Coordination of Care through Patient Engagement	
Objective	Use certified electronic health record technology (CEHRT) to engage with patients or their authorized representatives about the patient's care.
Measure	Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective: **Measure 1** – For a Promoting Interoperability (PI) reporting period in 2018, more than 5 percent of all unique patients (or their authorized representatives) seen by the eligible professional (EP) actively engage with the EHR made accessible by the provider and either— (1) View, download or transmit to a third party their health information; or (2) Access their health information through the use of an Application Programming Interface (API) that can be used by applications chosen by the patient and configured to the API in the provider's CEHRT; or (3) A combination of (1) and (2) Threshold for 2019 and Subsequent Years: The resulting percentage must be more than 10 percent. **Measure 2** – For a PI reporting period in 2018, more than 5 percent of all unique patients seen by the EP during the PI reporting period, a secure message was sent using the electronic messaging function of CEHRT to the patient (or the patient-authorized representative), or in response to a secure message sent by the patient or their authorized representative. Threshold in 2019 and Subsequent Years: The resulting percentage must be more than 25 percent in order for an EP to meet this measure. **Measure 3** – Patient generated health data or data from a non-clinical setting is incorporated into the CEHRT for more than 5 percent of all unique patients seen by the EP during the PI reporting period.

Exclusion	Measure 1, 2 and 3 Exclusion: A provider may exclude the measures if one of the following apply: (i) An EP may exclude from the measure if they have no office visits during the PI reporting period, or; (ii) Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the Federal Communications Commission (FCC) on the first day of the PI reporting period may exclude the measure.

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Definition of Terms

API – A set of programming protocols established for multiple purposes. APIs may be enabled by a provider or provider organization to provide the patient with access to their health information through a third-party application with more flexibility than is often found in many current "patient portals."

View – The patient (or authorized representative) accessing their health information online.

Download – The movement of information from online to physical electronic media.

Transmission – This may be any means of electronic transmission according to any transport standard(s) (SMTP, FTP, REST, SOAP, etc.). However, the relocation of physical electronic media (for example, USB, CD) does not qualify as transmission.

Patient Generated Health Data – Data generated by a patient or a patient's authorized representative.

Data from a Non-Clinical Setting – This includes, but is not limited to, social service data, data generated by a patient or a patient's authorized representative, advance directives, medical device data, home health monitoring data, and fitness monitor data.

Secure Message – Any electronic communication between a provider and patient that ensures only those parties can access the communication. This electronic message could be email or the electronic messaging function of a personal health record (PHR), an online patient portal, or any other electronic means.

Unique Patient – If a patient is seen by an EP more than once during the PI reporting period, then for purposes of measurement, that patient is only counted once in the denominator for the measure. All the measures relying on the term "unique patient" relate to what is contained in the patient's medical record. Not all of this information will need to be updated or even be needed by the provider at every patient encounter. This is especially true for patients whose encounter frequency is such that they would see the same provider multiple times in the same PI reporting period.

Attestation Requirements

Denominator/Numerator/Threshold/EXCLUSIONS

Measure 1:
- DENOMINATOR: Number of unique patients seen by the EP during the PI reporting period.
- NUMERATOR: The number of unique patients (or their authorized representatives) in the denominator who have viewed online, downloaded, or transmitted to a third party the patient's health information during the PI reporting period and the number of unique patients (or their authorized representatives) in the denominator who have accessed their health information through the use of an API during the PI reporting period.
- THRESHOLD FOR 2018: The resulting percentage must be more than 5 percent.
- THRESHOLD FOR 2019 AND SUBSEQUENT YEARS: The resulting percentage must be more than 10 percent.
- EXCLUSIONS: An EP may exclude from the measure if he or she has no office visits during the PI reporting period, or:
- Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the PI reporting period may exclude the measure.

Measure 2:
- DENOMINATOR: Number of unique patients seen by the EP during the PI reporting period.
- NUMERATOR: The number of patients in the denominator for whom a secure electronic message is sent to the patient (or patient-authorized representative) or in response to a secure message sent by the patient (or patient-authorized representative), during the PI reporting period.
- THRESHOLD FOR 2018: The resulting percentage must be more than 5 percent.
- THRESHOLD FOR 2019 AND SUBSEQUENT YEARS: The resulting percentage must be more than 25 percent.
- EXCLUSIONS: An EP may exclude from the measure if they have no office visits during the PI reporting period, or;
- Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the PI reporting period may exclude the measure.

Measure 3:
- DENOMINATOR: Number of unique patients seen by the EP during the PI reporting period.
- NUMERATOR: The number of patients in the denominator for whom data from non-clinical settings, which may include patient generated health data, is captured through the CEHRT into the patient record during the PI reporting period.
- THRESHOLD: The resulting percentage must be more than 5 percent.
- EXCLUSIONS: An EP may exclude from the measure if they have no office visits during the PI reporting period, or;
- Any EP that conducts 50 percent or more of his or her patient encounters in a county that does not have 50 percent or more of its housing units with 4Mbps broadband availability according to the latest information available from the FCC on the first day of the PI reporting period may exclude the measure.

