Quality ID #255: Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure
– National Quality Strategy Domain: Effective Clinical Care
– Meaningful Measure Area: Preventive Care

2019 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Process

DESCRIPTION:
Percentage of Rh-negative pregnant women aged 14-50 years at risk of fetal blood exposure who receive Rh-Immunoglobulin (Rhogam) in the emergency department (ED)

INSTRUCTIONS:
This measure is to be submitted each time a pregnant patient presents to the ED with complaints including blunt abdominal trauma, vaginal bleeding, ectopic pregnancy, and threatened or spontaneous abortion.

The Merit-based Incentive Payment System (MIPS) eligible clinician, group, or third party intermediary may utilize claims data to determine the ED discharge. Patients who present to the ED with these complaints should have documentation in the medical record of receiving an order for Rh-Immunoglobulin (Rhogam). It is anticipated that MIPS eligible clinicians who provide care in the ED will submit this measure. For MIPS eligible clinicians, groups, or third party intermediaries using claims data, the claim form place of service field must indicate that the encounter has taken place in the ED.

Measure Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

DENOMINATOR:
All pregnant female patients aged 14 to 50 years who are Rh-negative and at significant risk of fetal blood exposure

   Denominator Criteria (Eligible Cases):
   Pregnant female patients aged 14 to 50 years on date of encounter
   AND
   AND
   Diagnosis of High Risk Pregnancy Complications (ICD-10-CM): O00.80, O00.81, O00.90, O00.91, O02.1, O03.1, O03.6, O04.6, O07.1, O08.1, O20.0, O20.8, O20.9, O26.891, O43.011, O43.019, O44.30, O44.31, O44.50, O44.51, O45.001, O45.009, O45.011, O45.019, O45.021, O45.029, O45.091, O45.099, O45.8X1, O45.8X9, O45.90, O45.91, O46.001, O46.011, O46.021, O46.8X1, O46.8X9, O46.90, O46.91
   AND
   Patient encounter during the performance period (CPT): 99281, 99282, 99283, 99284, 99285, 99291
   AND
   Place of Service Indicator: 23
   (The claim form Place of Service field must indicate emergency department)
**NUMERATOR:**
Patients who receive an order for Rh-Immunoglobulin (Rhogam) in the ED

**Numerator Instructions:**
This measure is to be submitted each time a patient meets the requirements as indicated in the denominator. In the clinical event a patient has documented receipt of Rhogam submit quality-data code G8810.

**Numerator Options:**

**Performance Met:**
Rh-immunoglobulin (Rhogam) ordered (G8809)

**Denominator Exception:**
Rh-immunoglobulin (Rhogam) not ordered for reasons documented by clinician (e.g., patient had prior documented receipt of Rhogam within 12 weeks, patient refusal) (G8810)

**Performance Not Met:**
Documentation Rh-immunoglobulin (Rhogam) was not ordered, reason not given (G8811)

**RATIONALE:**
The potential for maternal exposure to fetal blood is a concern among pregnant patients presenting to the emergency department with a number of common complaints or diagnoses including abdominal pain, blunt abdominal trauma, vaginal bleeding, ectopic pregnancy, threatened or spontaneous abortion, or pelvic instrumentation. This concern increases after the first trimester as fetal RBC mass increases.

**CLINICAL RECOMMENDATION STATEMENTS:**
Exposure to less than 0.1 ml of fetal blood of a different rhesus (Rh) antigenicity among Rh negative has been shown to increase the risk of maternal alloimmunization. Alloimmunization can result in hemolytic disease of the fetus or newborn including spontaneous abortion, fetal hemolytic anemia, hydrops fetalis and severe neonatal jaundice in subsequent pregnancies.

Anti-D-immunoglobulin reduces the likelihood of alloimmunization. Routine administration of antenatal anti-D-immunoglobulin has been demonstrated as an effective prophylaxis and is recommended by the American College of Obstetricians and Gynecologists (ACOG). Guidelines (UK) recommend administration of anti-D-immunoglobulin after the first trimester for a number of sensitizing episodes including but not limited to uterine bleeding and for recurrent, painful or heavy uterine bleeding in the first trimester.

Routine use of anti-D prophylaxis is somewhat controversial as this is done to prevent so-called silent sensitization occurring in the absence of a clear hemorrhage, but this is generally performed in the UK and the US. As anti-D-immunoglobulin does cross the placenta, there are some concerns that this could cause fetal anemia, however, this was felt to be a minor concern relative to the benefits of administration.

