Measure Information Form and Instructions

Project Title: Measuring Outcomes in Orthopedics Routinely (MOOR) – Risk-standardized major bleeding and venous thromboembolism (VTE) rate following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) electronic clinical quality measure (eCQM)

Date: 11/25/2020

Information included is current on 12/21/20.

Project Overview:

The Centers for Medicare & Medicaid Services (CMS) provided funding to the Brigham and Women's Hospital (BWH) to develop a set of electronic clinical quality measures (eCQMs) related to total joint arthroplasty (TJA). The cooperative agreement name is Measuring Outcomes in Orthopedics Routinely (MOOR) and the number is: 1V1CMS331637-01-00.

1. Measure Name/Title (NQF Submission Form De.2.)

Risk-standardized major bleeding and venous thromboembolism (VTE) rate following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA)

2. Descriptive Information

2.1 Measure Type (NQF Submission Form De.1.)

Identify a measure type from the list. Patient-reported outcomes (PROs) include health-related quality of life, functional status, symptom burden, experience with care, and health-related behavior.

☐process
☐process: appropriate use
☒outcome
☐outcome: PRO
☐cost / resource use
☐efficiency
☐structure
☐intermediate outcome
☒composite

2.2 Brief Description of Measure (NQF Submission Form De.3.)

This measure estimates the combined risk-standardized major bleeding and venous thromboembolism (VTE) rate following elective primary total hip arthroplasty (THA) and/or total knee arthroplasty (TKA) at the clinician group level for adults 18 years and older. The outcome(s) are defined as any major bleeding and/or VTE occurring from the date of THA/TKA procedure to 35 days postdate of procedure (or procedure encounter if the procedure is done on an outpatient basis). Because this is a MIPS measure, the target population include patients 18 across all payers.

2.3 If Paired or Grouped (NQF Submission Form De.4.)

This measure is not paired or grouped with any other measures.

3. Measure Specifications

These items follow the NQF requirements for measure submission and provide information required for measure evaluation.

3.1 Measure-Specific Webpage (NQF Submission Form S.1.)

Not applicable; this measure is under development.

3.2 If this is an electronic clinical quality measure (eCQM) (NQF Submission Form S.2a.):

The measure is under development using the eMeasure Authoring Tool (MAT). The Human Readable file and data dictionary is attached

3.3 Data Dictionary, Code Table, or Value Sets (NQF Submission Form S.2b.)

Data Dictionary – Excel File

- Contains List of all Value Sets used and their respective OIDs
- Contains all ICD10 and RxNorm codes for conditions, procedures, and medications for Numerator/Exclusion Criteria

3.4 For an instrument-based measure (NQF Submission Form S.2c and S2.d):

Not applicable; this measure is based on routinely collected electronic health record (EHR) data.

3.5 Updates since last submission (NQF Submission Form S.3.1 and S.3.2)

Not applicable; this measure is under development.

3.6 Numerator Statement (NQF Submission Form S.4.)

The outcome(s) for this measure is major bleeding and/or venous thromboembolism events occurring from the date of THA/TKA procedure to 35 days postdate of procedure. If the elective primary THA or TKA are done outpatient, the outcome(s) is any major bleeding and/or VTE events that occurred during the 35 days following the procedure.

3.7 Numerator Details (NQF Submission Form S.5.)

A patient is in the numerator if they had any one of the following:

- Presence of ICD 10 diagnosis codes for major bleeding during index admission or inpatient hospital encounters and/or outpatient hospital encounters within 35 days from surgery
- Presence of ICD 10 PCS procedure codes for treatment of hemorrhage or hematoma during the index admission or inpatient hospital encounters and/or outpatient hospital encounters within 35 days from surgery
- If the patient received blood transfusion >= 1 units of whole blood or packed cells during the index admission
- Presence of ICD 10 diagnosis code for deep vein thrombosis (DVT) and/or pulmonary embolism (PE) during the index admission and/or 2 or more diagnosis codes for DVT from an outpatient encounter within 35 days from surgery.

NAME	OID #	STEWARD
Treatment of Hemorrhage or Hematoma	2.16.840.1.113762.1.4.1206.14	Brigham and Women's Hospital
Active Bleeding	2.16.840.1.113762.1.4.1206.28	Brigham and Women's Hospital
Blood Transfusion Administration	2.16.840.1.113762.1.4.1029.209	The Joint Commission
Venous Thromboembolism	2.16.840.1.113883.3.117.1.7.1.279	The Joint Commission

In addition, we harmonized the codes that Agency for Healthcare Research and Quality (AHRQ) Patient Safety indicator 12 (PSI 12) Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate measure used to capture proximal deep vein thrombosis and pulmonary embolism.