Additional Information

- To meet Stage 3 requirements, all providers must use technology certified to the 2015 Edition. A provider who has technology certified to a combination of the 2015 Edition and 2014 Edition may potentially attest to the Stage 3 requirements, if the mix of certified technologies would not prohibit them from meeting the Stage 3 measures. A provider who has technology certified to the 2014 Edition **may not** attest to Stage 3.
- For the numerator for measures 1 and 2, beginning in 2017, the action must occur within the PI reporting period if that period is a full calendar year, or if it is less than a full calendar year, within the calendar year in which the PI reporting period occurs (between January 1st and December 31st).
- Providers must attest to all three measures and must meet the thresholds for at least two measures to meet the objective.
- There are four actions a patient might take as part of Measure 1: 1. View their information, 2. Download their information, 3. Transmit their information to a third party, and 4. Access their information through an API. These actions may overlap, but a provider is able to count any and all actions in the single numerator. Therefore, for the first measure, a provider may meet a combined threshold for view, download, and transmit and API actions, or if their technology functions overlap, then any view, download, transmit, or API actions taken by the patient using CEHRT would count toward the threshold.
- In order to meet the objective, the following information must be available within 4 business days of the information being made available to the EP:
    - Patient name
    - Provider's name and office contact information
    - Current and past problem list
    - Procedures
    - Laboratory test results
    - Current medication list and medication history
    - Current medication allergy list and medication allergy history
    - Vital signs (height, weight, blood pressure, BMI, growth charts)
    - Smoking status

- o Demographic information (preferred language, sex, race, ethnicity, date of birth)
- o Care plan field(s), including goals and instructions
- o Any known care team members including the primary care provider of record
- An EP can make available additional information and still align with the objective.
- Measure 2 includes provider-initiated communications (when a provider sends a message to a patient or the patient's authorized representatives), and provider-to-provider communications if the patient is included. A provider can only count messages in the numerator when the provider participates in the communication (e.g any patient-initiated communication only if the provider responds to the patient. *Note*: *Providers are not required to respond to every message received if no response is necessary*.
- For Measure 3, the types of data that would satisfy the measure are broad. It may include, but is not limited to, social service data, data generated by a patient or a patient's authorized representative, advance directives, medical device data, home health monitoring data, and fitness monitor data. In addition, the sources of data vary and may include mobile applications for tracking health and nutrition, home health devices with tracking capabilities such as scales and blood pressure monitors, wearable devices such as activity trackers or heart monitors, patient-reported outcome data, and other methods of input for patient and non-clinical setting generated health data. Telehealth platform, personal health records, social determinant of health screening modules, long term care/post-acute care coordination platforms might also be considered. (*Note*: *Data related to billing, payment, or other insurance information would not satisfy this measure*.)
- For measure 3, providers in non-clinical settings may include, but are not limited to, care providers such as nutritionists, physical therapists, occupational therapists, psychologists, and home health care providers. Other key providers in the care team such as behavioral health care providers, may also be included, and we encourage providers to consider ways in which this measure can incorporate this essential information from the broader care team.
- For the Patient Generated Health Data measure, the data may not be information the patient provides to the EP on location during the office visit as such data does not meet the intent of the measure to support care coordination and patient engagement in a wide range of settings outside the provider's immediate scope of practice.
- For measure 3, we do not specify the manner in which providers are required to incorporate the data. Providers may work with their EHR developers to establish the methods and processes that work best for their practice and needs. For example, if data provided can be easily incorporated in a structured format or into an existing field within the EHR (such as a C–CDA or care team member reported vital signs or patient reported family health history and demographic information) the provider may elect to do so. Alternately, a provider may maintain an isolation between the data and the patient record and instead include the data by other means such as attachments, links, and text references again as best meets their needs.

Regulatory References

- This objective may be found in Section 42 of the code of the federal register at 495.24 (d)(6)(i)(A) and (B). For further discussion please see 80 FR 62851.
- In order to meet this objective and measure, an EP must possess the capabilities and standards of CEHRT as defined at § at 45 CFR 170.315(e)(1)(2) and (3).

Certification Standards and Criteria

Below is the corresponding certification and standards criteria for EHR technology that supports achieving the meaningful use of this objective.