Although the risk of alloimmunization is low, the consequences can be significant, and administration of Rh D immune globulin should be considered in cases of spontaneous first-trimester miscarriage, especially those that are later in the first trimester. (Level C Recommendation) (ACOG, 2017)

Because of the higher risk of alloimmunization, Rh D-negative women who have instrumentation for their miscarriage should receive Rh D immune globulin prophylaxis. (Level C Recommendation) (ACOG, 2017)

Rh D immune globulin should be given to Rh D-negative women who have pregnancy termination, either medical or surgical. (Level C Recommendation) (ACOG, 2017)

Administration of Rh D immune globulin for all cases of ectopic pregnancy in Rh D-negative women is recommended. (Level C Recommendation) (ACOG, 2017)
Anti-D immune globulin is recommended for Rh D-negative women who experience antenatal hemorrhage after 20 weeks of gestation. (Level C Recommendation) (ACOG, 2017)

Anti-D immune globulin should be administered to Rh D-negative women who have experienced abdominal trauma. (Level C Recommendation) (ACOG, 2017)

Anti-D immune globulin should be administered to Rh D-negative women who experience fetal death in the second or third trimester. (Level C Recommendation) (ACOG, 2017)

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2019 Clinical Quality Measure Flow for Quality ID #255: Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure

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NOTE: Submission Frequency – Episode
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Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in submitting this Individual Measure.

Start with Denominator:

1. Check Patient Age and Gender:
   a. If Pregnant Female Patient Age 14 to 50 Years on Date of Encounter equals No during the measurement period, do not include in Eligible Population. Stop Processing.
   b. If Pregnant Female Patient Age 14 to 50 Years on Date of Encounter equals Yes during the measurement period, proceed to check Diagnosis of Rh-Negative.

2. Check Diagnosis of Rh-Negative:
   a. If Diagnosis of Rh-Negative as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of Rh-Negative as Listed in the Denominator equals Yes, proceed to check Diagnosis of High Risk Pregnancy Complications.

3. Check Diagnosis of High Risk Pregnancy Complications:
   a. If Diagnosis of High Risk Pregnancy Complications as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of High Risk Pregnancy Complications as Listed in the Denominator equals Yes, proceed to check Encounter Performed.

4. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Place of Service: 23 Emergency Department (ED).

5. Check Place of Service: 23 Emergency Department (ED):
   a. If Place of Service: 23 Emergency Department (ED) equals No, do not include in Eligible Population. Stop Processing.
   b. If Place of Service: 23 Emergency Department (ED) equals Yes, include in Eligible Population.

6. Denominator Population:
   a. Denominator Population is all Eligible Episodes in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 episodes in the Sample Calculation.

Start Numerator:

7. Check Rh-Immunoglobulin (Rhogam) Ordered:
a. If Rh-Immunoglobulin (Rhogam) Ordered 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 a equals 40 episodes in the Sample Calculation.

c. If Rh-Immunoglobulin (Rhogam) Ordered equals No, proceed to check Rh-Immunoglobulin (Rhogam) Not Ordered for Reasons Documented by Clinician.

10. Check Rh-Immunoglobulin (Rhogam) Not Ordered for Reasons Documented by Clinician:

a. If Rh-Immunoglobulin (Rhogam) Not Ordered for Reasons Documented by Clinician equals Yes, include in Data Completeness Met and Denominator Exception.

b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 10 episodes in the Sample Calculation.

c. If Rh-Immunoglobulin (Rhogam) Not Ordered for Reasons Documented by Clinician equals No, proceed to check Documentation Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given.

11. Check Documentation Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given:

a. If Documentation Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given equals Yes, include in the 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 c equals 20 episodes in the Sample Calculation.

c. If Documentation Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given equals No, proceed to check Data Completeness Not Met.

12. Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 episodes have been subtracted from the Data Completeness Numerator in the Sample Calculation.

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**SAMPLE CALCULATIONS:**

Data Completeness =

Performance Met (a=40 episodes) + Denominator Exception (b=10 episodes) + Performance Not Met (c=20 episodes) = 70 episodes = 87.50%

Eligible Population / Denominator (d=80 episodes) = 80 episodes

Performance Rate =

Performance Met (a=40 episodes) = 46 episodes = 66.67%

Data Completeness Numerator (70 episodes) – Denominator Exception (b=10 episodes) = 60 episodes