track changes” in Microsoft Word™ to make the original source of copied text clear and any subsequent changes made – Default view of documents in the medical record and those transmitted to other EHRs is a "clean copy" (i.e. not showing tracked changes). The reader can easily click a button and view the tracked-changes version.	

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Hospital Labs	**EH MENU Objective:** Provide structured electronic lab results to ambulatory providers **EH MENU Measure:** Hospital labs send structured electronic clinical lab results to the ordering provider for more than 20 percent of electronic lab orders received	• **Eligible Hospitals** provide structured electronic lab results using LOINC to ordering providers • Threshold: Low	
Order Tracking	****New****	• **New** • **Menu: Eligible Professionals** • The EHR is able to assist with follow-up on orders to improve the management of results. • Results of specialty consult requests are returned to the ordering provider [pertains to specialists] • Threshold: Low • **Certification requirements:** ○ Display abnormal tests as indicated in the lab result message ○ Provide ability for ordering provider to optionally indicate a date that the order should be completed by when entering the order, which triggers notification to the ordering provider if the results are not returned by the indicated date ○ Notify ordering provider when results are available or not completed by a certain time ○ Record date and time that results are reviewed and by whom ○ CEHRT should provide the capability to match results (e.g., lab tests, consultation results) with the order in order to accurately results each order or to detect when an order has not been completed	
Unique Device Identifier (UDI)	****New****	• **New** • **Menu: Eligible Professionals and Eligible Hospitals** record the FDA Unique Device Identifier (UDI) when patients have devices implanted for each newly implanted device • Threshold: High	
Medication Adherence	****New****	• **New** • **Certification Criteria**: CEHRT has the ability to: 1. Access medication fill information from pharmacy benefit manager (PBM) **2.** Access PDMP data in a streamlined way (e.g., sign-in to PDMP system)	

Reducing disparities

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Demographics	**EP Objective: Record the following demographics** • Preferred language • Sex • Race • Ethnicity • Date of birth **EH Objective: Record the following demographics** • Preferred language • Sex • Race • Ethnicity • Date of birth • Date and preliminary cause of death in the event of mortality in the eligible hospital or CAH **Measure:** More than 80 percent 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) during the EHR reporting period have demographics recorded as structured data.	• **Certification criteria** • CEHRT provides the functionality to capture ▪ Patient preferred method of communication (e.g., online, telephone, letter) ▪ Occupation and Industry codes ▪ Sexual orientation, gender identity (optional fields) ▪ Disability status	

Engaging patients and families in their care

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
View, Download, Transmit (VDT)	**Objective:** Provide patients the ability to view online, download and transmit their health information within four business days of the information being available to the EP. **Measure 1:** More than 50 percent of all unique patients seen by the EP during the EHR reporting period are provided timely (available to the patient within 4 business days after the information is available to the EP) online access to their health information. **Measure 2:** More than 5 percent of all unique patients seen by the EP during the EHR reporting period (or their authorized representatives) view, download, or transmit to a third party their health information. 1. More than 50 percent of all unique patients discharged from the inpatient or emergency departments of the eligible hospital or CAH (POS 21 or 23) during the EHR reporting period have their information available online within 36 hours of discharge. 2. More than 5 percent of all unique patients (or their authorized representatives) who are discharged from the inpatient or emergency department (POS 21 or 23) of an eligible hospital or CAH view, download or transmit to a third party their information during the EHR reporting period	• **Core: Eligible Professionals/Eligible Hospitals** provide patients with the ability to view online, download, and transmit (VDT) their health information within **24 hours** if generated during the course of a visit and ensure the functionality is in use by patients. • Threshold for availability: High (i.e., the functionality is available to the majority of patients; it does not require patients to view information online, if they chose not to) • Threshold for use: low – **Labs or other types of information** not generated within the course of the visit should be made available to patients **within four (4) business days** of information becoming available • **Add family history to data available through VDT**	The recommendations from the February 13, 2013 Clinical Documentation Hearing, suggested that to improve accuracy, to improve patient engagement, and to guard against fraud, EHRs should have the functionality to provide progress notes as part of the MU objective for View, Download, and Transmit, for those providers who elect to do so. Although these goals still remain, upon further investigation, the workgroup is concerned that the inclusion of open assess to notes as a requirement for Meaningful Use could potentially stifle innovation and impact future sharing. The workgroup felt it was too early to prescribe a method, as those currently doing this are using different methods. Discussions with those leading the Open Notes project revealed that many systems do this differently and it is too early to identify a single method that works best for all systems. The workgroup agreed upon the importance of sharing notes with patients, but felt it was too early to include in stage 3 without stifling innovation. That being said, there were a few workgroup members that felt that it would be possible to create the capacity to electronically share notes with patients through portals in stage Preamble: Mobile access to VDT may improve access to underserved populations who do not have access to broadband.

