CMS ELECTRONIC HEALTH RECORD (EHR) INCENTIVE PROGRAM ELIGIBLE PROFESSIONALS STAGE 2 PUBLIC USE FILE (PUF) DATA DICTIONARY AND CODEBOOK

This is a provider-level file with the following variables. See the General Documentation for an overview of file contents, data source, and analytic utility.

**NPI**

This variable indicates the National Provider Identifier (NPI) for the EP.

**Program Year**

This variable contains the year of attestation to the Medicare EHR Program.

**Payment Year**

This variable contains the number of year of attestation to the Medicare EHR Program.

**Attestation Success Date**

This variable contains the full date of successful attestation to the Medicare EHR Program.

**CM21**

**Measure Name:** Core Measure 21

**Objective Title:** CPOE for Medication, Laboratory, and Radiology Orders

**Objective Description:** Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines.

**Measure Description:** More than 60 percent of medication, 30 percent of laboratory, and 30 percent of radiology orders created by the EP during the EHR reporting period are recorded using CPOE.

**Exclusion Description:** Any EP who writes fewer than 100 medication, radiology, or laboratory orders during the EHR reporting period.

**Numerator Description:**

Numerator 1 (Medication): Number of orders in the denominator recorded using CPOE.

Numerator 2 (Laboratory): Number of orders in the denominator recorded using CPOE.

Numerator 3 (Radiology): Number of orders in the denominator recorded using CPOE.
Denominator Description

Denominator 1 (Medication): Number of medication orders created by the EP during the EHR reporting period.

Denominator 2 (Laboratory): Number of laboratory orders created by the EP during the EHR reporting period.

Denominator 3 (Radiology): Number of radiology orders created by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM21.

**CM22**

Measure Name: Core Measure 22

Objective Title: Generate Prescriptions

Objective Description: Generate and transmit permissible prescriptions electronically (eRx).

Measure Description: More than 50 percent of all permissible prescriptions, or all prescriptions, written by the EP are queried for a drug formulary and transmitted electronically using CEHRT.

Exclusion Description: Exclusion 1: Any EP who writes fewer than 100 permissible prescriptions during the EHR reporting period.

Exclusion 2: Any EP who does not have a pharmacy within their organization and there are no pharmacies that accept electronic prescriptions within 10 miles of the EP’s practice location at the start of his/her EHR reporting period.

Numerator Description: Number of prescriptions in the denominator generated, queried for a drug formulary and transmitted electronically using CEHRT.

Denominator Description: Number of prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances during the EHR reporting period or number of prescriptions written for drugs requiring a prescription in order to be dispensed during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM22.

**CM23**

Measure Name: Core Measure 23

Objective Title: Record Demographics

Objective Description: Record the following demographics: preferred language, sex, race, ethnicity, date of birth.

Measure Description: More than 80 percent of all unique patients seen by the EP have demographics recorded as structured data.

Numerator Description: Number of patients in the denominator who have all the elements of demographics (or a specific notation if the patient declined to provide one or more elements or if recording an element is contrary to state law) recorded as structured data.
Denominator Description: Number of unique patients seen by the EP during the EHR reporting period.

These variables provide the numerator, denominator, and percentage, calculated by the numerator and denominator provided by the EP for CM23.

**CM24**

Measure Name: Core Measure 24  
Objective Title: Record Vital Signs  
Objective Description: Record and chart changes in the following vital signs: height/length and weight (no age limit); blood pressure (ages 3 and over); calculate and display body mass index (BMI); and plot and display growth charts for patients 0-20 years, including BMI.  
Measure Description: More than 80 percent of all unique patients seen by the EP have blood pressure (for patients age 3 and over only) and/or height and weight (for all ages) recorded as structured data.  
Exclusion Description: Exclusion 1: Any EP who sees no patients 3 years or older is excluded from recording blood pressure.  
Exclusion 2: Any EP who believes that all 3 vital signs of height/length, weight, and blood pressure have no relevance to their scope of practice is excluded from recording them.  
Exclusion 3: Any EP who believes that height/length and weight are relevant to their scope of practice, but blood pressure is not, is excluded from recording blood pressure.  
Exclusion 4: Any EP who believes that blood pressure is relevant to their scope of practice, but height/length and weight are not, is excluded from recording height/length and weight.  
Numerator Description: Number of patients in the denominator who have at least one entry of their height/length and weight (all ages) and/or blood pressure (ages 3 and over) recorded as structured data.  
Denominator Description: Number of unique patients seen by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM24.

