

Measure #46 (NQF 0097): Medication Reconciliation Post-Discharge – National Quality Strategy
Domain: Communication and Care Coordination

2017 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Process

DESCRIPTION:

The percentage of discharges from any inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) for patients 18 years and older of age seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record.

This measure is reported as three rates stratified by age group:

- Reporting Criteria 1: 18-64 years of age
- Reporting Criteria 2: 65 years and older
- Total Rate: All patients 18 years of age and older

INSTRUCTIONS:

This measure is to be reported at an outpatient visit occurring within 30 days of each inpatient facility discharge date during the performance period. This measure is appropriate for use in the ambulatory setting only. There is no diagnosis associated with this measure. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. This measure is not to be reported unless a patient has been discharged from an inpatient facility within 30 days prior to the outpatient visit.

This measure will be calculated with 3 performance rates:

- 1) Performance Rate1: Percentage of discharges from any inpatient facility (e.g., hospital, skilled nursing facility, or rehabilitation facility) for patients 18-64 years of age seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record

AND

- 2) Performance Rate2: Percentage of discharges from any inpatient facility (e.g., hospital, skilled nursing facility, or rehabilitation facility) for patients 65 years and older seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record

AND

- 3) Total Rate (Overall Performance Rate): Percentage of discharges from any inpatient facility (e.g., hospital, skilled nursing facility, or rehabilitation facility) for patients 18 years and older seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record

Measure Reporting:

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:

All discharges from any inpatient facility (e.g., hospital, skilled nursing facility, or rehabilitation facility) for patients 18 years of age seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care.

DENOMINATOR NOTE: This denominator is based on discharges followed by an office visit, not patients. Patients may appear in the denominator more than once if there was more than one discharge followed by an office visit in the performance period.

Denominator Criteria (Eligible Cases):

REPORTING CRITERIA 1: Patients 18-64 years of age on date of encounter

REPORTING CRITERIA 2: Patients aged 65 years and older on date of encounter

REPORTING CRITERIA 3: All Patients 18 years of age and older

AND

Patient encounter during the **performance period** (CPT or HCPCS): 90791, 90792, 90832, 90834, 90837, 90839, 90845, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99495, 99496, G0402, G0438, G0439

AND

Patient discharged from an inpatient facility (e.g., hospital, skilled nursing facility, or rehabilitation facility) within the last 30 days

AND NOT

DENOMINATOR EXCLUSION:

Patient had hospice services any time during the measurement period: G9691

NUMERATOR (REPORTING CRITERIA 1 & 2 & 3):

Medication reconciliation conducted by a prescribing practitioner, clinical pharmacists or registered nurse on or within 30 days of discharge.

Definition:

Medication Reconciliation – A type of review in which the discharge medications are reconciled with the most recent medication list in the outpatient medical record. Documentation in the outpatient medical record must include evidence of medication reconciliation and the date on which it was performed. Any of the following evidence meets criteria: (1) Documentation of the current medications with a notation that references the discharge medications (e.g., no changes in meds since discharge, same meds at discharge, discontinue all discharge meds), (2) Documentation of the patient's current medications with a notation that the discharge medications were reviewed, (3) Documentation that the provider "reconciled the current and discharge meds," (4) Documentation of a current medication list, a discharge medication list and notation that the appropriate practitioner type reviewed both lists on the same date of service, (5) Notation that no medications were prescribed or ordered upon discharge

NUMERATOR NOTE: Medication reconciliation should be completed and documented on or within 30 days of discharge. If the patient has an eligible discharge but medication reconciliation is not performed and documented within 30 days, report 1111F with 8P.

Numerator Options:

Performance Met:

Discharge medications reconciled with the current medication list in outpatient medical record (1111F)

OR

Performance Not Met:

Discharge medications not reconciled with the current medication list in outpatient medical record, reason not otherwise specified (1111F *with* 8P)

RATIONALE:

Medications are often changed while a patient is hospitalized. Continuity between inpatient and on-going care is essential.