Please refer to the VTE/Bleeding data dictionary (Excel file) for a full list of codes.

3.8 Denominator Statement (NQF Submission Form S.6.)

The target population for this eCQM includes adults 18 years of age or older undergoing elective inpatient or outpatient primary THA and/or TKA procedures (all payers).

3.9 Denominator Details (NQF Submission Form S.7.)

To be included in the measure cohort used in public reporting, patients must meet the following inclusion criteria:

1. Aged 18 or older on the date of procedure

2. Having a qualifying elective primary THA/TKA procedure (inpatient or outpatient); elective primary THA/TKA procedures are defined as those procedures without any of the following:
   - Femur, hip, or pelvic fractures coded in the billing diagnosis field from any hospital encounters within 3 months prior to the date of procedure.
   - Partial hip arthroplasty (PHA) procedures with a concurrent THA/TKA
   - Revision procedures with a concurrent THA/TKA
   - Resurfacing procedures with a concurrent THA/TKA
   - Mechanical complication coded in the billing diagnosis field from any hospital encounters within 3 months prior to the date of procedure.
   - Malignant neoplasm of the pelvis, sacrum, coccyx, lower limbs, or bone/bone marrow or a disseminated malignant neoplasm coded in the billing diagnosis field from any hospital encounters within 3 months prior to the date of procedure.
   - Removal of implanted devises/prostheses
   - Transfer status from another acute care facility for the THA/TKA

The following existing value sets will be used to identify patients in the measure cohort:

NAME	**OID #**	STEWARD
Total Hip, Total Knee Replacement	2.16.840.1.113762.1.4.1029.96	The Joint Commission
Nonprimary Total Hip, Total Knee Replacement	2.16.840.1.113762.1.4.1206.5	Brigham and Women's Hospital
Mechanical Complications Related to Hip and Knee Procedures	2.16.840.1.113762.1.4.1206.1	Brigham and Women's Hospital
Malignant Neoplasm Complications Related to Hip and Knee Procedures	2.16.840.1.113762.1.4.1206.7	Brigham and Women's Hospital
Fracture Exclusions for Hip and Knee Procedures	2.16.840.1.113762.1.4.1206.2	Brigham and Women's Hospital

3.10 Denominator Exclusions (NQF Includes "Exception" in the "Exclusion" Field) (NQF Submission Form S.8.)

This measure will exclude patients:

1. Who were discharged against medical advice (AMA); or,
2. Who had more than two THA/TKA procedure codes during the index hospitalization
3. With diagnosis codes for renal insufficiency within the 365 days prior to the THA/TKA procedure
4. With diagnosis codes for chronic atrial fibrillation within the 365 days prior to the THA/TKA procedure
5. With diagnosis codes for cancer within the 365 days prior to the THA/TKA procedure
6. Who received prescription orders for anticoagulant medications 10-90 Days Prior to Surgery and meets the following criteria:
    a. Patient who received an Anticoagulant Injection/Infusion
    b. Patient who received a tablet (Oral) Anticoagulant order, Quantity > 1
7. With VTE diagnosis code present on admission for index admission
8. With major bleeding diagnosis code present on admission for index admission
9. With diagnosis code for coagulation disorder within 365 prior to the THA/TKA procedure
10. Who had additional surgery within 35 days from the elective primary THA/TKA

If a patient has more than one eligible admission in a calendar year after applying these exclusion criteria (in addition to denominator exclusion conditions and concurrent non-primary THA/TKA procedures), we use the first eligible admission and exclude the other eligible admissions in that year.

