Frequently Asked Questions

For Severe Obstetric Complications Electronic Clinical Quality Measure (eCQM) in the Inpatient Quality Reporting (IQR) Program

October 2025 Public Reporting

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Measure Updates

1. **What updates have been made to CY 2024 PC-07 for 2025 public reporting?**

CMS has made the following updates:

- Updated the year used to calculate the measure (i.e., CY 2024 is now used);
- PC-07 is now mandatory for reporting in the IQR program for FY 2026;
- Updated codes used in the value sets;
    - 33 erroneous codes from the blood transfusion value set (OID 2.16.840.1.113762.1.4.1029.213) will be removed from the measure calculation.
- The measure now allows for three approaches to determine Gestational Age in the following order of precedence:
    - The GA is calculated using the American College of Obstetricians and Gynecologists ReVITALize guidelines.
    - The GA is obtained from a discrete field in the electronic health record. This option is only used when the calculated GA is not available.
    - The GA is based on ICD10 or SNOMED codes indicative of weeks gestation. This option is only used when results from items #1 and #2 (see above) are not available

Measure Overview

2. Why is CMS measuring obstetric complications?

Maternal morbidity and mortality pose serious health threats to pregnant women in the United States. Hemorrhage, hypertensive disorders of pregnancy (HDP), sepsis/infection, cardiovascular conditions, cardiomyopathy, embolism, and mental health conditions have been identified as overall leading causes of peripartum death.[1] Nearly 16% of pregnancy-related deaths can be attributed to cardiovascular conditions, [2] and over 75% of pregnancy-related deaths due to cardiovascular conditions are often found to be preventable.[3]

National health experts and organizations have prioritized quality improvement strategies to mitigate risk of adverse outcomes among maternal populations. The U.S. Department of Health & Human Services (HHS) has called for action to improve maternal health and outcomes and outlines seven actions for healthcare professionals, including participating in quality improvement and safety initiatives.[4] Most nationally implemented quality measures focused on maternal health are process measures and limited in scope. While existing measures aim to promote coordination of care and standardize health care processes, maternal health outcome measures are needed. Measures that are focused on maternal health outcomes will address the patient safety priority area under the Meaningful Measures 2.0 framework, and likewise will use electronic health record (EHR) data to address interoperability, another meaningful measure area for assessing quality of health care.[5]

Data Sources

3. What data did CMS use to calculate the Severe Obstetric Complications eCQM?

The Severe Obstetric Complications Electronic Clinical Quality Measure (PC-07) uses EHR data and data from other electronic clinical systems, depending on hospital site workflows, to define all components of the measures. For the 2025 results, hospitals submitted data for discharges occurring between January 1, 2024 – December 31, 2024. See the Measure Specifications for details of the measure components and Results for how to interpret calculations.

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[1] Hoyert DL, Miniño AM. Maternal mortality in the United States: changes in coding, publication, and data release, 2018. 2020.

[2] National Quality Forum. Maternal Morbidity and Mortality Environmental Scan. 2020

[3] Briller J. Pregnancy-Related Mortality Due to Cardiovascular Conditions: Maternal Mortality Review Committees in 32 U.S. States, 2017 to 2019

[4] U.S. Department of Health & Human Services. The Surgeon General's Call to Action to Improve Maternal Health. 2020.

[5] Centers for Medicare & Medicaid Services. Meaningful Measures 2.0: Moving from Measure Prioritization and Modernization. 2025; https://www.cms.gov/medicare/quality/cms-national-quality-strategy/meaningful-measures-20-moving-measure-reduction-modernization

Measure Specifications

Cohort

4. **Which patients are part of the measure cohort?**

The measure cohort (the denominator) includes all inpatient hospitalizations for patients between 8 years to under 65 years who delivered at least one baby (live or stillborn ≥ 20 weeks old). Patients with COVID-19 are only excluded if they had a respiratory complication during the hospitalization.

Outcome

5. **What is the measure outcome?**

The Severe Obstetric Complications measure is unique in that it has two outcomes:

1) Any complications: Severe medical (i.e., sepsis, eclampsia, respiratory, cardiac, etc.) and procedural (i.e., hysterectomy, blood transfusion) complications, including death.
2) Any Complications excluding blood transfusion only cases: Any complications (above) but excludes cases where blood transfusion was the only complication.

The measure outcome (the numerator) is based on the Center for Disease Control and Prevention's (CDC) definition of Severe Maternal Morbidity[6] and uses the International Classification of Diseases 10th Revision (ICD-10) to define diagnoses and procedures that are indicative of a complication. ICD-10 codes are used for billing in hospitals and therefore are generally widely available and offer stability over time. Different from the CDC definition, the measure uses present on admission (POA) codes to only count complications that occurred after admission for delivery as numerator events. The numerator also includes patients who die during the inpatient delivery encounter.