CLINICAL RECOMMENDATION STATEMENTS:

Medication reconciliation post-discharge is an important step to catch potentially harmful omissions or changes in prescribed medications, particularly in elderly patients that are prescribed a greater quantity and variety of medications (Leape, 1991). Although the magnitude of the effect of medication reconciliation alone on patient outcomes is not well studied, there is agreement among experts that potential benefits outweigh the harm (Coleman, 2003; Pronovost, 2003; IOM, 2002; IOM, 2006). Medication reconciliation post-discharge is recommended by the Joint Commission patient safety goals (Kienle, 2008), the American Geriatric Society (Coleman, 2003), Society of Hospital Medicine (Kripalani, 2007; Grennwald, 2010), ACOVE (Assessing Care of Vulnerable Elders; Knight, 2001), and the Task Force on Medicines Partnership (2005). Additionally, measurement of medication reconciliation post-discharge has been cited by the National Quality Forum and the National Priorities Partnership as a measurement priority area (NQF, 2010)

No trials of the effects of physician acknowledgment of medications post-discharge were found. However, patients are likely to have their medications changed during a hospitalization. Estimates suggest that 46% of medication errors occur on admission or discharge from a hospital (Pronovost, 2003). Therefore, medication reconciliation is a critical piece of care coordination post-discharge for all individuals who use prescription medications. Prescription medication use is common among adults of all ages, particularly older adults and adults with chronic conditions. On average, 82% of adults in the U.S. are taking at least one medication (prescription or nonprescription, vitamin/mineral, herbal/natural supplement); 29% are taking five or more. Older adults are the biggest consumers of medications with 17-19% of people 65 and older taking at least ten medications in a given week (Slone Survey, 2006).

One observational study showed that 1.5 new medications were initiated per patient during hospitalization, and 28% of chronic medications were canceled by the time of hospital discharge. Another observational study showed that at one week post-discharge, 72% of elderly patients were taking incorrectly at least one medication started in the inpatient setting, and 32% of medications were not being taken at all. One survey study faulted the quality of discharge communication as contributing to early hospital readmission, although this study did not implicate medication discontinuity as the cause. (ACOVE)

Implementing routine medication reconciliation after discharge from an inpatient facility is an important step to ensure medication errors are addressed and patients understand their new medications. The process of resolving discrepancies in a patient's medication list reduces the risk of these adverse drug interactions being overlooked and helps physicians minimize the duplication and complexity of the patient's medication regimen (Wenger, 2004). This in turn may increase patient adherence to the medication regimen and reduce hospital readmission rates.

First, a medication list must be collected. It is important to know what medications the patient has been taking or receiving prior to the outpatient visit in order to provide quality care. This applies regardless of the setting from which the patient came — home, long-term care, assisted living, etc. The medication list should include all medications (prescriptions, over-the-counter, herbals, supplements, etc.) with dose, frequency, route, and reason for taking it. It is also important to verify whether the patient is actually taking the medication as prescribed or instructed, as sometimes this is not the case.

At the end of the outpatient visit, a clinician needs to verify three questions:

- 1) Based on what occurred in the visit, should any medication that the patient was taking or receiving prior to the visit be discontinued or altered?
- 2) Based on what occurred in the visit, should any prior medication be suspended pending consultation with the prescriber?
- 3) Have any new prescriptions been added today?

These questions should be reviewed by the physician who completed the procedure, or the physician who evaluated and treated the patient.

- If the answer to *all three questions* is “no,” the process is complete.
- If the answer to *any question* is “yes,” the patient needs to receive clear instructions about what to do — all changes, holds, and discontinuations of medications should be specifically noted. Include any follow-up required, such as calling or making appointments with other practitioners and a timeframe for doing so
Institute for Healthcare Improvement (IHI)

