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- Certification Companion Guide (CCG)
- Test Procedure

Updated on 06-11-2024

Regulation Text

Regulation Text

§ 170.315 (g)(2) *Automated measure calculation*—

For each Promoting Interoperability Programs percentage-based measure that is supported by a capability included in a technology, record the numerator and denominator and create a report including the numerator, denominator, and resulting percentage associated with each applicable measure.

Standard(s) Referenced

None

Certification Dependencies

Design and Performance: This certification criterion was adopted at § 170.315(g)(2). Quality management system (§ 170.315(g)(4)) and accessibility-centered design (§ 170.315(g)(5)) need to be certified as part of the overall scope of the certificate issued to the product.

- Quality management system (§ 170.315(g)(4)): When a single quality management system (QMS) is used, the QMS only needs to be identified once. Otherwise, the QMS' need to be identified for every capability to which it was applied.
- Accessibility-centered design (§ 170.315(g)(5)): When a single accessibility-centered design standard is used, the standard only needs to be identified once. Otherwise, the accessibility-centered design standards need to be identified for every capability to which they were applied; or, alternatively, the developer must state that no accessibility-centered design was used.

Measure-Specific Guidance from CMS

Revision History

Version #	Description of Change	Version Date
1.0	Initial publication	03-11-2024
1.1	Updates made to test steps to align with test data scenarios and current CMS requirements.	06-11-2024

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Standard(s) Referenced

None

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Design and Performance: This certification criterion was adopted at § 170.315(g)(2). Quality management system (§ 170.315(g)(4)) and accessibility-centered design (§ 170.315(g)(5)) need to be certified as part of the overall scope of the certificate issued to the product.

- Quality management system (§ 170.315(g)(4)): When a single quality management system (QMS) is used, the QMS only needs to be identified once. Otherwise, the QMS' need to be identified for every capability to which it was applied.
- Accessibility-centered design (§ 170.315(g)(5)): When a single accessibility-centered design standard is used, the standard only needs to be identified once. Otherwise, the accessibility-centered design standards need to be identified for every capability to which they were applied; or, alternatively, the developer must state that no accessibility-centered design was used.

Measure-Specific Guidance from CMS

- Medicare Promoting Interoperability Program and Eligible Hospitals, Critical Access Hospitals and Dual Eligible Hospitals for 2019
- Medicare EC Merit-based Incentive Program System (MIPS) Promoting Interoperability Performance Category for 2020

Testing
Testing Tool

Testing Components

Criterion Subparagraph	Test Data
Test Data Set 1 – EH/CAH	§ 170.315(g)(2) Test Data Set 1 – EH/CAH, last updated on 1/3/2022
Test Data Set 2 – EP/EC	§ 170.315(g)(2) Test Data Set 2 – EP/EC, last updated on 1/3/2022

Revision History

Version #	Description of Change	Version Date
1.0	Initial publication	03-11-2024
1.1	Updates made to test steps to align with test data scenarios and current CMS requirements.	06-11-2024

This Test Procedure illustrates the test steps required to certify a Health IT Module to this criterion. Please consult the most recent ONC Final Rule on the Certification Regulations page for a detailed description of the certification criterion with which these testing steps are associated. ONC also encourages developers to consult the Certification Companion Guide in tandem with the test procedure as it provides clarifications that may be useful for product development and testing.

Note: The test step order does not necessarily prescribe the order in which the tests should take place.

Testing components

ONC Supplied Test Data

(g)(2) Automated measure calculation

System Under Test

Required Attestation

Health IT developers with Health IT Modules certified to section (g)(2) are required to attest that they have provided to other health IT developers and end-users documentation including the following as applicable:

> For ambulatory only systems or inpatient/ambulatory systems, identify and acknowledge the Health IT Module is not certified or deemed to section (g)(2) for calculation method Merit-based Incentive Payment System (MIPS) Promoting Interoperability performance category (TIN/NPI).

Test Lab Verification

Required Attestation

Tester verifies that the attestation includes all required elements.

Organization

The tests are organized as follows:

> Required Tests 1 through 15 are measure-specific sections that address required capabilities for each measure.

Health IT Modules that are ambulatory systems only must use the ambulatory test data. Health IT Modules that are inpatient systems only must use the eligible hospital test data and, if the inpatient system is used in the ambulatory setting, the ambulatory test data. Health IT Modules that are both ambulatory and inpatient systems must use the eligible hospital test data and the ambulatory test data. Health IT Modules that test for the ambulatory data must test for both the EC individual and EC Group calculation methods.

For Measure Specific Sections

Within each of the measure-specific sections, the test procedure addresses the capability to record the numerator and denominator and resulting percentage for § 170.315(g)(2) for each measure for Medicare Promoting Interoperability Program and MIPS Promoting Interoperability performance category measures:

> Record – evaluates the capability to electronically record the numerator and denominator and resulting percentage for each objective with a percentage-based measure
>
> > The health IT developer records all numerator and denominator measure elements for the method(s) by which the Health IT Module records the numerator and denominator for each measure.

ONC supplies Test Data Scenarios to be used during the test, and the health IT developer supplies Test Data Scenarios and parameters. A single set of test patients has been created that occurs across all required tests. The health IT developer is required to use all test patients in each scenario. The health IT developer must use the test patients that are in the test data and may not change their names, birthdays, or gender.

Report – evaluates the capability to create a report that includes the numerator and denominator associated with each percentage-based measure. For each scenario the health IT developer enters the test patients for the scenario and the corresponding test data for each required test for which they are presenting for testing. Using the functions of the Health IT Module, the health IT developer creates a report that includes, as relevant, the numerator and denominator and resulting percentage for each measure based on the supplied test data from the test data scenario across all required tests. The report must also include the list of patients included in the numerator and denominator as relevant. Then the health IT developer marks the report for the associated scenario.

- Scenario 1: baseline measure report
- Scenario 2: populate numerator only
- Scenario 3: populate numerator and denominator
- Scenario 4: populate denominator only
- Scenario 5: do not populate numerator or denominator
- The health IT developer submits all five reports to the tester for review.
- The tester verifies that the increments in the numerator and denominator produced in the delta report are accurate and complete and represent the expected increments in comparison to the baseline measure report, based on the ONC supplied test data. The tester uses the English Statements described in the Test Guide for each measure. The tester verifies that the correct patients are included in the numerator and denominator for each measure.