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Amendments	**New**	• **New** • **Certification Criteria:** Provide patients with an easy way to request an amendment to their record online (e.g., offer corrections, additions, or updates to the record)	

Patient Generated Health Data	**New**	• **New**
		• **Menu: Eligible Professionals and Eligible Hospitals** receive provider-requested, electronically submitted patient-generated health information through either:
		  ◦ structured or semi-structured questionnaires (e.g., screening questionnaires, medication adherence surveys, intake forms, risk assessment, functional status)
		  ◦ or secure messaging.
		• Threshold: Low
			FAQ: Although not a part of the certification criteria, if an organization's EHR accepts patient-generated information using interfaces to remote devices, then receipt of such data will satisfy this objective.

Visit Summary/ Clinical Summary	**EP Objective:** Provide clinical summaries for patients for each office visit **EP Measure:** Clinical summaries provided to patients or patient-authorized representatives within 1 business day for more than 50 percent of office visits.	• **Core: Eligible Professionals** provide office-visit summaries to patients or patient-authorized representatives with **relevant, actionable information, and instructions pertaining to the visit** in the form/media preferred by the patient • Summaries should be shared with the patient according to their preference (e.g., online, printed handout), if the provider has implemented the technical capability to meet the patient preference • Threshold: Medium • **Certification Criteria:** CEHRT allows provider organizations to configure the summary reports to provide relevant, actionable information related to a visit.	HITSC to identify what the communication preferences options should be. Providers should have the ability to select options that are technically feasible, these could include: Email, patient portal, regular mail, etc…

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Patient Education	**EP/EH Objective:** Use Certified EHR Technology to identify patient-specific education resources and provide those resources to the patient **EP CORE Measure:** Patient specific education resources identified by CEHRT are provided to patients for more than 10 percent of all unique patients with office visits seen by the EP during the EHR reporting period **EH CORE Measure:** More than 10 percent of all unique patients admitted to the eligible hospital's or CAH's inpatient or emergency departments (POS 21 or 23) are provided patient- specific education resources identified by Certified EHR Technology	• Continue educational material objective from stage 2 for Eligible Professionals and Hospitals – Threshold: Low • Additionally, **Eligible Providers and Hospitals** use CEHRT capability to provide patient-specific educational material in non-English speaking patient's preferred language, if material is available, using preferred media (e.g., online, print-out from CEHRT). – Threshold: Low, this should be a number and not a percentage • **Certification criteria**: EHRs are capable of providing patient-specific educational materials in at least one non-English language	Additional information: Expand the InfoButton standard to include disability status. CDS may be used to remind providers about relevant patient-specific education for shared decision making
Secure Messaging	**EP Core Objective:** Use secure electronic messaging to communicate with patients on relevant health information **EP Core Measure:** A secure message was sent using the electronic messaging function of Certified EHR Technology by more than 5 percent of unique patients (or their authorized representatives) seen by the EP during the EHR reporting period	• **No Change in objective** • **Core: Eligible Professionals** • Patients use secure electronic messaging to communicate with EPs on clinical matters. • Threshold: Low (e.g. 5% of patients send secure messages) • **Certification criteria**: EHRs have the capability to: – Indicate whether the patient is expecting a response to a message they initiate – Track the response to a patient-generated message (e.g., no response, secure message reply, telephone reply)	

Improving Care Coordination

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Medication Reconciliation	**EP/EH CORE Objective:** The EP/EH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation. **EP/EH CORE Measure:** 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)	• **No Change** • **Core: Eligible Professionals, Hospitals, and CAHs** who receive patients from another setting of care perform medication reconciliation. • Threshold: No Change	**FAQ:** Reconciliation may also be performed for all encounters (instead of just transitions of care)