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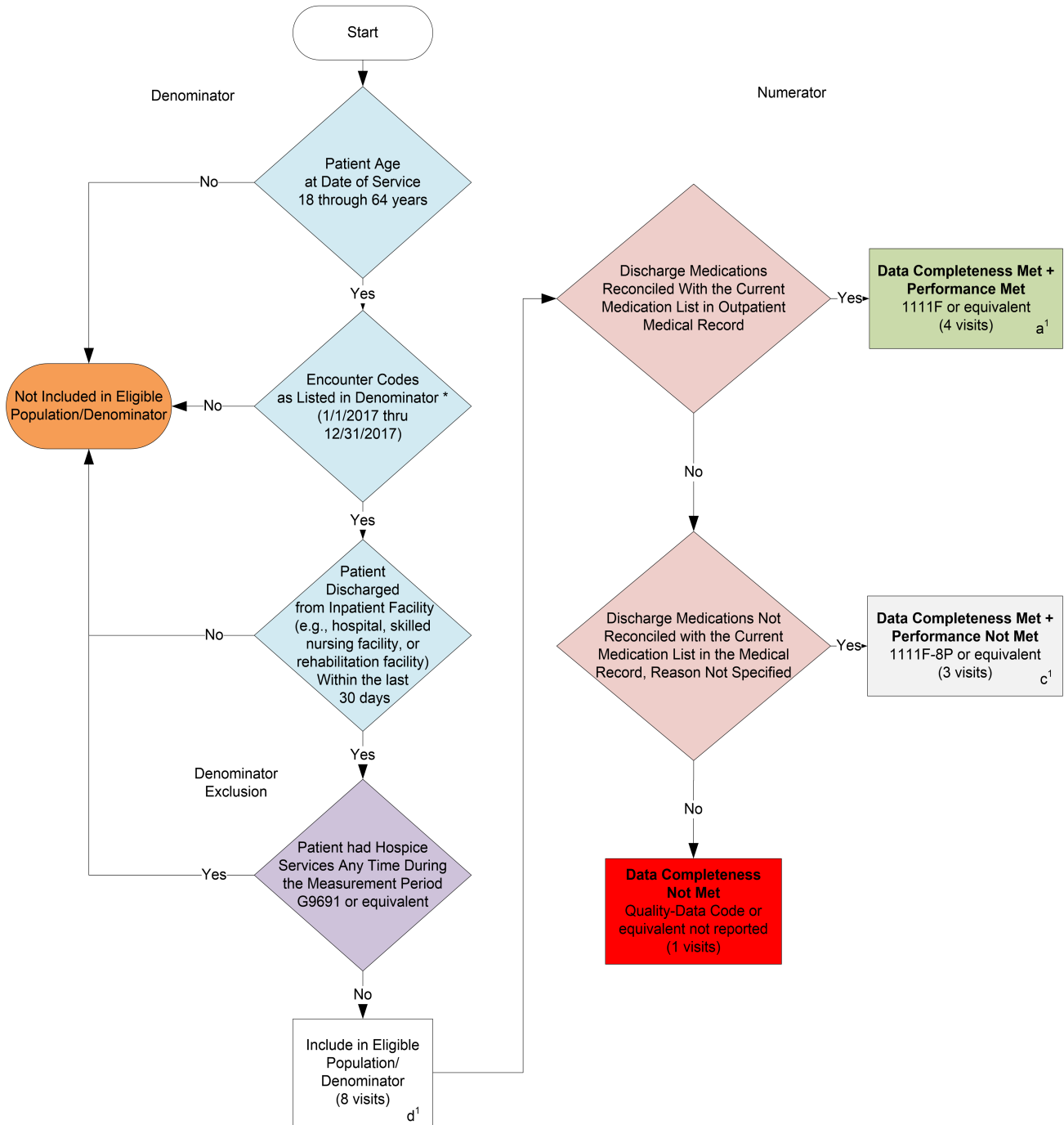
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2017 Registry Individual Measure Flow #46 NQF #0097: Medication Reconciliation Post-Discharge Reporting Criteria One