Each measure-specific Test Description provides a Measure Element list and English Statements for each measure. The Measure Element list deconstructs the English Statements to provide the discrete measure elements for recording the numerator and denominator.

System Under Test	**Test Lab Verification**
Required Attestation	**Required Attestation**
Health IT developers with Health IT Modules certified to section (g)(2) are required to attest that they have provided to other health IT developers and end-users documentation including the following as applicable: For ambulatory only systems or inpatient/ambulatory systems, identify and acknowledge the Health IT Module is not certified or deemed to section (g)(2) for calculation method Merit-based Incentive Payment System (MIPS) Promoting Interoperability performance category (TIN/NPI).	Tester verifies that the attestation includes all required elements.

Required Test 1 - ePrescribing

Medicare Promoting Interoperability Program

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category

System Under Test

The health IT developer records and creates five reports, one for each scenario. Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification. Any prescriptions written by the eligible clinician (EC) in an ambulatory setting, or discharge medication orders in an inpatient setting, will populate the numerator once per prescription transmitted electronically for a patient who was seen/admitted during the reporting/performance period.

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure:

> Medicare EH/CAH: At least one hospital discharge medication order for permissible prescriptions (for new and changed prescriptions) are transmitted electronically using certified electronic health record technology (CEHRT).

Medicare Promoting Interoperability Program Measure English Statements:

- Numerator: The number of prescriptions in the denominator generated and transmitted electronically.
- Denominator: The number of new or changed prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances for patients discharged during the EHR reporting period.

Medicare Promoting Interoperability Program Measure Elements:

- Numerator: Prescription generated, and transmitted electronically.
- Denominator: Prescriptions generated.

EC Measure Description

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category Measure:

> EC: At least one permissible prescription written by the MIPS eligible clinician is transmitted electronically using CEHRT.

MIPS Promoting Interoperability Performance Category English Statements:

- Numerator: The number of prescriptions in the denominator generated and transmitted electronically using CEHRT.
- Denominator: Number of prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances during the performance period; or number of prescriptions written for drugs requiring a prescription in order to be dispensed during the performance period.

MIPS Promoting Interoperability Performance Category Measure Elements:

- Numerator: Prescription generated and transmitted electronically.
- Denominator: Prescriptions other than controlled substances generated; or prescriptions generated.

Test Lab Verification

The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 1 and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5.

System Under Test	Test Lab Verification
The health IT developer records and creates five reports, one for each scenario. Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification. Any prescriptions written by the eligible clinician (EC) in an ambulatory setting, or discharge medication orders in an inpatient setting, will populate the numerator once per prescription transmitted electronically for a patient who was seen/admitted during the reporting/performance period.	The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 1 and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5.

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure:

System Under Test	Test Lab Verification

Medicare EH/CAH: At least one hospital discharge medication order for permissible prescriptions (for new and changed prescriptions) are transmitted electronically using certified electronic health record technology (CEHRT).

Medicare Promoting Interoperability Program Measure English Statements:

- Numerator: The number of prescriptions in the denominator generated and transmitted electronically.
- Denominator: The number of new or changed prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances for patients discharged during the EHR reporting period.

Medicare Promoting Interoperability Program Measure Elements:

- Numerator: Prescription generated, and transmitted electronically.
- Denominator: Prescriptions generated.

EC Measure Description

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category Measure:

EC: At least one permissible prescription written by the MIPS eligible clinician is transmitted electronically using CEHRT.

MIPS Promoting Interoperability Performance Category English Statements:

- Numerator: The number of prescriptions in the denominator generated and transmitted electronically using CEHRT.
- Denominator: Number of prescriptions written for drugs requiring a prescription in order to be dispensed other than controlled substances during the performance period; or number of prescriptions written for drugs requiring a prescription in order to be dispensed during the performance period.

System Under Test	Test Lab Verification
MIPS Promoting Interoperability Performance Category Measure Elements: • Numerator: Prescription generated and transmitted electronically. • Denominator: Prescriptions other than controlled substances generated; or prescriptions generated.	

Required Test 2a, b, or c – Provide Patients Electronic Access to Their Health Information (formerly Patient Electronic Access)

Medicare Promoting Interoperability Program

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category

System Under Test

The health IT developer records and creates five reports, one for each ONC Test Data Scenario(s). Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification. The act of giving a patient timely online access to his or her health information will populate the numerator if:

Medicare Promoting Interoperability Program: Patient health information must be made available to the patient within 36 hours of its availability to the eligible hospital or CAH.

Promoting Interoperability performance category: Patient health information is made available to the patient within four business days of its availability to the EC.

Test Data

- Health IT Modules that are certified to § 170.315 (e)(1), (g)(9) or (g)(10) must use test data in tab RT 2a Provider Patient Exchange (EH/CAH and EP/EC).
- Health IT Modules that are certified to § 170.315 (e)(1) only must use test data in tab RT 2b Provider Patient Exchange (EH/CAH and EP/EC).
- Health IT Modules that are certified to § 170.315 (g)(9) or (g)(10) must use test data in tab RT 2c Provider Patient Exchange (EH/CAH and EP/EC) and will only be tested for the Medicare Promoting Interoperability Program and Promoting Interoperability performance category measures.

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure:

> Medicare EH/CAH: For at least one unique patient discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23): (1) The patient (or the patient-authorized representative) is provided timely access to view online, download, and transmit his or her health information; and (2) The eligible hospital or CAH ensures the patient's health information is available for the patient (or patient-authorized representative) to access using any application of their choice that is configured to meet the technical specifications of the API in the eligible hospital or CAH's CEHRT.

Medicare Promoting Interoperability Program English Statements:

- Numerator: The number of patients in the denominator (or patient-authorized representative) who are provided timely access to health information to view online, download, and transmit to a third party and to access using an application of their choice that is configured meet the technical specifications of the API in the hospital or CAH's CEHRT.
- Denominator: The number of unique patients discharged from an eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period.

Medicare Promoting Interoperability Program Measure Elements:

- Numerator:
  - Date and time information made available online to patient;
  - Date and time of discharge;
  - Date and time information made available to an API.
- Denominator: Number of patients discharged from the EH or CAH.