Certification Criteria*	
§170.315(e)(1) Patient engagement	(1) View, download, and transmit to 3rd party. (i) Patients (and their authorized representatives) must be able to use internet-based technology to view, download, and transmit their health information to a 3rd party in the manner specified below. Such access must be consistent and in accordance with the standard adopted in §170.204(a)(1) and may alternatively be demonstrated in accordance with the standard specified in §170.204(a)(2). (A) View. Patients (and their authorized representatives) must be able to use health information technology (HIT) to view, at a minimum, the following data: (1) The Common Clinical Data Set (which should be in their English (i.e., non-coded) representation if they associate with a vocabulary/code set). (2) Ambulatory setting only. Provider's name and office contact information. (3) Inpatient setting only. Admission and discharge dates and locations; discharge instructions; and reason(s) for hospitalization. (4) Laboratory test report(s). Laboratory test report(s), including: (i) The information for a test report as specified all the data specified in 42 CFR 493.1291(c)(1) through (7); (ii) The information related to reference intervals or normal values as specified in 42 CFR 493.1291(d); and (iii) The information for corrected reports as specified in 42 CFR 493.1291(k)(2). (5) Diagnostic image report(s). (B) Download. (1) Patients (and their authorized representatives) must be able to use technology to download an ambulatory summary or inpatient summary (as applicable to the HIT setting for which certification is requested) in the following formats: (i) Human readable format; and (ii) The format specified in accordance to the standard specified in §170.205(a)(4) following the CCD document template.

	(2) When downloaded according to the standard specified in §170.205(a)(4) following the CCD document template, the ambulatory summary or inpatient summary must include, at a minimum, the following data (which, for the human readable version, should be in their English representation if they associate with a vocabulary/code set): (i) Ambulatory setting only. All of the data specified in paragraph (e)(1)(i)(A)(1), (2), (4), and (5) of this section. (ii) Inpatient setting only. All of the data specified in paragraphs (e)(1)(i)(A)(1), and (3) through (5) of this section. (3) Inpatient setting only. Patients (and their authorized representatives) must be able to download transition of care/referral summaries that were created as a result of a transition of care (pursuant to the capability expressed in the certification criterion specified in paragraph (b)(1) of this section). (C) Transmit to third party. Patients (and their authorized representatives) must be able to: (1) Transmit the ambulatory summary or inpatient summary (as applicable to the HIT setting for which certification is requested) created in paragraph (e)(1)(i)(B)(2) of this section in accordance with both of the following ways: (i) Email transmission to any email address; and (ii) An encrypted method of electronic transmission.
§170.315(e)(2) **Patient engagement**	(2) Inpatient setting only. Transmit transition of care/referral summaries (as a result of a transition of care/referral as referenced by (e)(1)(i)(B)(3)) of this section selected by the patient (or their authorized representative) in both of the ways referenced (e)(1)(i)(C)(1)(i) and (ii) of this section). (D) Timeframe selection. With respect to the data available to view, download, and transmit as referenced paragraphs (e)(1)(i)(A), (B), and (C) of this section, patients (and their authorized representatives) must be able to: (1) Select data associated with a specific date (to be viewed, downloaded, or transmitted); and (2) Select data within an identified date range (to be viewed, downloaded, or transmitted).

	(ii) Activity history log. (A) When any of the capabilities included in paragraphs (e)(1)(i)(A) through (C) of this section are used, the following information must be recorded and made accessible to the patient (or his/her authorized representative): (1) The action(s) (i.e., view, download, transmission) that occurred; (2) The date and time each action occurred in accordance with the standard specified in §170.210(g); (3) The user who took the action; and (4) Where applicable, the addressee to whom an ambulatory summary or inpatient summary was transmitted. (B) Technology presented for certification may demonstrate compliance with paragraph (e)(1)(ii)(A) of this section if it is also certified to the certification criterion specified in §170.315(d)(2) and the information required to be recorded in paragraph (e)(1)(ii)(A) of this section is accessible by the patient (or his/her authorized representative). (2) Secure messaging. Enable a user to send messages to, and receive messages from, a patient in a secure manner.
§170.315(e)(3) Patient engagement	(3) Patient health information capture. Enable a user to: (i) Identify, record, and access information directly and electronically shared by a patient (or authorized representative). (ii) Reference and link to patient health information documents.

* Note: Depending on the type of certification issued to the EHR technology, it will also have been certified to the certification criterion adopted at 45 CFR 170.314 (g)(1), (g)(2), or both, in order to assist in the calculation of this PI measure.

Standards Criteria	
§ 170.204(a)	Web Content Accessibility Guidelines (WCAG) 2.0, Level A Conformance (incorporated by reference in § 170.299).
§ 170.210(f)	Any encryption and hashing algorithm identified by the National Institute of Standards and Technology as an approved security function in Annex A of the FIPS Publication 140-2 (incorporated by reference in § 170.299).

§ 170.205(a)(3)	HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, (incorporated by reference in §170.299). The use of the "unstructured document" document-level template is prohibited
§ 170.202(a)	ONC Applicability Statement for Secure Health Transport, Version 1.0 (incorporated by reference in §170.299).
§ 170.210(g)	The date and time recorded utilize a system clock that has been synchronized following (RFC 1305) Network Time Protocol, (incorporated by reference in §170.299) or (RFC 5905) Network Time Protocol Version 4, (incorporated by reference in §170.299).

* Note: Additional standards criteria may apply. Review the [ONC 2015 Edition Final Rule](#) for more information.