Multiple Performance



* See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Visit

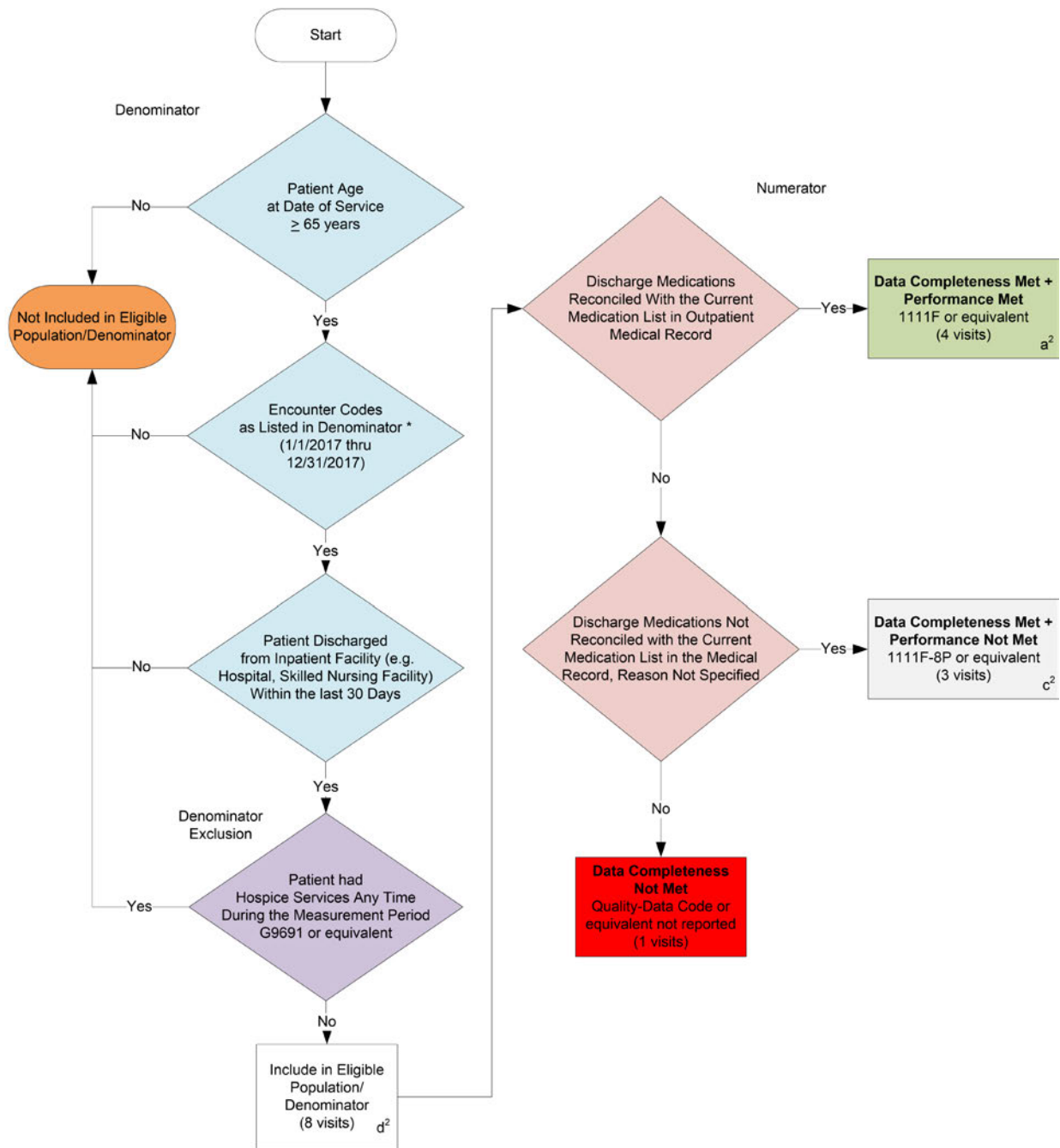
**It is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate

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**2017 Registry Individual Measure Flow
#46 NQF #0097: Medication Reconciliation Post-Discharge
Reporting Criteria Two**

Multiple Performance



* See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Visit

**It is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate

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**2017 Registry Individual Measure Flow
#46 NQF #0097: Medication Reconciliation Post-Discharge**

Multiple Performance

SAMPLE CALCULATIONS: Data Completeness and Performance One

Data Completeness=

$$\frac{\text{Performance Met (a}^1=4 \text{ visits)} + \text{Performance Not Met (c}^1=3 \text{ visits)}}{\text{Eligible Population / Denominator (d}^1=8 \text{ visits)}} = \frac{7 \text{ visits}}{8 \text{ visits}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^1=4 \text{ visits)}}{\text{Data Completeness Numerator (7 visits)}} = \frac{4 \text{ visits}}{7 \text{ visits}} = 57.14\%$$