EC Measure Description

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category Measure:

> EC: For at least one unique patient seen by the MIPS EC (1) the patient (or the patient authorized representative) is provided timely access to view online, download, and transmit his or her health information; and (2) the MIPS EC ensures the patient's health information is available for the patient (or patient-authorized representative) to access using any application of his or her choice that is configured to meet the technical specifications of the API in the MIPS EC's CEHRT.

MIPS Promoting Interoperability Performance Category English Statements:

- Numerator: The number of patients in the denominator (or patient authorized representatives) who are provided timely access to health information to view online, download, and transmit to a third party and to access using an application of their choice that is configured to meet the technical specifications of the API in the MIPS EC's certified EHR technology.
- Denominator: The number of unique patients seen by the MIPS EC during the performance period.

MIPS Promoting Interoperability Performance Category Measure Elements:

- Numerator:
  - Date and time information available to the EC;
  - Date and time information made available online to patient;
  - Date and time information made available to an API.
- Denominator: Number of patients seen by the EC.

Test Lab Verification

The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 2a, 2b, or 2c and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5. The tester verifies that all of the required information below is made available to patients.

1. USCDI (which should be in their English representation)
2. Provider's name and office contact information (ambulatory setting only)
3. Admission and discharge dates and locations; discharge instructions; and reason(s) for hospitalization (inpatient setting only)
4. Laboratory test report(s)
5. Diagnostic image report(s)

System Under Test	**Test Lab Verification**
The health IT developer records and creates five reports, one for each ONC Test Data Scenario(s). Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification. The act of giving a patient timely online access to his or her health information will populate the numerator if:	The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 2a, 2b, or 2c and use ONC Test Data

System Under Test

Medicare Promoting Interoperability Program: Patient health information must be made available to the patient within 36 hours of its availability to the eligible hospital or CAH.

Promoting Interoperability performance category: Patient health information is made available to the patient within four business days of its availability to the EC.

Test Data

- Health IT Modules that are certified to § 170.315 (e)(1), (g)(9) or (g)(10) must use test data in tab RT 2a Provider Patient Exchange (EH/CAH and EP/EC).
- Health IT Modules that are certified to § 170.315 (e)(1) only must use test data in tab RT 2b Provider Patient Exchange (EH/CAH and EP/EC).
- Health IT Modules that are certified to § 170.315 (g)(9) or (g)(10) must use test data in tab RT 2c Provider Patient Exchange (EH/CAH and EP/EC) and will only be tested for the Medicare Promoting Interoperability Program and Promoting Interoperability performance category measures.

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure:

Test Lab Verification

Scenario(s) 1, 2, 3, 4, and 5. The tester verifies that all of the required information below is made available to patients.

1. USCDI (which should be in their English representation)
2. Provider's name and office contact information (ambulatory setting only)
3. Admission and discharge dates and locations; discharge instructions; and reason(s) for hospitalization (inpatient setting only)
4. Laboratory test report(s)
5. Diagnostic image report(s)

System Under Test	Test Lab Verification
Medicare EH/CAH: For at least one unique patient discharged from the eligible hospital or CAH inpatient or emergency department (POS 21 or 23): (1) The patient (or the patient-authorized representative) is provided timely access to view online, download, and transmit his or her health information; and (2) The eligible hospital or CAH ensures the patient's health information is available for the patient (or patient-authorized representative) to access using any application of their choice that is configured to meet the technical specifications of the API in the eligible hospital or CAH's CEHRT. *Medicare Promoting Interoperability Program English Statements:* • Numerator: The number of patients in the denominator (or patient-authorized representative) who are provided timely access to health information to view online, download, and transmit to a third party and to access using an application of their choice that is configured meet the technical specifications of the API in the hospital or CAH's CEHRT. • Denominator: The number of unique patients discharged from an eligible hospital or CAH inpatient or emergency department (POS 21 or 23) during the EHR reporting period. *Medicare Promoting Interoperability Program Measure Elements:* • Numerator: ◦ Date and time information made available online to patient; ◦ Date and time of discharge; ◦ Date and time information made available to an API. • Denominator: Number of patients discharged from the EH or CAH.	

EC Measure Description

System Under Test	Test Lab Verification

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category Measure:
 	
EC: For at least one unique patient seen by the MIPS EC (1) the patient (or the patient authorized representative) is provided timely access to view online, download, and transmit his or her health information; and (2) the MIPS EC ensures the patient's health information is available for the patient (or patient-authorized representative) to access using any application of his or her choice that is configured to meet the technical specifications of the API in the MIPS EC's CEHRT.
 	
MIPS Promoting Interoperability Performance Category English Statements:
 	
• Numerator: The number of patients in the denominator (or patient authorized representatives) who are provided timely access to health information to view online, download, and transmit to a third party and to access using an application of their choice that is configured to meet the technical specifications of the API in the MIPS EC's certified EHR technology.
• Denominator: The number of unique patients seen by the MIPS EC during the performance period.
 	
MIPS Promoting Interoperability Performance Category Measure Elements:
 	
• Numerator:
  ◦ Date and time information available to the EC;
  ◦ Date and time information made available online to patient;
  ◦ Date and time information made available to an API.
• Denominator: Number of patients seen by the EC.	

Required Test 7 – Support Electronic Referral Loops by Sending Health Information (formerly Transitions of Care)

Medicare Promoting Interoperability Program

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category

System Under Test

For the periods up to the 2023 reporting period/2026 payment year:

The health IT developer records and creates five reports, one for each scenario. Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification. The Health IT Module will populate the numerator when a provider creates and transmits/exchanges a summary of care record, and confirms receipt of the transmitted/exchanged summary of care record, no earlier than the first day of the calendar year of the reporting/performance period (for a 90-day reporting/performance period only), during the reporting/performance period (for a 90-day and full calendar year reporting/performance period), or no later than the end of the calendar year (for a 90-day reporting/performance period only).

For the periods beginning with the 2024 reporting period/2026 payment year:

The Health IT Module will populate the numerator when a provider creates and transmits/exchanges a summary of care record, and confirms receipt of the transmitted/exchanged summary of care record, no earlier than the first day of the calendar year of the reporting/performance period (for a 180-day reporting/performance period), during the reporting/performance period (for a 180-day and full calendar year reporting/performance period), or no later than the end of the calendar year (for a 180-day reporting/performance period).

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure:

> Medicare EH/CAH: For at least one transition of care or referral the eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care: (1) creates a summary of care record using CEHRT; and (2) electronically exchanges the summary of care record.