**CM25**

Measure Name: Core Measure 25  
Objective Title: Record Smoking Status  
Objective Description: Record smoking status for patients 13 years old or older.  
Measure Description: More than 80 percent of all unique patients 13 years old or older seen by the EP have smoking status recorded as structured data.  
Exclusion Description: Any EP that neither sees nor admits any patients 13 years old or older.  
Numerator Description: Number of patients in the denominator with smoking status recorded as structured data.
Denominator Description: Number of unique patients age 13 or older seen by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM25.

**CM26**

Measure Name: Core Measure 26  
Objective Title: Clinical Decision Support  
Objective Description: Use clinical decision support to improve performance on high-priority health conditions.  
Measure Description: 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’s scope of practice or patient population, the clinical decision support interventions must be related to high-priority health conditions. Measure 2: The EP has enabled and implemented the functionality for drug-drug and drug-allergy interaction checks for the entire EHR reporting period.  
Exclusion Description: For the second measure, any EP who writes fewer than 100 medication orders during the EHR reporting period.  
Numerator Description: N/A  
Denominator Description: N/A

This variable provides the response (Yes/No) and exclusion (if any) provided by the EP for both CM26 measures.

**CM27**

Measure Name: Core Measure 27  
Objective Title: Clinical Lab Test Results  
Objective Description: Incorporate clinical lab-test results into Certified EHR Technology (CEHRT) as structured data.  
Measure Description: More than 55 percent of all clinical lab tests results ordered by the EP 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.  
Exclusion Description: Any EP who orders no lab tests where results are either in a positive/negative affirmation or numeric format during the EHR reporting period.  
Numerator Description: Number of lab test results which are expressed in a positive or negative affirmation or as a numeric result which are incorporated in CEHRT as structured data.
Denominator Description: Number of lab tests ordered during the EHR reporting period by the EP whose results are expressed in a positive or negative affirmation or as a number.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM27.

**CM28**

Measure Name: Core Measure 28  
Objective Title: Generate List of Patients  
Objective Description: Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach.  
Measure Description: Generate at least one report listing patients of the EP with a specific condition. Note: This measure only requires a yes/no answer.  
Numerator Description: N/A  
Denominator Description: N/A

This variable provides the response (Yes/No) provided by the EP for CM28.

**CM29**

Measure Name: Core Measure 29  
Objective Title: Patient Reminders  
Objective Description: 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 Description: 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.  
Exclusion Description: Any EP who has had no office visits in the 24 months before the EHR reporting period.  
Numerator Description: Number of patients in the denominator who were sent a reminder per patient preference when available during the EHR reporting period.  
Denominator Description: Number of unique patients who have had two or more office visits with the EP in the 24 months prior to the beginning of the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM29.

**CM30**

Measure Name: Core Measure 30  
Objective Title: Patients Ability to View, Download, and Transmit Health Information
Objective Description: 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 Description: 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, with the ability to view, download, and transmit to a third party.
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.

Exclusion Description: Exclusion 1: Any EP who neither orders nor creates any of the information listed for inclusion as part of both measures, except for "Patient name" and "Provider's name and office contact information," may exclude both measures.
Exclusion 2: Any EP who 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 3Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period may exclude only the second measure.

Numerator Description: Numerator 1: Number of patients in the denominator who have timely (within 4 business days after the information is available to the EP) online access to their health information to view, download, and transmit to a third party.
Numerator 2: 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.

Denominator Description Denominator 1: Number of unique patients seen by the EP during the EHR reporting period.
Denominator 2: Number of unique patients seen by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for both CM30 measures.