SAMPLE CALCULATIONS: Data Completeness and Performance Rate Two

Data Completeness=

$$\frac{\text{Performance Met (a}^2=4 \text{ visits)} + \text{Performance Not Met (c}^2=3 \text{ visits)}}{\text{Eligible Population / Denominator (d}^2=8 \text{ visits)}} = \frac{7 \text{ visits}}{8 \text{ visits}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^2=4 \text{ visits)}}{\text{Data Completeness Numerator (7 visits)}} = \frac{4 \text{ visits}}{7 \text{ visits}} = 57.14\%$$

SAMPLE CALCULATIONS: Data Completeness and Performance Rate Three

Data Completeness=

$$\frac{\text{Performance Met (a}^1+a^2=8 \text{ visits)} + \text{Performance Not Met (c}^1+c^2=6 \text{ visits)}}{\text{Eligible Population / Denominator (d}^1+d^2=16 \text{ visits)}} = \frac{14 \text{ visits}}{16 \text{ visits}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^1+a^2=8 \text{ visits)}}{\text{Data Completeness Numerator (14 visits)}} = \frac{8 \text{ visits}}{14 \text{ visits}} = 57.14\%$$

* See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Visit

**It is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate

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2017 Registry Individual Measure Flow
#46 NQF #0097: Medication Reconciliation

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. This measure will be calculated with 2 Performance Rates.

Reporting Criteria 1

1. Start with Denominator
2. Check Patient Age:
 - a. If the Age is 18 through 64 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
 - b. If the Age is 18 through 64 years of age on Date of Service and equals Yes during the measurement period, proceed to check Encounter Performed.
3. Check Encounter Performed:
 - a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population, proceed to Check Patient Discharged from Inpatient Facility (eg Hospital skilled nursing facility) Within the last 30 Days.
4. Check Patient Discharged from Inpatient Facility (e.g. Hospital skilled nursing facility) Within the last 30 Days:
 - a. If Patient Discharged from Inpatient Facility (e.g. Hospital skilled nursing facility) Within the last 30 Days as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Patient Discharged from Inpatient Facility (e.g. Hospital skilled nursing facility) Within the Last 30 Days as Listed in the Denominator equals Yes, proceed to check Patient had Hospice Services Any Time During the Measurement Period.
5. Check Patient had Hospice Services Any Time During the Measurement Period:
 - a. If Patient had Hospice Services Any Time During the Measurement Period equals No, include in the Eligible population.
 - b. If Patient had Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
6. Denominator Population
 - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 visits in the sample calculation.
7. Start Numerator
8. Check Discharge Medication Reconciled With the Current Medication List in Outpatient Medical Record:

- a. If Discharge Medications Reconciled With the Current Medication List in Outpatient Medical Record equals Yes, include in Data Completeness Met and Performance Met.
 - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a1 equals 4 visits in Sample Calculation.
 - c. If Discharge Medications Reconciled With the Current Medication List in Outpatient Medical Record equals No, proceed to Discharge Medications Not Reconciled with Current Medication List in the Medical Record, Reason Not Specified.
9. Check Discharge Medications Not Reconciled with the Current Medication List in the Medical Record, Reason Not Specified:
- a. If Discharge Medications Not Reconciled with the Current Medication List in the Medical Record, Reason Not Specified equals Yes, include in Data Completeness Met and Performance Not Met.
 - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c2 equals 3 visits in the Sample Calculation.
 - c. If Discharge Medications Not Reconciled with the Current Medication List in the Medical Record, Reason Not Specified equals No, proceed to Data Completeness Not Met.
10. Check Data Completeness Not Met:
- a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 visit has been subtracted from the data completeness numerator in sample calculation.

2017 Registry Individual Measure Flow
PQRS #46 NQF #0097: Medication Reconciliation

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. This measure will be calculated with 2 Performance Rates.