Medicare Promoting Interoperability Program Measure English Statements:

Inpatient:

- Numerator: The number of transitions of care and referrals in the denominator where a summary of care record was created using CEHRT and exchanged electronically.
- Denominator: Number of transitions of care and referrals during the EHR reporting period for which the EP or EH or CAH inpatient or emergency department (POS 21 or 23) was the transferring or referring provider.

Medicare Promoting Interoperability Program Measure Elements:

Inpatient:

- Numerator:
  - Summary of care record created and exchanged;
  - Summary of care record receipt confirmed.
- Denominator: Number of transitions of care for which the EP, EH, or CAH was the transferring or referring provider.

EC Measure Description

MIPS Promoting Interoperability Performance Category Measure:

For at least one transition of care or referral, the MIPS EC that transitions or refers their patient to another setting of care or health care provider: (1) creates a summary of care record using certified EHR technology; and (2) electronically exchanges the summary of care record.

MIPS Promoting Interoperability Performance Category Measure English Statements:

- Numerator: The number of transitions of care and referrals in the denominator where a summary of care record was created using certified EHR technology and exchanged electronically.
- Denominator: Number of transitions of care and referrals during the performance period for which the MIPS EC was the transferring or referring clinician.

MIPS Promoting Interoperability Performance Category Measure Elements:

- Numerator:
  - Summary of care record created and exchanged;
  - Summary of care record receipt confirmed.
- Denominator: Number of transitions of care and referrals for which the EP, EH, or CAH was the transferring of referring provider.

Test Lab Verification

The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 7 and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5.

The tester shall verify that at a minimum, the following fields (listed below) in the summary of care record contain all of the information (or an indication of none) prior to numerator population. If a summary of care record does not contain all of the information (or an indication of none), the numerator should not be populated for both ambulatory & inpatient settings:

1. Current problem list;
2. Current medication list;
3. Current medication allergy list.

System Under Test

For the periods up to the 2023 reporting period/2026 payment year:

The health IT developer records and creates five reports, one for each scenario. Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification. The Health IT Module will populate the numerator when a provider creates and transmits/exchanges a summary of care record, and confirms receipt of the transmitted/exchanged summary of care record, no earlier than the first day of the calendar year of the reporting/performance period (for a 90-day reporting/performance period only), during the reporting/performance period (for a 90-day and full calendar year reporting/performance period), or no later than the end of the calendar year (for a 90-day reporting/performance period only).

For the periods beginning with the 2024 reporting period/2026 payment year:

The Health IT Module will populate the numerator when a provider creates and transmits/exchanges a summary of care record, and confirms receipt of the transmitted/exchanged summary of care record, no earlier than the first day of the calendar year of the reporting/performance period (for a 180-day reporting/performance period), during the

Test Lab Verification

The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 7 and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5.

The tester shall verify that at a minimum, the following fields (listed below) in the summary of care record contain all of the information (or an indication of none) prior to numerator population. If a summary of care record does not contain all of the information (or an indication of none), the numerator should not be populated for both ambulatory & inpatient settings:

System Under Test

reporting/performance period (for a 180-day and full calendar year reporting/performance period), or no later than the end of the calendar year (for a 180-day reporting/performance period).

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure:

> Medicare EH/CAH: For at least one transition of care or referral the eligible hospital or CAH that transitions or refers their patient to another setting of care or provider of care: (1) creates a summary of care record using CEHRT; and (2) electronically exchanges the summary of care record.

Medicare Promoting Interoperability Program Measure English Statements:

Inpatient:

- Numerator: The number of transitions of care and referrals in the denominator where a summary of care record was created using CEHRT and exchanged electronically.
- Denominator: Number of transitions of care and referrals during the EHR reporting period for which the EP or EH or CAH inpatient or emergency department (POS 21 or 23) was the transferring or referring provider.

Medicare Promoting Interoperability Program Measure Elements:

Inpatient:

- Numerator:
  - Summary of care record created and exchanged;
  - Summary of care record receipt confirmed.
- Denominator: Number of transitions of care for which the EP, EH, or CAH was the transferring or referring provider.

EC Measure Description

MIPS Promoting Interoperability Performance Category Measure:

Test Lab Verification

1. Current problem list;
2. Current medication list;
3. Current medication allergy list.

System Under Test	Test Lab Verification

For at least one transition of care or referral, the MIPS EC that transitions or refers their patient to another setting of care or health care provider: (1) creates a summary of care record using certified EHR technology; and (2) electronically exchanges the summary of care record.
 	
MIPS Promoting Interoperability Performance Category Measure English Statements:
 	
• Numerator: The number of transitions of care and referrals in the denominator where a summary of care record was created using certified EHR technology and exchanged electronically.
• Denominator: Number of transitions of care and referrals during the performance period for which the MIPS EC was the transferring or referring clinician.
 	
MIPS Promoting Interoperability Performance Category Measure Elements:
 	
• Numerator:
  ◦ Summary of care record created and exchanged;
  ◦ Summary of care record receipt confirmed.
• Denominator: Number of transitions of care and referrals for which the EP, EH, or CAH was the transferring of referring provider.	

Required Test 15 – Support Electronic Referral Loops by Receiving and Incorporating Health Information

Medicare Promoting Interoperability Program

MIPS Promoting Interoperability Performance Category

System Under Test

The health IT developer records and creates five reports, one for each scenario. Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification.

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure (Starting in 2019):

> Medicare EH/CAH: For at least one electronic summary of care record received for patient encounters during the EHR reporting period for which an EH or CAH was the receiving party of a transition of care or referral, or for patient encounters during the EHR reporting period in which the EH or CAH has never before encountered the patient, the EH or CAH conducts clinical information reconciliation for medication, mediation allergy, and current problem list.

Medicare Promoting Interoperability Program Measure English Statements (Starting in 2019):

- Numerator: The number of electronic summary of care records in the denominator for which clinical information reconciliation is completed using CEHRT for the following three clinical information sets: (1) Medication – Review of the patient's medication, including the name, dosage, frequency, and route of each medication; (2) Medication Allergy – Review of the patient's known medication allergies; and (3) Current Problem List – Review of the patient's current and active diagnoses.
- Denominator: Number of electronic summary of care records received using CEHRT for patient encounters during the EHR reporting period for which an EH or CAH was the receiving party of a transition of care or referral, and for patient encounters during the EHR reporting period in which the EH or CAH has never before encountered the patient.