The measure outcome is defined as the number of inpatient delivery hospitalizations among the denominator who experience any of the following numerator events (note that only diagnoses not present on admission are considered a numerator event), or death:

- Acute myocardial infarction
- Aortic aneurysm
- Cardiac arrest/ventricular fibrillation
- Heart failure/arrest during procedure or surgery
- Disseminated intravascular coagulation
- Shock
- Acute renal failure
- Adult respiratory distress syndrome
- Pulmonary edema/Acute heart failure[7]
- Sepsis
- Air and thrombotic embolism
- Amniotic fluid embolism
- Eclampsia
- Severe anesthesia complications
- Puerperal cerebrovascular disorder
- Sickle cell disease with crisis
- Blood transfusion
- Conversion of cardiac rhythm
- Hysterectomy
- Temporary tracheostomy
- Ventilation

Read more about the measure outcome within the measure methodology report located on the eCQI Resource Center.

6. Why are there two measure outcomes?

Blood transfusions, generally needed in response to excessive bleeding around delivery, account for the greatest proportion of patients identified as having an obstetric complication, so both outcomes show different constructs of maternal quality.

[6] The Centers for Disease Control and Prevention (CDC). (2024). Severe Maternal Morbidity. https://www.cdc.gov/maternal-infant-health/php/severe-maternal-morbidity/index.html

[7] CDC utilizes 21 indicators for defining SMM, but for the purposes of this measure's outcome, one of the indicators (Pulmonary edema/Acute heart failure) are defined using two distinct value sets. It is listed here as one indicator, but the value sets identify these as two distinct diagnoses. Likewise, the Measure Authoring Tool (MAT) header that supports this eCQM identifies these two diagnoses separately.

Risk Adjustment

7. How does the measure risk-adjust for differences in the measure population?

The goal of risk adjustment is to account for patient-level factors that are clinically relevant, have strong relationships with the outcome, and are outside of the control of the reporting entity, without obscuring important quality differences. Risk factors can increase (or decrease) the likelihood that a patient experiences a certain outcome. Risk adjustment for case mix differences among hospitals is based on clinical status of the patient and other patient characteristics at the time of admission. Only conditions or comorbidities that convey information about the patient at the time of the admission are included in risk adjustment, determined by present on admission indicators. Complications that arise during the hospitalization are not used in risk adjustment. The following risk variables were included in the final risk model:

- Patient demographics: maternal age (derived from birthdate)
- Preexisting conditions and pregnancy characteristics defined by ICD-10 codes:
- Anemia
- Asthma
- Autoimmune disease
- Bariatric surgery
- Bleeding disorder
- Body Mass Index (BMI) >= 40
- Cardiac disease
- Gastrointestinal disease
- Gestational diabetes
- Human Immunodeficiency Virus (HIV)
- Hypertension
- Mental health disorder
- Multiple pregnancy
- Neuromuscular disease
- Obstetric venous thromboembolism (VTE)
- Other pre-eclampsia
- Placental accreta spectrum
- Placental abruption
- Placenta previa
- Preexisting diabetes
- Preterm birth
- Previous cesarean
- Pulmonary hypertension
- Renal disease
- Severe pre-eclampsia
- Substance abuse
- Thyrotoxicosis
- Laboratory tests and vital signs upon hospital arrival [first resulted value within 24 hours prior to initial encounter (earliest between inpatient admission, emergency department/obstetric triage, observation stay) and before delivery]: Hematocrit, White blood cell (WBC) count, Heart rate, Systolic blood pressure
- Long-term anticoagulant medication use
- Social Risk Factors: economic/housing instability

8. **How are present on admission (POA) codes used in the measure and why are they important?**

POA codes are used in two ways in the measure calculation:

1) To identify risk factors: Allows your hospital's rates to be properly adjusted based on how sick a patient is. If POA indicators are missing, it cannot be determined whether a risk factor was present prior to admission. This can make it appear that your patients are healthier than they actually are.

2) To identify numerator events or complications: If POA indicators are missing, it cannot be determined if a complication occurred before or during the delivery hospitalization. This can make it appear that patients did not have a complication, when in actuality they did.

9. **How and when are my results risk-adjusted?**

After your hospital submits Quality Reporting Document Architecture (QRDA) 1 files with all required data elements to calculate the risk-adjusted outcome rates (including POA codes), CMS will provide you with the observed rates. After receiving data from all hospitals, CMS calculates your risk standardized complication rate (RSCR) and provides your facility with the results during Summer Preview (usually in August). See the Results section for details of the RSCR.