Reporting Criteria 2

1. Start with Denominator
2. Check Patient Age:
 - a. If the Age is greater than or equal to 65 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
 - b. If the Age is greater than or equal to 65 years of age on Date of Service and equals Yes during the measurement period, proceed to check Encounter Performed.
3. Check Encounter Performed:
 - a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population, proceed to Check Patient Discharged from Inpatient Facility (eg Hospital skilled nursing facility) Within the last 30 Days.
4. Check Patient Discharged from Inpatient Facility (eg Hospital skilled nursing facility) Within the last 30 Days:
 - a. If Patient Discharged from Inpatient Facility (eg Hospital skilled nursing facility) Within the last 30 Days as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
 - b. If Patient Discharged from Inpatient Facility (eg Hospital skilled nursing facility) Within the Last 30 Days as Listed in the Denominator equals Yes, proceed to check Patient had Hospice Services Start Any Time During the Measurement Period.
5. Check Patient had Hospice Services Start Any Time During the Measurement Period:
 - a. If Patient had Hospice Services Start Any Time During the Measurement Period equals No, include in the Eligible population.
 - b. If Patient had Hospice Services Start Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
6. Denominator Population:
 - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 visits in the sample calculation.
7. Start Numerator
8. Check Discharge Medications Reconciled With Current Medication List in Outpatient Medical Record:

- a. If Discharge Medications Reconciled With Current Medication List in Outpatient Medical Record equals Yes, include in Data Completeness Met and Performance Met.
 - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a2 equals 4 visits in Sample Calculation.
 - c. If Discharge Medications Reconciled With Current Medication List in Outpatient Medical Record equals No, proceed to Discharge Medications Not Reconciled with Current Medication List in the Medical Record, Reason Not Specified.
9. Check Discharge Medications Not Reconciled with Current Medication List in the Medical Record, Reason Not Otherwise Specified:
- a. If Discharge Medications Not Reconciled with Current Medication List in the Medical Record, Reason Not Otherwise Specified equals Yes, include in Data Completeness Met and Performance Not Met.
 - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c3 equals 3 visits in the Sample Calculation.
 - c. If Discharge Medications Not Reconciled with Current Medication List in the Medical Record, Reason Not Otherwise Specified equals No, proceed to Data Completeness Not Met.
10. Check Data Completeness Not Met:
- a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 visit has been subtracted from the data completeness numerator in sample calculation.

SAMPLE CALCULATIONS: Data Completeness and Performance One

Data Completeness=

$$\frac{\text{Performance Met (a}^1\text{=4 visits) + Performance Not Met (c}^1\text{=3 visits)}}{\text{Eligible Population / Denominator (d}^1\text{=8 visits)}} = \frac{7 \text{ visits}}{8 \text{ visits}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^1\text{=4 visits)}}{\text{Data Completeness Numerator (7 visits)}} = \frac{4 \text{ visits}}{7 \text{ visits}} = 57.14\%$$

SAMPLE CALCULATIONS: Data Completeness and Performance Rate Two

Data Completeness=

$$\frac{\text{Performance Met (a}^2\text{=4 visits) + Performance Not Met (c}^2\text{=3 visits)}}{\text{Eligible Population / Denominator (d}^2\text{=8 visits)}} = \frac{7 \text{ visits}}{8 \text{ visits}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^2\text{=4 visits)}}{\text{Data Completeness Numerator (7 visits)}} = \frac{4 \text{ visits}}{7 \text{ visits}} = 57.14\%$$

SAMPLE CALCULATIONS: Data Completeness and Performance Rate Three

Data Completeness=

$$\frac{\text{Performance Met (a}^1\text{+a}^2\text{= 8 visits) + Performance Not Met (c}^1\text{+c}^2\text{=6 visits)}}{\text{Eligible Population / Denominator (d}^1\text{+d}^2\text{= 16 visits)}} = \frac{14 \text{ visits}}{16 \text{ visits}} = 87.50\%$$

Performance Rate=

$$\frac{\text{Performance Met (a}^1\text{+a}^2\text{=8 visits)}}{\text{Data Completeness Numerator (14 visits)}} = \frac{8 \text{ visits}}{14 \text{ visits}} = 57.14\%$$