Medicare Promoting Interoperability Program Measure Elements (Starting in 2019):

- Numerator:
  > The number of electronic summary of care records with an indication that clinical reconciliation of medications, medications allergy, and current problem list occurred.
- Denominator:
  - Number of electronic care summary records received where the EH or CAH was the receiving party of a transition or referral; and
  - Number of electronic care summary records received where the EH or CAH has never before encountered the patient.

EC Measure Description

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category Measures (starting in 2019):

For at least one electronic summary of care record received for patient encounters during the performance period for which a MIPS eligible clinician was the receiving party of a transition of care or referral, or for patient encounters during the performance period in which the MIPS EC has never before encountered the patient, the MIPS EC conducts clinical information reconciliation for medication, medication allergy, and current problem list.

MIPS Promoting Interoperability Performance Category Measures English Statement (starting in 2019):

- Numerator: The number of electronic summary of care records in the denominator for which clinical information reconciliation is completed using CEHRT for the following three clinical information sets: (1) Medication – Review of the patient's medication, including the name, dosage, frequency, and route of each medication; (2) Medication Allergy – Review of the patient's known medication allergies; and (3) Current Problem List – Review of the patient's current and active diagnoses.
- Denominator: Number of electronic summary of care records received using CEHRT for patient encounters during the performance period for which a MIPS EC was the receiving party of a transition of care or referral, and for patient encounters during the performance period in which the MIPS EC has never before encountered the patient.

MIPS Promoting Interoperability Performance Category Measure Elements (Starting in 2019):

- Numerator:
  The number of electronic summary of care records with an indication that clinical reconciliation of medications, medication allergy, and current problem list occurred.
- Denominator:
  - Number of electronic care summary records received where the EC was the receiving party of a transition or referral; and
  - Number of electronic care summary records received where the EC has never before encountered the patient.

Test Lab Verification

The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 15 and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5.

System Under Test

The health IT developer records and creates five reports, one for each scenario. Note that the health IT developer may create each report for a single required test or it may create one report for all of the required tests for which it is seeking certification.

EH/CAH Measure Description

Medicare Promoting Interoperability Program Measure (Starting in 2019):

> Medicare EH/CAH: For at least one electronic summary of care record received for patient encounters during the EHR reporting period for which an EH or CAH was the receiving party of a transition of care or referral, or for patient encounters during the EHR reporting period in which the EH or CAH has never before encountered the patient, the EH or CAH conducts clinical information reconciliation for medication, mediation allergy, and current problem list.

Medicare Promoting Interoperability Program Measure English Statements (Starting in 2019):

- Numerator: The number of electronic summary of care records in the denominator for which clinical information reconciliation is completed using CEHRT for the following three clinical information sets: (1) Medication – Review of the patient's medication, including the name, dosage, frequency, and route of each medication; (2) Medication Allergy – Review of the patient's known medication allergies; and (3) Current Problem List – Review of the patient's current and active diagnoses.

Test Lab Verification

The tester verifies that each report, including the numerator, denominator, and resulting percentages, are created correctly and without omission and include sufficient detail to match the patients or actions in the numerator report to the measure's denominator limitations. The tester ensures that the correct patients are included in the numerator and denominator. The tester will use the information provided in required Test 15 and use ONC Test Data Scenario(s) 1, 2, 3, 4, and 5.

System Under Test

- Denominator: Number of electronic summary of care records received using CEHRT for patient encounters during the EHR reporting period for which an EH or CAH was the receiving party of a transition of care or referral, and for patient encounters during the EHR reporting period in which the EH or CAH has never before encountered the patient.

Medicare Promoting Interoperability Program Measure Elements (Starting in 2019):

- Numerator:
  The number of electronic summary of care records with an indication that clinical reconciliation of medications, medications allergy, and current problem list occurred.
- Denominator:
  - Number of electronic care summary records received where the EH or CAH was the receiving party of a transition or referral; and
  - Number of electronic care summary records received where the EH or CAH has never before encountered the patient.

Test Lab Verification

EC Measure Description

Merit-based Incentive Payment System (MIPS) Promoting Interoperability Performance Category Measures (starting in 2019):

System Under Test	Test Lab Verification
For at least one electronic summary of care record received for patient encounters during the performance period for which a MIPS eligible clinician was the receiving party of a transition of care or referral, or for patient encounters during the performance period in which the MIPS EC has never before encountered the patient, the MIPS EC conducts clinical information reconciliation for medication, medication allergy, and current problem list. *MIPS Promoting Interoperability Performance Category Measures English Statement (starting in 2019):* • Numerator: The number of electronic summary of care records in the denominator for which clinical information reconciliation is completed using CEHRT for the following three clinical information sets: (1) Medication – Review of the patient's medication, including the name, dosage, frequency, and route of each medication; (2) Medication Allergy – Review of the patient's known medication allergies; and (3) Current Problem List – Review of the patient's current and active diagnoses. • Denominator: Number of electronic summary of care records received using CEHRT for patient encounters during the performance period for which a MIPS EC was the receiving party of a transition of care or referral, and for patient encounters during the performance period in which the MIPS EC has never before encountered the patient. *MIPS Promoting Interoperability Performance Category Measure Elements (Starting in 2019):*	

System Under Test	Test Lab Verification
• Numerator: The number of electronic summary of care records with an indication that clinical reconciliation of medications, medication allergy, and current problem list occurred. • Denominator: ◦ Number of electronic care summary records received where the EC was the receiving party of a transition or referral; and ◦ Number of electronic care summary records received where the EC has never before encountered the patient.	

Updated on 03-11-2024

Regulation Text

Regulation Text

§ 170.315 (g)(2) *Automated measure calculation—*

For each Promoting Interoperability Programs percentage-based measure that is supported by a capability included in a technology, record the numerator and denominator and create a report including the numerator, denominator, and resulting percentage associated with each applicable measure.

Standard(s) Referenced

None

Certification Dependencies

Design and Performance: This certification criterion was adopted at § 170.315(g)(2). Quality management system (§ 170.315(g)(4)) and accessibility-centered design (§ 170.315(g)(5)) need to be certified as part of the overall scope of the certificate issued to the product.