10. **Do people with more codes with the same risk factor have that risk factor weighted more?**

No, multiple conditions within a condition category are not more heavily weighted in risk adjustment.

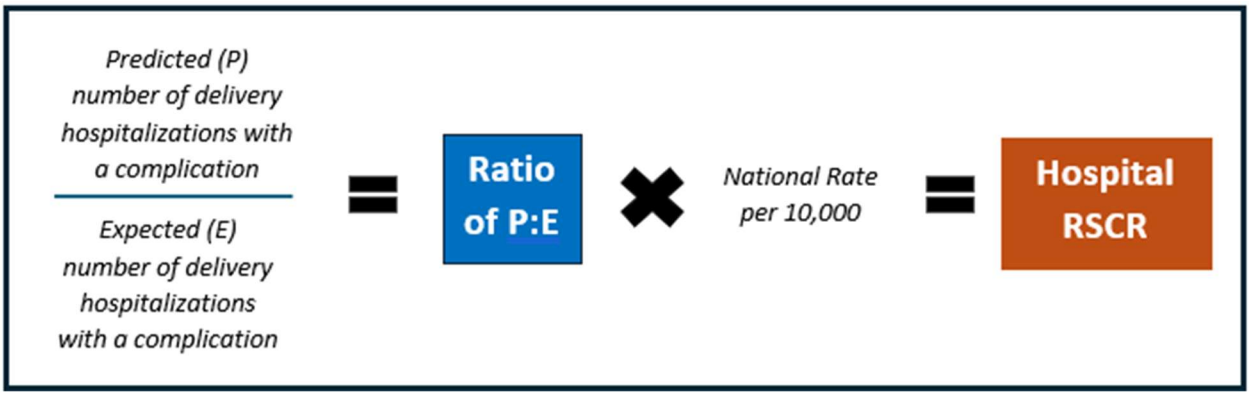
Results

Risk Standardized Obstetric Complications Rate

11. What is a Risk Standardized Obstetric Complications Rate (RSCR)?

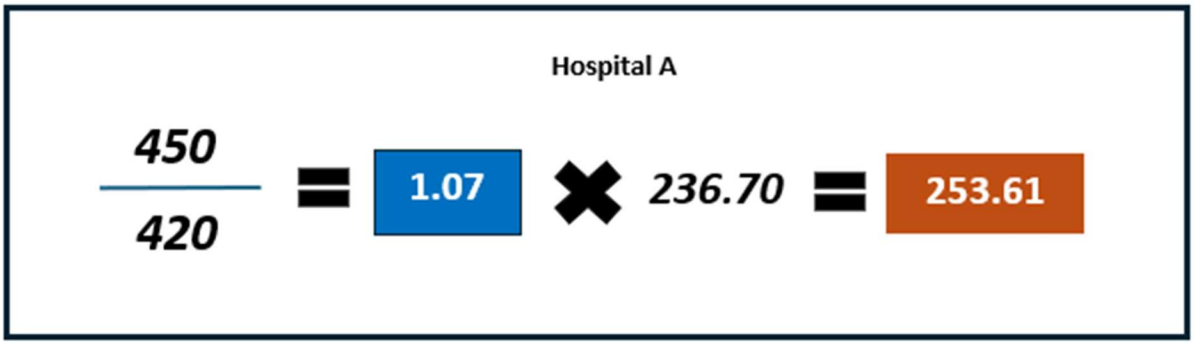
A hospital's Risk Standardized Obstetric Complications Rate (RSCR) is calculated as the ratio of the number of "predicted" complications to the number of "expected" complications at a given hospital, multiplied by the national observed readmission rate, as illustrated in Figure 1.

Figure 1: Risk Standarized Obstetric Complications Rate (RSCR) Calculation



For each hospital, the numerator of the ratio is the number of complications predicted based on the hospital's performance with its observed case mix; the denominator is the number of complications expected based on the nation's performance with that hospital's case mix. This approach is analogous to a ratio of "observed" to "expected" used in other types of statistical analyses. It conceptually allows a particular hospital's performance, given its case mix, to be compared to an average hospital's performance with the same case mix. Thus, a lower ratio indicates lower-than-expected complication rates or better quality, while a higher ratio indicates higher-than-expected complication rates or worse quality. The hospital's ratio of P/E is then standardized by multiplying it by the national observed rate (see an example in Figure 2 for Hospital A's RSCR calculation).