**CM31**

Measure Name: Core Measure 31
Objective Title: Provide Clinical Summaries
Objective Description: Provide clinical summaries for patients for each office visit.
Measure Description: Clinical summaries provided to patients or patient-authorized representatives within one business day for more than 50 percent of office visits.
Exclusion Description: Any EP who has no office visits during the EHR reporting period.
Numerator Description: Number of office visits in the denominator where the patient or a patient-authorized representative is provided a clinical summary of their visit within one (1) business day.

Denominator Description: Number of office visits conducted by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM31.

**CM32**

Measure Name: Core Measure 32  
Objective Title: Provide Patient-specific Education Resources  
Objective Description: Use clinically relevant information from Certified EHR Technology to identify patient-specific education resources and provide those resources to the patient.

Measure Description: Patient-specific education resources identified by Certified EHR Technology 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.

Exclusion Description: Any EP who has no office visits during the EHR reporting period.

Numerator Description: Number of patients in the denominator who were provided patient-specific education resources identified by the Certified EHR Technology.

Denominator Description: Number of unique patients with office visits seen by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM32.

**CM33**

Measure Name: Core Measure 33  
Objective Title: Perform Medication Reconciliation  
Objective Description: The EP who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation.

Measure Description: The EP who performs medication reconciliation for more than 50 percent of transitions of care in which the patient is transitioned into the care of the EP.

Exclusion Description: Any EP who was not the recipient of any transitions of care during the EHR reporting period.

Numerator Description: Number of transitions of care in the denominator where medication reconciliation was performed.

Denominator Description: Number of transitions of care during the EHR reporting period for which the EP was the receiving party of the transition.
These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM33.

**CM34**

**Measure Name:** Core Measure 34  
**Objective Title:** Summary Care Record Provided to Patients  
**Objective Description:** The EP who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care must provide summary care record for each transition of care or referral.  
Note: EPs must satisfy measures 1 and 2 in order to meet the objective.  
**Measure Description:** Measure 1: The EP 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 percent of transitions of care and referrals.  
Measure 2: The EP who transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 10 percent 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 NwHIN.  
Note: An EP must satisfy one of the criteria under measure 3 to meet the objective. Measure 3 only requires a yes/no answer.  
Measure 3: Conducts one or more successful electronic exchanges of a summary of care document, as part of which is counted in "measure 2" (for EPs the measure at §495.6(j)(14)(ii)(B) with a recipient who has EHR technology that was developed designed by a different EHR technology developer than the sender's EHR technology certified to 45 CFR 170.314(b)(2) OR conducts one or more successful tests with the CMS designated test EHR during the EHR reporting period.  
**Exclusion Description:** Any EP who transfers a patient to another setting or refers a patient to another provider less than 100 times during the EHR reporting period is excluded from all three measures.  
**Numerator Description:** Numerator 1: Number of transitions of care and referrals in the denominator where a summary of care record was provided.  
Numerator 2: Number of transitions of care and referrals in the denominator where a summary of care record was 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. The organization can be a third-party or the sender's own organization.  
Numerator 3: N/A
Denominator Description
Denominator 1: Number of transitions of care and referrals during the EHR reporting period for which the EP was the transferring or referring provider.
Denominator 2: Number of transitions of care and referrals during the EHR reporting period for which the EP was the transferring or referring provider.
Denominator 3: N/A

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for CM34.

**CM35**

Measure Name: Core Measure 35
Objective Title: Submit Electronic Data for Immunization
Objective Description: Capability to submit electronic data to immunization registries or immunization information systems except where prohibited, and in accordance with applicable law and practice.

Measure Description: Successful ongoing submission of electronic immunization data from CEHRT to an immunization registry or immunization information system for the entire EHR reporting period.

Exclusion Description:
Exclusion 1: The EP does not administer any of the immunizations to any of the populations for which data is collected by their jurisdiction's immunization registry or immunization information system during the EHR reporting period.
Exclusion 2: The EP operates in a jurisdiction for which no immunization registry or immunization information system is capable of accepting the specific standards required for CEHRT at the start of their EHR reporting period.
Exclusion 3: The EP operates in a jurisdiction where no immunization registry or immunization information system provides information timely on capability to receive immunization data.
Exclusion 4: The EP operates in a jurisdiction for which no immunization registry or immunization information system that is capable of accepting the specific standards required by CEHRT at the start of their EHR reporting period can enroll additional EPs.