- Quality management system (§ 170.315(g)(4)): When a single quality management system (QMS) is used, the QMS only needs to be identified once. Otherwise, the QMS' need to be identified for every capability to which it was applied.
- Accessibility-centered design (§ 170.315(g)(5)): When a single accessibility-centered design standard is used, the standard only needs to be identified once. Otherwise, the accessibility-centered design standards need to be identified for every capability to which they were applied; or, alternatively, the developer must state that no accessibility-centered design was used.

Measure-Specific Guidance from CMS

Revision History

Version #	Description of Change	Version Date
1.0	Initial publication	03-11-2024
1.1	Updates made to test steps to align with test data scenarios and current CMS requirements.	06-11-2024

Regulation Text

Regulation Text

§ 170.315 (g)(2) *Automated measure calculation—*

For each Promoting Interoperability Programs percentage-based measure that is supported by a capability included in a technology, record the numerator and denominator and create a report including the numerator, denominator, and resulting percentage associated with each applicable measure.

Standard(s) Referenced

None

Certification Dependencies

Design and Performance: This certification criterion was adopted at § 170.315(g)(2). Quality management system (§ 170.315(g)(4)) and accessibility-centered design (§ 170.315(g)(5)) need to be certified as part of the overall scope of the certificate issued to the product.

- Quality management system (§ 170.315(g)(4)): When a single quality management system (QMS) is used, the QMS only needs to be identified once. Otherwise, the QMS' need to be identified for every capability to which it was applied.

- Accessibility-centered design (§ 170.315(g)(5)): When a single accessibility-centered design standard is used, the standard only needs to be identified once. Otherwise, the accessibility-centered design standards need to be identified for every capability to which they were applied; or, alternatively, the developer must state that no accessibility-centered design was used.

Measure-Specific Guidance from CMS

Revision History

Version #	Description of Change	Version Date
1.0	Initial publication	03-11-2024

Testing
Testing Tool

Testing Components

Criterion Subparagraph	Test Data
Test Data Set 1 – EH/CAH	§ 170.315(g)(2) Test Data Set 1 – EH/CAH, last updated on 1/3/2022
Test Data Set 2 – EP/EC	§ 170.315(g)(2) Test Data Set 2 – EP/EC, last updated on 1/3/2022

Certification Companion Guide: Automated measure calculation

This Certification Companion Guide (CCG) is an informative document designed to assist with health IT product certification. The CCG is not a substitute for the requirements outlined in regulation and related ONC final rules. It extracts key portions of ONC final rules' preambles and includes subsequent clarifying interpretations. To access the full context of regulatory intent please consult the Certification Regulations page for links to all ONC final rules or consult other regulatory references as noted. The CCG is for public use and should not be sold or redistributed.

The below table outlines whether this criterion has additional Maintenance of Certification dependencies, update requirements and/or eligibility for standards updates via SVAP. Review the Certification Dependencies and Required Update Deadline drop-downs above if this table indicates "yes" for any field.

Base EHR Definition	Real World Testing	Insights Condition	SVAP	Requires Updates
Not Included	No	No	No	No

Certification Requirements

Technical Explanations and Clarifications

Applies to entire criterion

Technical outcome – A user can create a report that includes the numerator, denominator, and resulting percentage for each applicable percentage-based Promoting Interoperability Programs measure supported.

Clarifications:

- There is no standard required for this certification criterion.
- ONC administers the ONC Health IT Certification Program; CMS administers the Promoting Interoperability and Quality Payment Programs. Questions regarding requirements for the Promoting Interoperability and Quality Payment Programs should be directed to CMS.
- Please refer to CMS' Promoting Interoperability Programs webpage and Quality Payment Program webpage for more resources on specific measures.
- The test for (g)(2) does not require a live demonstration of recording data and generating reports. Developers may self-test their Health IT Modules(s) and submit the resulting reports to the ONC-ATL to verify compliance with the criterion. The test procedure specifies what reports must be submitted for each required test, as well as what the tester must verify within each report.
- Health IT Modules are required to de-duplicate test patients when aggregating together data for the Eligible Clinician Group calculation method.
- Health IT Modules that are testing for the MIPS Promoting Interoperability performance category calculation method must test for both the Eligible Clinician Individual and Eligible Clinician Group calculation methods.
- Health IT Modules that are testing for the Eligible Clinician Individual and Eligible Clinician Group calculation methods are required to be able to record an Eligible Clinician's TIN. Further, they are also required to be able to associate a single NPI with multiple TINs within a single instance, database, etc. of the Health IT Module. Health IT Modules that are testing for the Individual Eligible Provider calculation method only are not required to record TIN or be able to associate a single NPI to multiple TINs.

- For the Eligible Clinician Individual and Eligible Clinician Group calculation methods, actions that accrue to the numerator have a transitive effect across all of the TINs that an individual NPI is included in. For example, if an Eligible Clinician provides patient education materials to a patient under TIN A, they will receive credit in the numerator for TIN B as long as the same NPI is used in both TINs and the same Health IT Module (i.e. same database, instance, etc.) is used. The test data reflects this transitive effect.
- The capability for technology to populate the numerator before, during, and after the reporting/performance period depends on the numerator and denominator statements for the Promoting Interoperability measure. Developers should refer to the numerator and denominator statements in the measure specification sheets provided by CMS' Promoting Interoperability Programs webpage to determine the reporting/performance period technology needs to support. Regardless of whether an action must occur during the reporting/performance period or can occur outside of the reporting/performance period, all actions must occur during the calendar year of the reporting/performance period.
    - Starting in 2019, CMS has clarified that the numerator for the Medicare Promoting Interoperability Program Eligible Hospital/Critical Access Hospital measures is constrained to the EHR reporting period. The numerator action therefore must take place during the reporting period. Actions occurring outside of the reporting period, including after the calendar year will not count in the numerator.
    - Starting in 2019, a MIPS Promoting Interoperability performance category measure numerator and denominator is constrained to the performance period chosen, with the exception of the "Security Risk Analysis" measure, which may occur any time during the calendar year.
- It is possible for the action of "record" in this certification criterion to be implemented in different ways. For example, "record" could comprise the ability of a centralized analytics Health IT Module to accept or retrieve raw data from another Health IT Module(s). Other possible methods could include a Health IT Module that accepts or retrieves raw data, analyzes the data, and then generates a report based on the analysis; a Health IT Module that separately tracks each capability with a percentage-based Promoting Interoperability measure and later aggregates the numbers and generates a report; or an integrated bundle of Health IT Modules in which each of the Health IT Modules that is part of the bundle categorizes relevant data, identifies the numerator and denominator and calculates, when requested, the percentage associated with the applicable Promoting Interoperability Programs measure. In each of these examples, the action of "record" means to obtain the information necessary to generate the relevant numerator and denominator.

