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

2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

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 emergency department with complaints including blunt abdominal trauma, vaginal bleeding, ectopic pregnancy, and threatened or spontaneous abortion.

Registries may utilize claims data to determine the emergency department discharge. Patients who present to the emergency department with these complaints should have documentation in the medical record of receiving an order for Rh-Immunoglobulin (Rhogam). It is anticipated that eligible clinicians who provide care in the emergency department will submit this measure. For registries using claims data, the Part B claim form place of service field must indicate that the encounter has taken place in the emergency department.

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

Denominator Criteria (Eligible Cases):
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, O44.50, O44.31, 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 Part B 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)

*OR*

*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)

*OR*

*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.

**COPYRIGHT:**

This measure is owned by American College of Emergency Physicians.

**THESE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.**
2018 Registry Flow for Quality ID #255:
Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure

Denominator

Start

Female Patient Age at Date of Encounter 14 thru 50 Years

No

Yes

Diagnosis For Rh-Negative as Listed in Denominator

No

Yes

Not Included in Eligible Population/ Denominator

Diagnosis of High Risk Pregnancy Complications as Listed in Denominator

No

Yes

Encounter as Listed in Denominator (1/1/2018 thru 12/31/2018)

No

Yes

Place of Service: 23 Emergency Department (ED)**

No

Yes

Include in Eligible Population/ Denominator (80 episodes)

Numerator

Documentation in Medical Record that Rh-Immunoglobulin (Rhogam) Ordered

No

Yes

Data Completeness Met + Denominator Exception G8610 or Equivalent (40 episodes) a

Yes

Rh-Immunoglobulin (Rhogam) Not Ordered for Documented Reasons

No

Yes

Data Completeness Met + Denominator Exception G8610 or Equivalent (10 episodes) b

No

Yes

Rh-Immunoglobulin (Rhogam) Not Ordered, Reason Not Given

No

Yes

Data Completeness Met + Performance Not Met G8611 or Equivalent (23 episodes) c

No

Yes

Data Completeness Met + Performance Not Met Quality Data Code or Equivalent Not Submitted (10 episodes)

*See the posted Measure Specification for specific coding and instructions to submit this measure.
**Encounters must occur in the Emergency Department (ED).
NOTE: Submission Frequency – Episode

CPT only copyright 2017 American Medical Association. All rights reserved. The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitute for the measure specifications.
SAMPLE CALCULATIONS:

Data Completeness:
\[
\text{Performance Met (a=40 episodes) + Denominator Exception (b=10 episodes) + Performance Not Met (c=29 episodes) = 79 episodes = 87.40%}
\]

Eligible Population / Denominator (d=49 episodes) = 89 episodes

Performance Rate:
\[
\text{Performance Met (a=40 episodes) = 40 episodes = 66.67%}
\]

Data Completeness Numerator (79 episodes) - Denominator Exception (b=10 episodes) = 69 episodes

*See the posted Measure Specification for specific coding and instructions to submit this measure.
**Encounter must occur in the Emergency Department (ED).
NOTE: Submission Frequency = Episode
2018 Registry Flow for Quality ID #255: Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in submitting this Individual Measure. This flow is for registry data submission.

1. Start with Denominator

2. Check Patient Age and Gender:
   a. If the Female Age is equal to 14 thru 50 years of age on Date of Encounter equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Female Age is equal to 14 thru 50 years of age on Date of Encounter equals Yes during the measurement period, proceed to check Patient Diagnosis.

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

4. 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 Patient Population. Stop Processing.
   b. If Diagnosis of High Risk Pregnancy Complications as Listed in the Denominator equals Yes, proceed to check Encounter Performed.

5. 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, proceed to check Place of Service: 23 Emergency Department (ED)

6. Check Place of Service: 23 Emergency Department (ED):
   a. If Place of Service: 23 Emergency Department (ED) as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Place of Service: 23 Emergency Department (ED) as Listed in the Denominator equals Yes, include in the Eligible Population.

7. 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 80 episodes in the Sample Calculation.

8. Start Numerator
9. Check Documentation in Medical Record that Rh-Immunoglobulin (Rhogam) Ordered:
   a. If Documentation in Medical Record that 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 Documentation in Medical Record that Rh-Immunoglobulin (Rhogam) Ordered equals No, proceed to Rh-Immunoglobulin (Rhogam) Not Ordered for Documented Reasons.

10. Check Rh-Immunoglobulin (Rhogam) Not Ordered for Documented Reasons:
   a. If Rh-Immunoglobulin (Rhogam) Not Ordered for Documented Reasons equals Yes, include in Data Completeness Met and Performance Exception.
   b. Data Completeness Met and Denominator Exception 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 Documented Reasons equals No, proceed to Documentation Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given.

11. Check Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given:
   a. If 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 Rh-Immunoglobulin (Rhogam) was Not Ordered, Reason Not Given equals No, proceed to Data Completeness Not Met.

12. Check Data Completeness Not Met
   a. If Data Completeness Not Met equals No, Quality Data Code or equivalent was not submitted. 10 episodes have been subtracted from the Data Completeness Numerator in the Sample Calculation.

---

**SAMPLE CALCULATIONS:**

\[
\text{Data Completeness} = \frac{\text{Performance Met (a=40 episodes)}}{\text{Eligible Population}} = \frac{70 \text{ episodes}}{80 \text{ episodes}} = 87.50\% \\
\text{Performance Rate} = \frac{\text{Performance Met (a=40 episodes)}}{\text{Data Completeness Numerator (70 episodes)}} = \frac{40 \text{ episodes}}{60 \text{ episodes}} = 66.67\%
\]