Note: This measure only requires a yes/no answer.

Numerator Description: N/A
Denominator Description: N/A

This variable provides the response (Yes/No) and exclusions (if any) provided by the EP for CM35.
CM36

Measure Name: Core Measure 36
Objective Title: Protect Electronic Health Information
Measure Description: Conduct or review a security risk analysis in accordance with the requirements under 45 CFR 164.308(a) (1), including addressing the encryption/security of data stored in CEHRT in accordance with requirements under 45 CFR 164.312 (a)(2)(iv) and 45 CFR 164.306(d)(3), and implement security updates as necessary and correct identified security deficiencies as part of the provider's risk management process for EPs.
Note: This measure only requires a yes/no answer.

Numerator Description: N/A
Denominator Description: N/A

This variable provides the response (Yes/No) provided by the EP for CM36.

CM37

Measure Name: Core Measure 37
Objective Title: Use Secure Electronic Messaging
Objective Description: Use secure electronic messaging to communicate with patients on relevant health information.
Measure Description: A secure message was sent using the electronic messaging function of CEHRT by more than 5 percent of unique patients (or their authorized representatives) seen by the EP during the EHR reporting period.
Exclusion Description: Any EP who has no office visits during the EHR reporting period, or any EP who 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 3Mbps broadband availability according to the latest information available from the FCC on the first day of the EHR reporting period.

Numerator Description: N/A
Denominator Description: N/A

This variable provides the response (Yes/No) and exclusion (if any) provided by the EP for CM37.

MM21

Measure Name: Menu Measure 21
Objective Title: Imaging Results
Objective Description: Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through CEHRT.
Measure Description: 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.
Exclusion Description: Any EP who orders less than 100 tests whose result is an image during the EHR reporting period; or any EP who has no access to electronic imaging results at the start of the EHR reporting period.

Numerator Description: Number of results in the denominator that are accessible through CEHRT.

Denominator Description: Number of tests whose result is one or more images ordered by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for MM21.

**MM22**

<table>
<thead>
<tr>
<th>Measure Name:</th>
<th>Menu Measure 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Title:</td>
<td>Record Patient Family Health History</td>
</tr>
<tr>
<td>Objective Description:</td>
<td>Record patient family health history as structured data.</td>
</tr>
<tr>
<td>Measure Description:</td>
<td>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.</td>
</tr>
</tbody>
</table>

Exclusion Description: Any EP who has no office visits during the EHR reporting period.

Numerator Description: Number of patients in the denominator with a structured data entry for one or more first-degree relatives.

Denominator Description: Number of unique patients seen by the EP during the EHR reporting period.

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for MM22.

**MM23**

<table>
<thead>
<tr>
<th>Measure Name:</th>
<th>Menu Measure 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Title:</td>
<td>Submit Electronic Syndromic Surveillance Data</td>
</tr>
<tr>
<td>Objective Description:</td>
<td>Capability to submit electronic syndromic surveillance data to public health agencies, except where prohibited, and in accordance with applicable law and practice.</td>
</tr>
<tr>
<td>Measure Description:</td>
<td>Successful ongoing submission of electronic syndromic surveillance data from CEHRT to a public health agency for the entire EHR reporting period.</td>
</tr>
</tbody>
</table>
Exclusion Description: Exclusion 1: The EP is not in a category of providers that collect ambulatory syndromic surveillance information on their patients during the EHR reporting period.
Exclusion 2: The EP operates in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data in the specific standards required by CEHRT at the start of their EHR reporting period.
Exclusion 3: The EP operates in a jurisdiction where no public health agency provides information timely on capability to receive syndromic surveillance data.
Exclusion 4: The EP operates in a jurisdiction for which no public health agency that is capable of accepting the specific standards required by CEHRT at the start of their EHR reporting period can enroll additional EPs.
Note: This measure only requires a yes/no answer.