Figure 2: Risk Standarized Obstetric Complications Rate (RSCR) Calculation Example



12. How should I interpret my risk-adjusted results?

Each hospital's RSCR is calculated based on the ratio of predicted-to-expected and multiplied by the national rate (Figure 2). The risk-adjusted rate should be compared to the national rate. If your hospital's risk-adjusted rate is lower than the national rate, it indicates the hospital's outcome rate is better than expected given the characteristics of the patient mix for your hospital. In the example above, Hospital A has a RSCR of 253.6 per 10,000 which is greater than the example national rate of 236.7 per 10,000, indicating that Hospital A's outcome rate is worse than expected when the observed rate is adjusted for their patient's case mix. For more details about the risk adjustment model, please see the Methodology Report located on the eCQI resource center.

Hospital-Specific Reports

13. What is in my report?

CMS is providing your facility with a summary of the results called a Hospital-Specific Report (HSR) (see Figure 3 below) as well as a detailed downloadable CSV file with patient level data and accompanying user guide. The HSR includes the observed rate for your hospital, the RSCR, the numerator (number of outcomes among eligible deliveries), and the denominator (number of eligible deliveries); it also includes results stratified by each complication as the percent of all deliveries with a specific complication. For instructions on accessing these reports, see the following video on YouTube. You will find the following results on the Hospital Quality Reporting platform. If your hospital did not receive an HSR, see FAQ 17.

Figure 3: Example Summary of Facility Results

Performance Overview

Metric	Facility	State	National
Observed Rate (per 10,000)			
Risk-standardized rate (per 10,000)*			
Numerator (Outcome events among eligible deliveries)			
Denominator (Eligible Deliveries)*			

Indicates publicly reported data

14. How should I use my measure results?

Generally, knowing a hospital's performance compared to other hospitals could suggest an opportunity for improvement in the provision of care. The results are intended to guide hospital efforts to improve maternal health outcomes by reducing severe obstetric

complications. This can be achieved through implementing evidence-based practices, strengthening care systems, and the delivery of timely, effective treatment—ultimately enhancing the quality of maternal care.

15. Are my results publicly reported?

Your hospital's RSCR for both outcomes will be publicly reported on the Provider Data Catalog on Medicare.data.gov.

16. Am I required to submit data for PC-07?

If your hospital participates in either CMS's Hospital Inpatient Quality Reporting (IQR) Program or Medicare Promoting Interoperability Program, your facility is required to participate. For CY 2024, the program requires eligible participating hospitals to report on and submit a full year's worth of data on three self-selected eCQMs, and three required eCQMs, one of which is the PC-07 Severe Obstetric Complications eCQM.

17. Why didn't my hospital receive an HSR with measure results?

Your hospital will not receive an HSR if it was not defined as open during the measurement period/reporting period deadline.

If you believe that your hospital should have received an HSR but did not, please contact the *QualityNet* Service Center at qnetsupport@cms.hhs.gov. Please ***do not include Personally Identifiable Information or Protected Health Information in questions submitted.***

Additional Resources

18. Where can I find more information on this measure?

The Measure Methodology Report and Measure Updates Report are located on the eCQI Resource Center by clicking here, or learn more about measure information, specifications, and data elements by heading here. Additional information can be found on QualityNet.

19. Where do I go to ask questions?

There are two places you can go to ask your questions.
If your question is about technical measure specifications, you can submit your question on JIRA at https://oncprojectracking.healthit.gov/olp -> create an issue ticket.

Please submit other questions about the measure or general program requirements following these steps:

1. Access the QualityNet Q&A tool - Opens in new browser tab.
2. Select "IQR - Inpatient Quality Reporting" from the drop-down menu in the Program field
3. Click into the Topic field and select "eCQMs" under "IQR - Inpatient Quality Reporting"
4. Complete all other mandatory fields, the CAPTCHA, and click "Submit Question"

For proper handling of inquiries, please refer to the specific measure (PC-07 or severe obstetric complications for this measure) to which your questions relate.

Glossary

Hospital-Specific Reports (HSRs): Reports issued by CMS in the Hospital IQR Program and other quality programs that give hospitals detailed measure results, discharge-level data, and state and national results.

Outcome: The result of performance (or nonperformance) of a function or process.

Outcome measure: A measure that assesses what happens or does not happen to a patient following a process; agreed upon desired patient characteristics to be achieved; or undesired patient conditions to be avoided.

Present on admission: This refers to whether a diagnosis or condition existed at the time a patient was admitted to a hospital for inpatient care, to distinguish between conditions that were present upon admission (POA) and those that developed during the patient's stay.

Risk adjustment: Risk adjustment means looking at things like severity of illness or age to estimate the chance of a patient having a particular outcome, such as a complication. In some cases, CMS adjusts for risk when reporting performance measures to compare performance.

Value Set: A set list of codes and corresponding terms from standard clinical vocabularies (like SNOMED CT, RxNorm, or LOINC) that define specific clinical concepts. These value sets specify the acceptable codes for data elements in clinical quality measures, ensuring data consistency and interoperability.