- What is required for certification for this criterion depends on the type of flexibility identified by CMS.
    - In some cases, CMS identifies certain measurement flexibilities that are limited to "either/or" options. In these cases, technology presented for certification must be able to calculate the percentage based on both identified options.
    - In cases where CMS has identified measurement flexibilities that are open-ended and dependent on a unique decision by an Eligible Professional, Eligible Clinician, Eligible Hospital, or CAH at the practice/organization-level for a given EHR reporting period (e.g., excluding certain orders from the CPOE measure because they are protocol/standing orders), then the technology presented for certification is not required to support every possible method of calculation in order to meet this certification criterion. Rather, the technology must support at least one calculation method for a certification criterion, as long as the technology supports all distinct options for measurement (e.g., including controlled substances in the eRx measure or not). ONC strongly encourages technology developers to work with their clients and to incorporate as many of these practice/organization-level open-ended flexibilities in the technology as appropriate to make the Promoting Interoperability measures as relevant as possible to their clients' scopes of practice. [see also 77 FR 54244–54245]
- ONC also applies to this Automated measure calculation criterion the clarification and guidance included for certification to the Automated measure calculation criterion in the 2014 Edition Release 2 rulemaking [see also 79 FR 10920 and 54445].
    - A Health IT Module may be certified to only the ''Automated measure calculation'' certification criterion (§ 170.315(g)(2)) in situations where the Health IT Module does not include a capability that supports a Promoting Interoperability Program percentage-based measure but can meet the requirements of the ''Automated measure calculation'' certification criterion.
    - An example of this would be an ''analytics'' Health IT Module where data is fed from other health IT, and the Health IT Module can record the requisite numerators, denominators and create the necessary percentage report as specified in the ''Automated measure calculation'' certification criterion.
- The Support Electronic Referral Loops by Sending Health Information measure for the Medicare Promoting Interoperability Programs, and the MIPS Promoting Interoperability performance category require that the Eligible Professional/Eligible Clinician/Eligible Hospital/CAH confirm receipt of the summary of care by the referred to provider in order to increment the numerator. The test data tests this baseline requirement by requiring that a Health IT Module demonstrate confirmation of receipt before incrementing the numerator. ONC does not require a specific method Health IT Modules should use to confirm receipt. Health IT Modules could use a number of methods, including but not limited to, the Direct Message Disposition Notification, a check box, report verifications, etc.

- The test data used for this criterion is supplied by ONC and is organized into five test data scenarios, with a single set of 12 test cases. Health IT developers are required to use the ONC-supplied test data and may not modify the test case names.
- The Medicare Promoting Interoperability "Provide Patients Electronic Access to Their Health Information" measure requires that two conditions be met in order to increment/populate the numerator: patient data must be available to view, download, or transmit and it must be available to an API within 48 hours (Eligible Professional) or 36 hours (Eligible Hospital/CAH). The MIPS Promoting Interoperability performance category Provide Patients Electronic Access to Their Health Information measure requires that two conditions be met in order to increment/populate the numerator: patient data must be available to view, download, or transmit and it must be available to an API within four business days (Eligible Clinician). As such, Health IT Modules certified to only (e)(1) or certified to only (g)(9) or (g)(10) will be required to demonstrate that the product increments the denominator for the condition for which they are certified. For example, if the Test Case indicates that only view, download, or transmit was met, the numerator will increment for products certified to (e)(1) but will not increment for products certified to (g)(9) or (g)(10). Health IT Modules certified for (e)(1) and (g)(9) or (g)(10) will be expected to increment the numerator as the measure specifies. Health IT Modules certified to only (e)(1) or certified to only (g)(9) or (g)(10) will be required to provide documentation during testing that demonstrates how the Health IT Module performs the calculation for its “portion” of the measure as a condition of passing testing. This documentation must also be made available with the health IT developer’s transparency statement regarding costs and limitations. Documentation should enable Eligible Professionals, Eligible Clinicians, Eligible Hospitals, and Critical Access Hospitals to determine how to correctly add together the numerator and denominator from systems providing each of the capabilities.
- CMS has issued FAQ 22521 regarding the application of the transitive effect to certain MIPS Promoting Interoperability performance category measures. For the purposes of testing to this criterion, the test data is structured to differentiate actions between TIN/NPI combinations. However, Health IT Modules that are not able to differentiate actions between TIN/NPI combinations for the measures to which the transitive effect applies are not required to demonstrate this capability. ONC-ATLs may offer flexibility during testing regarding the transitive effect and focus on the outcome to ensure the correct numerator and denominator are calculated by the Health IT Module. At a minimum, developers of Health IT Modules unable to differentiate actions at the TIN/NPI level for those measures to which the transitive effect applies must provide sufficient documentation and explanation of alternate workflows to the ONC-ATL to demonstrate how actions taken by a provider relate to the numerator and denominator. Health IT developers must also provide documentation to providers on configuration and the logic for properly using the “Automated measure calculation” functionality, including details on how the developer has implemented the transitive effect policy.

- CMS has issued a series of FAQs that provide additional guidance on the new Medicare Promoting Interoperability Program measure for Eligible Hospitals in 2019: "Support Electronic Referral Loops by Receiving and Incorporating Health Information." The FAQs also apply in 2019 for the "Support Electronic Referral Loops by Receiving and Incorporating Health Information" measure in the MIPS Promoting Interoperability performance category.
- The Medicaid Promoting Interoperability Program ended January 2022, the required tests that only supported the Medicaid Promoting Interoperability Program were removed.

Technical outcome – A user can create a report that includes the numerator, denominator, and resulting percentage for each applicable percentage-based Promoting Interoperability Programs measure supported.