Numerator Description: N/A
Denominator Description: N/A

This variable provides the response (Yes/No) and exclusions (if any) provided by the EP for MM23.

MM24

Measure Name: Menu Measure 24
Objective Title: Identify and Report Cancer Cases
Objective Description: Capability to identify and report cancer cases to a public health central cancer registry, except where prohibited, and in accordance with applicable law and practice.
Measure Description: Successful ongoing submission of cancer case information from CEHRT to a public health central cancer registry for the entire EHR reporting period.
Exclusion Description: Exclusion 1: The EP does not diagnose or directly treat cancer.
Exclusion 2: The EP operates in a jurisdiction for which no public health agency is capable of receiving electronic cancer case information in the specific standards required for CEHRT at the beginning of their EHR reporting period.
Exclusion 3: The EP operates in a jurisdiction where no PHA provides information timely on capability to receive electronic cancer case information.
Exclusion 4: The EP operates in a jurisdiction for which no public health agency that is capable of receiving electronic cancer case information in the specific standards required for CEHRT at the beginning of their EHR reporting period can enroll additional EPs.
Note: This measure only requires a yes/no answer.

Numerator Description: N/A
Denominator Description: N/A
This variable provides the response (Yes/No) and exclusions (if any) provided by the EP for MM24.

**MM25**

<table>
<thead>
<tr>
<th>Measure Name:</th>
<th>Menu Measure 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Title:</td>
<td>Identify and Report Specific Cases to a Specialized Registry</td>
</tr>
<tr>
<td>Objective Description:</td>
<td>Capability to identify and report specific cases to a specialized registry (other than a cancer registry), except where prohibited, and in accordance with applicable law and practice.</td>
</tr>
<tr>
<td>Measure Description:</td>
<td>Successful ongoing submission of specific case information from CEHRT to a specialized registry for the entire EHR reporting period.</td>
</tr>
<tr>
<td>Exclusion Description:</td>
<td>Exclusion 1: The EP does not diagnose or directly treat any disease associated with a specialized registry sponsored by a national specialty society for which the EP is eligible, or the public health agencies in their jurisdiction. Exclusion 2: The EP operates in a jurisdiction for which no specialized registry sponsored by a public health agency or by a national specialty society for which the EP is eligible is capable of receiving electronic specific case information in the specific standards required by CEHRT at the beginning of their EHR reporting period. Exclusion 3: The EP operates in a jurisdiction where no public health agency or national specialty society for which the EP is eligible provides information timely on capability to receive information into their specialized registries. Exclusion 4: The EP operates in a jurisdiction for which no specialized registry sponsored by a public health agency or by a national specialty society for which the EP is eligible that is capable of receiving electronic specific case information in the specific standards required by CEHRT at the beginning of their EHR reporting period can enroll additional EPs.</td>
</tr>
</tbody>
</table>

Note: This measure only requires a yes/no answer.

| Numerator Description: | N/A |
| Denominator Description: | N/A |

This variable provides the response (Yes/No) and exclusions (if any) provided by the EP for MM25.

**MM26**

<table>
<thead>
<tr>
<th>Measure Name:</th>
<th>Menu Measure 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Title:</td>
<td>Record Electronic Notes</td>
</tr>
<tr>
<td>Objective Description:</td>
<td>Record electronic notes in patient records.</td>
</tr>
<tr>
<td>Measure Description:</td>
<td>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 reporting period. The text of the electronic note must be text searchable and may contain drawings and other content.</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Exclusion Description:</td>
<td>Any EP who has no office visits during the EHR reporting period.</td>
</tr>
<tr>
<td>Numerator Description:</td>
<td>Number of unique patients in the denominator who have at least one electronic progress note from an eligible professional recorded as text searchable data.</td>
</tr>
<tr>
<td>Denominator Description</td>
<td>Number of unique patients with at least one office visit during the EHR reporting period for EPs during the EHR reporting period.</td>
</tr>
</tbody>
</table>

These variables provide the numerator, denominator, percentage (calculated by the numerator and denominator), and exclusions provided by the EP for MM26.

**EHR Certification Number**

This variable contains the EHR Certification Number of the EP to the Medicare EHR Program.