3.11 Denominator Exclusion Details (NQF Includes "Exception" in the "Exclusion" Field) (NQF Submission Form S.9.)

This measure excludes index admissions/procedures for patients:

1. Who were discharged against medical advice (AMA);
    - *Rationale: Providers did not have the opportunity to deliver full care and prepare the patient for discharge*
2. Who had more than two THA/TKA procedure codes during the index hospitalization
    - *Rationale: Although clinically possible, it is highly unlikely that patients would receive more than two elective primary THA/TKA procedures in one hospitalization, which may reflect a coding error*
3. With diagnosis codes for renal insufficiency within the 365 days prior to the THA/TKA procedure
    - *Rationale: Literature has shown that patients with underlying renal insufficiency increases the risk of conditions that normally require anticoagulation (DVT, PE) and anticoagulation-related complications, most notably major bleeding. [2,5]*
    - *Value set: Renal Insufficiency, OID # 2.16.840.1.113883.3.3157.1330*

4. With diagnosis codes for chronic atrial fibrillation within the 365 days prior to the THA/TKA procedure
    - *Rationale: Patients with chronic atrial fibrillation generally require prolonged anticoagulant therapy and, at times, therapy with additional platelet aggregation inhibitors. Studies have shown higher underlying risk of major bleeding (due to their prolonged anticoagulant therapy) in these patients. [1]*
    - *Value Set: Atrial Fibrillation, OID # 2.16.840.1.113883.17.4077.3.1001*
5. With diagnosis codes for cancer within the 365 days prior to the THA/TKA procedure
    - *Rationale: Studies report a higher rate of major bleeding in patients with cancer during oral anticoagulation therapy. Furthermore, cancer is known to increase the risk of VTE. [3,4]*
    - *Value Set: Cancer, OID # 2.16.840.1.113883.3.526.3.1010*
6. Who received prescriptions for anticoagulant medications within 10-90 days prior to THA/TKA procedure
    - *Rationale: Patients who were prior anticoagulant users (for different reasons) may have higher risk of developing major bleeding following THA/TKA procedure.*
    - Anticoagulant Medications, Injection OID # 2.16.840.1.113762.1.4.1206.21
    - Anticoagulant Medications, Oral OID # 2.16.840.1.113762.1.4.1206.20
7. With VTE diagnosis code present on admission for index admission
    - *Rationale: Since this measure focuses on rate of VTE after THA/TKA procedure, patients who were admitted to the hospital due to an incident of VTE prior to THA/TKA procedure should be excluded.*
    - *Value Set: Pulmonary Embolism or DVT, OID # 2.16.840.1.113883.17.4077.3.1036*
8. With major bleeding diagnosis code present on admission for index admission
    - *Rationale*: Since this measure focuses on rate of major bleeding after THA/TKA procedure, patients who were admitted to the hospital due to an incident of major bleeding prior to THA/TKA procedure should be excluded
    - *Value Sets*:
        i. *General Major Bleeding Events, OID # 2*.16.840.1.113762.1.4.1179.5
        ii. *Active Bleeding, OID # 2*.16.840.1.113762.1.4.1029.211
9. With diagnosis code for coagulation disorder within 365 prior to the THA/TKA procedure
    - *Rationale*: Patients who have existing coagulation disorders may develop abnormal bleeding because coagulation disorders affect the blood's clotting activities.
    - *Value Set*: Coagulation Disorder Conditions, OID # 2.16.840.1.113762.1.4.1206.17
10. Who had additional surgery within 35 days from the elective primary THA/TKA
    - *Rationale*: Additional surgery after the index admission would increase the likelihood of VTE and major bleeding events. It would be also be difficult to attribute the cause of the VTE/Major bleeding event to a particular surgery.
    - *Value Set*: General Surgery, OID # 2.16.840.1.113762.1.4.1206.15

References

1. Douros A et al. Concomitant use of direct oral anticoagulants with antiplatelet agents and the risk of major bleeding in patients with nonvalvular atrial fibrillation. The American Journal of Medicine. 2019; 132:191-199.
2. Gutierrez OM. Risks of anticoagulation in patients with chronic kidney disease and atrial fibrillation: More than just bleeding? Res Pract Thromb Haemost. 2019; 3(2): 147-148.
3. Kester BS, Merkow RP, Ju MH., et al. Effect of Post-Discharge Venous Thromboembolism on Hospital Quality Comparisons Following Hip and Knee Arthroplasty. J Bone Joint Surg Am. 2014; 96:1476-84.
4. Shoeb M, Fang MC. Assessing Bleeding Risk in Patients Taking Anticoagulants. J Thromb Thrombolysis. 2013; 35(3):312-319.
5. Whalley D, Skappak C, Lang ES. The need to clot: a review of current management strategies for adverse bleeding events with new oral anticoagulants. Minerva Anesthesiologica. 2014; 80(7):821-30.