Clarifications:

- There is no standard required for this certification criterion.
- ONC administers the ONC Health IT Certification Program; CMS administers the Promoting Interoperability and Quality Payment Programs. Questions regarding requirements for the Promoting Interoperability and Quality Payment Programs should be directed to CMS.
- Please refer to CMS' Promoting Interoperability Programs webpage and Quality Payment Program webpage for more resources on specific measures.
- The test for (g)(2) does not require a live demonstration of recording data and generating reports. Developers may self-test their Health IT Modules(s) and submit the resulting reports to the ONC-ATL to verify compliance with the criterion. The test procedure specifies what reports must be submitted for each required test, as well as what the tester must verify within each report.
- Health IT Modules are required to de-duplicate test patients when aggregating together data for the Eligible Clinician Group calculation method.
- Health IT Modules that are testing for the MIPS Promoting Interoperability performance category calculation method must test for both the Eligible Clinician Individual and Eligible Clinician Group calculation methods.
- Health IT Modules that are testing for the Eligible Clinician Individual and Eligible Clinician Group calculation methods are required to be able to record an Eligible Clinician's TIN. Further, they are also required to be able to associate a single NPI with multiple TINs within a single instance, database, etc. of the Health IT Module. Health IT Modules that are testing for the Individual Eligible Provider calculation method only are not required to record TIN or be able to associate a single NPI to multiple TINs.
- For the Eligible Clinician Individual and Eligible Clinician Group calculation methods, actions that accrue to the numerator have a transitive effect across all of the TINs that an individual NPI is included in. For example, if an Eligible Clinician provides patient education materials to a patient under TIN A, they will receive credit in the numerator for TIN B as long as the same NPI is used in both TINs and the same Health IT Module (i.e. same database, instance, etc.) is used. The test data reflects this transitive effect.

- The capability for technology to populate the numerator before, during, and after the reporting/performance period depends on the numerator and denominator statements for the Promoting Interoperability measure. Developers should refer to the numerator and denominator statements in the measure specification sheets provided by CMS' Promoting Interoperability Programs webpage to determine the reporting/performance period technology needs to support. Regardless of whether an action must occur during the reporting/performance period or can occur outside of the reporting/performance period, all actions must occur during the calendar year of the reporting/performance period.
    - Starting in 2019, CMS has clarified that the numerator for the Medicare Promoting Interoperability Program Eligible Hospital/Critical Access Hospital measures is constrained to the EHR reporting period. The numerator action therefore must take place during the reporting period. Actions occurring outside of the reporting period, including after the calendar year will not count in the numerator.
    - Starting in 2019, a MIPS Promoting Interoperability performance category measure numerator and denominator is constrained to the performance period chosen, with the exception of the "Security Risk Analysis" measure, which may occur any time during the calendar year.
- It is possible for the action of "record" in this certification criterion to be implemented in different ways. For example, "record" could comprise the ability of a centralized analytics Health IT Module to accept or retrieve raw data from another Health IT Module(s). Other possible methods could include a Health IT Module that accepts or retrieves raw data, analyzes the data, and then generates a report based on the analysis; a Health IT Module that separately tracks each capability with a percentage-based Promoting Interoperability measure and later aggregates the numbers and generates a report; or an integrated bundle of Health IT Modules in which each of the Health IT Modules that is part of the bundle categorizes relevant data, identifies the numerator and denominator and calculates, when requested, the percentage associated with the applicable Promoting Interoperability Programs measure. In each of these examples, the action of "record" means to obtain the information necessary to generate the relevant numerator and denominator.
- What is required for certification for this criterion depends on the type of flexibility identified by CMS.
    - In some cases, CMS identifies certain measurement flexibilities that are limited to "either/or" options. In these cases, technology presented for certification must be able to calculate the percentage based on both identified options.
    - In cases where CMS has identified measurement flexibilities that are open-ended and dependent on a unique decision by an Eligible Professional, Eligible Clinician, Eligible Hospital, or CAH at the practice/organization-level for a given EHR reporting period (e.g., excluding certain orders from the CPOE measure because they are protocol/standing orders), then the technology presented for certification is not required to support every possible method of calculation in order to meet this certification criterion. Rather, the technology must support at least one calculation method for a certification criterion, as long as the technology supports all distinct options for measurement (e.g., including controlled substances in the eRx measure or not). ONC strongly encourages technology developers to work with their clients and to incorporate as many of these practice/organization-level open-ended flexibilities in the technology as appropriate to make the Promoting Interoperability measures as relevant as possible to their clients' scopes of practice. [see also 77 FR 54244–54245]

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    - A Health IT Module may be certified to only the ‘‘Automated measure calculation’’ certification criterion (§ 170.315(g)(2)) in situations where the Health IT Module does not include a capability that supports a Promoting Interoperability Program percentage-based measure but can meet the requirements of the ‘‘Automated measure calculation’’ certification criterion.
    - An example of this would be an ‘‘analytics’’ Health IT Module where data is fed from other health IT, and the Health IT Module can record the requisite numerators, denominators and create the necessary percentage report as specified in the ‘‘Automated measure calculation’’ certification criterion.
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- CMS has issued FAQ 22521 regarding the application of the transitive effect to certain MIPS Promoting Interoperability performance category measures. For the purposes of testing to this criterion, the test data is structured to differentiate actions between TIN/NPI combinations. However, Health IT Modules that are not able to differentiate actions between TIN/NPI combinations for the measures to which the transitive effect applies are not required to demonstrate this capability. ONC-ATLs may offer flexibility during testing regarding the transitive effect and focus on the outcome to ensure the correct numerator and denominator are calculated by the Health IT Module. At a minimum, developers of Health IT Modules unable to differentiate actions at the TIN/NPI level for those measures to which the transitive effect applies must provide sufficient documentation and explanation of alternate workflows to the ONC-ATL to demonstrate how actions taken by a provider relate to the numerator and denominator. Health IT developers must also provide documentation to providers on configuration and the logic for properly using the “Automated measure calculation” functionality, including details on how the developer has implemented the transitive effect policy.
- CMS has issued a series of FAQs that provide additional guidance on the new Medicare Promoting Interoperability Program measure for Eligible Hospitals in 2019: "Support Electronic Referral Loops by Receiving and Incorporating Health Information." The FAQs also apply in 2019 for the "Support Electronic Referral Loops by Receiving and Incorporating Health Information" measure in the MIPS Promoting Interoperability performance category.
- The Medicaid Promoting Interoperability Program ended January 2022, the required tests that only supported the Medicaid Promoting Interoperability Program were removed.