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Summary of care for transfers of care	**EP/EH CORE Objective:** The EP/EH/CAH who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care provides summary care record for each transition of care or referral. **CORE Measure:** 1. The EP, eligible hospital, or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50 percent of transitions of care and referrals. 2. The EP, eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 10% of such transitions and referrals either (a) electronically transmitted using CEHRT to a recipient or (b) where the recipient receives the summary of care record via exchange facilitated by an organization that is a NwHIN Exchange participant or in a manner that is consistent with the governance mechanism ONC establishes for the nationwide health information network.	**Eligible Professionals/Eligible Hospitals/Critical Access Hospitals** provide a summary of care record during transitions of care. Types of transitions: • Transfers of care from one site of care to another (e.g.. Hospital to: PCP, hospital, SNF, HHA, home, etc) • Consult (referral) request (e.g., PCP to Specialist; PCP, SNF to ED) **[pertains to EPs only]** • Consult result note (e.g. consult note, ER note) Summary of care may (at the discretion of the provider organization) include, as relevant: • A narrative that includes a synopsis of current care and expectations for consult/transition or the results of a consult [required for all transitions] • Overarching patient goals and/or problem-specific goals • Patient instructions, suggested interventions for care during transition • Information about known care team members (including a designated caregiver) Threshold: No Change	Although structured data is helpful, use of free text in the summary of care document is acceptable

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Notifications	****New****	• **New** • **Menu: Eligible Hospitals and CAHs** send electronic notifications of significant healthcare events in a timely manner to known members of the patient's care team (e.g., the primary care provider, referring provider, or care coordinator) with the patient's consent if required • Significant events include: – Arrival at an Emergency Department (ED) – Admission to a hospital – Discharge from an ED or hospital – Death • Low threshold	FAQ: Modular certification is encouraged; this does not need to be an EHR function

Population and public health

Topic	Stage 2 Final Rule	Updated Stage 3 Objective	Discussion
Immunization history		• **Eligible Professionals, Hospitals, and CAHs** receive a patient's immunization history supplied by an immunization registry or immunization information system, allowing healthcare professionals to use structured historical immunization information in the clinical workflow • Threshold: Low, a simple use case • **Certification Criteria:** CEHRT functionality provides ability to receive and present a standard set of structured, externally-generated immunization history and capture the act and date of review within the EP/EH practice	
Electronic lab reporting	**Core Objective:** Capability to submit electronic reportable laboratory results to public health agencies, where except where prohibited, and in accordance with applicable law and practice. **Core Measure:** Successful ongoing submission of electronic reportable laboratory results from Certified EHR Technology to a public health agency for the entire EHR reporting period.	• **No Change** • **Core: Eligible Hospitals and CAHs** submit electronic reportable laboratory results, for the entire reporting period, to public health agencies, except where prohibited, and in accordance with applicable law and practice	

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Case Reports	****New****	• **New** • **Certification Criteria:** – CEHRT is capable of using external knowledge (i.e., CDC/CSTE Reportable Conditions Knowledge Management System) to prompt an end-user when criteria are met for case reporting. – When case reporting criteria are met, CEHRT is capable of recording and maintaining an audit for the date and time of prompt. – CEHRT is capable of using external knowledge to collect standardized case reports (e.g., structured data capture) and preparing a standardized case report (e.g., consolidated CDA) that may be submitted to the state/local jurisdiction and the data/time of submission is available for audit.	
Syndromic Surveillance	**EP MENU Objective:** Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice **EH Objective:** Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice **EP/EH Measure:** Successful ongoing submission of electronic syndromic surveillance data from Certified EHR Technology to a public health agency for the entire EHR reporting period	**No Change from Stage 2** • **EP (menu) Eligible Hospitals and CAHs (core)** submit syndromic surveillance data for the entire reporting period from CEHRT to public health agencies, except where prohibited, and in accordance with applicable law and practice	

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Registries		• **Core: Eligible Professionals** • **Menu: Eligible Hospitals** • Purpose: Reuse CEHRT data to electronically submit standardized (i.e., data elements, structure and transport mechanisms) reports to one registry • Reporting should use one of the following mechanisms: 1. Upload information from EHR to registry using standard c-CDA 2. Leverage national or local networks using federated query technologies	CEHRT is capable (certification criteria only) of allowing end-user to configure standard c-CDA file to determine which data will be sent to the registries