3.12 Stratification Details/Variables (NQF Submission Form S.10.)

The measure will not be stratified.

3.13 Risk Adjustment Type (NQF Submission Form S.11.)

Select the risk adjustment type. Provide specifications for risk stratification in 3.14 (NQF Submission Form S.12.) and for the statistical model in 3.16-3.17 (NQF Submission Form S.14.–15.).

☐ no risk adjustment or risk stratification
☐ stratification by risk category/subgroup
☒ statistical risk model
☐ other (S.13.a.)

We adapted Dawson's conceptual model for relationships between social determinants of health and systolic blood pressure to describe the relationship between antecedents, predisposing, enabling factors, need for healthcare factors and patient outcomes. For this eCQM the outcome we are measuring are VTE and major bleeding after THA/TKA. In terms of antecedents, regional variation will be important when looking at these outcome rates nationally. Rosenberg et al. (2016) found that the amount of variability in health outcomes in the U.S. is large even after accounting for differences in population, co-morbidities, and health system factors. African American/Black race is an important outcome antecedent in the total joint replacement population. Pfefferle et al. (2014) noted poorer outcomes for African American patients (particularly African American women) after TKA. They found that African American women under the age of 60 had the greatest incidence of manipulation after TKA due to stiffness and decreased range of motion. Stone et al. (2019) also found that African American patients had longer lengths of stay, more complications (e.g., sepsis, manipulation under anesthesia) and were less likely to be discharged home than Caucasian patients after total joint surgery.

Patient demographics including age, sex and household income may be important predisposing factors of post-THA/TKA surgical outcomes. Basilico et al. (2008) found that older age was an important risk factor for complications following total joint replacement surgery. As noted above, younger African American women have the greatest incidence of manipulation post TKA. Dy et al. (2013) found that younger age and lower income (e.g., Medicaid) increased the risk of undergoing early revision THA. Kremers et al. (2015) did not find associations between marital status and educational attainment and postoperative complications.

English proficiency may be an important enabling factor for patients undergoing THA/TKA. De Oliveira et al. (2015) found that THA/TKA patients had a high prevalence of inadequate health literacy (60%) that may be associated with poor comprehension of discharge instructions and could potentially impact post-surgical outcomes.

Comorbidity and smoking status are important factors that increase the need for healthcare and may contribute to poorer outcomes in patients undergoing total joint replacement. Kremers et al. (2015) explored social and behavioral factors in THA/TKA and found that a positive smoking status was associated with higher rates of post-surgical infections. In addition, Haynes et al. (2017) has shown that obesity is associated with higher rates of peri-operative complications, joint and wound infections, mechanical complications, deep vein thrombosis, blood loss, operative time, and need for revision surgery following primary total joint arthroplasty. Currently, more than one third of Americans are classified as obese (BMI $\geq 30 kg/m^2$) and morbidly obese patients have significantly higher risk of complications noted above and they undergo total knee arthroplasty at an average age of 13 years younger than non-obese patients due to rapid progression of osteoarthritis (Changulani et al 2008).

References:

1. De Oliveira GS., et al. (2015). "The impact of health literacy in the care of surgical patients: a qualitative systematic review". BMC Surgery 15 (86).
2. Changulani M, et al. (2008). "The relationship between obesity and the age at which hip and knee replacement is undertaken". J Bone Joint Sug. 90: (B:360-363)
3. Haynes J, et al. (2017). "Obesity in total hip arthroplasty: Does it make a difference?" Bone Joint J. 99-B (1 Supple A): 31-6
4. Kremers HM., et al. (2015). "Social and behavioral factors in total knee and hip arthroplasty". The Journal of Arthroplasty. 30:1852-1854.
5. Rosenberg BL., et al. (2016). "Quantifying Geographic Variation in Health Care Outcomes in the United States before and after Risk-Adjustment". PLoS ONE 11(12):e0166762.
6. Pfefferle KJ, et al. (2014). "Risk factors for manipulation after total knee arthroplasty: a pooled electronic health record database study". Journal of Arthroplasty 29(10): 2036-8.
7. Stone AH, et al. (2019). "Differences in perioperative outcomes and complications between African American and white patients after total joint arthroplasty". Journal of Arthroplasty 34(4):656-662.

8. Basilico FC, et al. (2008). "Risk factors for cardiovascular complications following total joint replacement surgery". American College of Rheumatology 58(7): 1915-1920.
9. Dy CJ, et al. (2013). "Risk factors for early revision after total hip arthroplasty". American College of Rheumatology 66(6):907-915.

3.14 Type of Score (NQF Submission Form S.12.):

- ☐count
- ☒rate/proportion
- ☐ratio
- ☐categorical (e.g., yes or no)
- ☐continuous variable (CV) (e.g., an average)
- ☐other (specify)

3.15 Interpretation of Score (NQF Submission Form S.13.)

A lower score indicates better quality of care.

3.16 Calculation Algorithm/Measure Logic (NQF Submission Form S.14.)

Step 1: Define the Initial Population

Identify all patients aged 18 years or older, covered by any healthcare payer, who received an elective primary THA and/or TKA within the measurement period.

Step 2: Define the Denominator

Apply the denominator exclusion criteria to all the patients from the initial population and determine the denominator population. For the full list of denominator exclusions, please refer to section S7, S8, and S9.

Step 3: Define the Numerator

Identify all patients from the denominator who had an occurrence of major bleeding and/or VTE treated in inpatient and/or outpatient settings within 35 days from the date of elective primary THA/TKA procedure. Please refer to section S4-S5 for full list of numerators/outcomes of interest.

Step 4: Calculate the Composite Major Bleeding and VTE rate

Our current plan is to use a linear combination outcome (subject to approval). Using the Harm Weight Ratio from AHRQ, VTE will get a weight of 2.7 and bleeding will get a weight of 1. Thus, if we code VTE as a 1 if yes and 0 if no, and similarly, bleeding as 1 if yes and 0 if no, then patient VTE/Bleeding outcome

will be 2.7*VTE + Bleeing. In particular, the patient outcome is 0 if the patient has neither a VTE nor bleed; 2.7 if the patient has VTE but no bleed; 1 if the patient has bleeding but no bleed; and 3.7 if the patient has both VTE and bleeding.

Hierarchical Linear Regression Model

The measure estimates clinician group-level risk standardized VTE/Bleeding linear combination outcome following elective primary THA/TKA using hierarchical robust linear regression models. In brief, the approach simultaneously models data at the patient and clinician group levels to account for variance in patient outcomes within and between clinician groups (Normand et al., 2007; Dimick et al., 2010; Krell et al., 2014; MacKenzie et al., 2015). At the patient level, it models the mean of the VTE/Bleeding linear combination outcome occurring during the index admission or within 35 days from surgery using age, sex, selected clinical covariates and a clinician group-specific random intercept. At the clinician group level, it models the clinician group-specific intercepts as arising from a normal distribution. The clinician group intercept represents the underlying VTE/Bleeding linear combination outcome mean at the clinician group level, after accounting for patient risk. The clinician group-specific intercepts are given a distribution to account for the clustering (non-independence) of patients within the same clinician group. If there were no differences among clinician groups, then after adjusting for patient risk, the clinician group intercepts should be identical across all clinician groups.

The risk standardized VTE/Bleeding linear combination outcome mean is calculated as the ratio of the "predicted mean" to the "expected" mean. For each clinician group, the numerator of the ratio is the mean of the VTE/Bleeding linear combination outcome within 35 days predicted based on the clinician group's performance with its observed case mix, and the denominator is the mean of the VTE/Bleeding linear combination outcome based on the nation's performance with that clinician group's case mix. This approach is analogous to a ratio of "observed" to "expected" used in other types of statistical analyses. It conceptually allows for a comparison of a clinician group's performance given its case mix to an average clinician group's performance with the same case mix. Thus, a lower ratio indicates lower-than-expected major bleeding and/or VTE event rates or better quality, and a higher ratio indicates higher-than-expected major bleeding and/or VTE event rates or worse quality.

In summary, the hierarchical regression model is on the patient level and contains the patient characteristics as covariates (with fixed regression coefficients for these covariates that are common over all clinician groups) as well as a random effect for clinician group into which the patient's clinician belongs. The fixed regression coefficients of the risk factors are estimated using maximum likelihood with numerical quadrature to form the marginal likelihood integrated over the random clinician group-specific intercepts (Lange, 1999). The random clinician group-specific intercepts are then estimated using an empirical Bayes approach (Schall, 1991).

The "predicted" is the sum of the predicted VTE/Bleeding linear combination outcome over subjects (the numerator) and is calculated by using the coefficients estimated by regressing the risk factors and the clinician group-specific random intercept; . E.g., the estimated clinician group-specific intercept is added to the sum of the estimated regression coefficients multiplied by the patient characteristics. The results are summed over all patients attributed to a clinician group to get a predicted value. The "expected" (the denominator) is obtained in the same

manner as the numerator, but a common intercept using all clinician groups in our sample is added. Thus, the risk factors for the patients and their common fixed regression coefficients are used in both the "predicted" and the "expected", but the expected is based solely on the patient characteristics, whereas the predicted includes the clinician group effect. Note, though, the clinician group random effect can be considered the residual clinician group effect after controlling for the patient risk factors. If there are strong clinician group effects after controlling for patient risk factors, then the risk standardized VTE/Bleeding linear combination outcome can be much different across clinician groups; if the clinician group effects are weak after controlling for the patient risk factors, then the predicted/expected VTE/Bleeding linear combination outcome will be close to one. To assess clinician group performance for each reporting period, we re-estimate the model coefficients using the years of data in that period. This approach has been used in clinical papers by the statistician on our team (Wakeam et al., 2017; Krimphove et al., 2019)

References:

1. Dimick JB., et al. (2010). "Ranking hospitals on surgical mortality: the importance of reliability adjustment." Health Services Research. 45(6p1):1614-29.
2. Krell RW., et al. (2014). "Reliability of risk-adjusted outcomes for profiling hospital surgical quality." JAMA surgery. 149(5):467-74.
3. Krimphove MJ., et al. (2019). "The current landscape of low-value care in men diagnosed with prostate cancer: what is the role of individual hospitals?" Urol Oncol. pii: S1078-1439(19)30134-6.
4. MacKenzie TA., et al. (2015). "A primer on using shrinkage to compare in-hospital mortality between centers." Ann Thorac Surg. 99(3):757-761.
5. Normand S-LT., et al. (2007). "Statistical and Clinical Aspects of Hospital Outcomes Profiling." Stat Sci. 22(2): 206-226.
6. Wakeam E., et al. (2017). "Variation in the cost of 5 common operations in the United States." Surgery. 162(3):592-604.
7. Lange K. (1999). Numerical Analysis for Statisticians. New York: Springer‐Verlag
8. Schall R. (1991). "Estimation in generalized linear models with random effects." Biometrika. 78(4): 719-727.

3.17 Sampling (NQF Submission Form S.15.)

Not applicable; this measure is not based on a sample.

3.18 Survey/Patient-Reported Data (NQF Submission Form S.16.)

Not applicable; this measure is not based on survey or patient-reported data.

3.19 Data Source (NQF Submission Form S.17.)

Indicate all sources for which the measure is specified and tested.

☐ administrative data
☐ claims data
☒ patient medical records (i.e., paper-based or electronic)

☒electronic clinical data
☐registries
☐standardized patient assessments
☐patient-reported data and surveys
☐non-medical data
☐other—describe in 3.20 (NQF Submission Form S.18.)

3.20 Data Source or Collection Instrument (NQF Submission Form S.18.)

Routinely collected information documented in EHRs.

3.21 Data Source or Collection Instrument (Reference) (NQF Submission Form S.19.)

Not applicable.

3.22 Level of Analysis (NQF Submission Form S.20.)

Indicate only the levels for which the measure is specified and tested.

☐clinician: individual
☒clinician: group/practice
☐facility
☐health plan
☐integrated delivery system
☐population: community, county, or city
☐population: regional and state
☐other

3.23 Care Setting (NQF Submission Form S.21.)

Indicate only the settings for which the measure is specified and tested.

☐ambulatory surgery center
☒clinician office/clinic
☐outpatient rehabilitation
☐urgent care – Ambulatory
☐behavioral health: Inpatient
☐behavioral health: Outpatient
☐dialysis facility
☐emergency medical services/ambulance
☐emergency department
☐home health
☐hospice
☐hospital
☐hospital: critical care
☐hospital: acute care facility
☐imaging facility
☐laboratory
☐pharmacy

☐nursing home / skilled nursing facility (SNF)
☐inpatient rehabilitation facility (IRF)
☐long-term acute care
☐birthing center
☐no applicable care setting
☐other

3.24 Composite Performance Measure (NQF Submission Form S.22.)

See scoring section 3.16