Quality ID #254: Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain
- 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 pregnant female patients aged 14 to 50 who present to the emergency department (ED) with a chief complaint of abdominal pain or vaginal bleeding who receive a trans-abdominal or trans-vaginal ultrasound to determine pregnancy location

INSTRUCTIONS:
This measure is to be submitted each time a pregnant patient presents to the ED with a chief complaint of abdominal pain and/or vaginal bleeding during the performance period. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide care in the ED will submit this measure. 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 who present to the ED with a chief complaint of abdominal pain or vaginal bleeding

Denominator Criteria (Eligible Cases):
Pregnant females aged 14 to 50 on date of encounter
AND
Diagnosis of Other Current Condition in the Mother Classifiable Elsewhere but Complicating Pregnancy, Childbirth, or the Puerperium (ICD-10-CM): O26.891, O26.899, O26.90, O26.91
AND
OR
Diagnosis of Vaginal Bleeding (ICD-10-CM): O20.0, O20.8, O20.9, 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, O46.009, O46.011, O46.019, O46.021, O46.029, O46.091, O46.8X1, O46.8X9, O46.90, O46.91, O46.099
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 a trans-abdominal or trans-vaginal ultrasound with documentation of pregnancy location in medical record

**Numerator Instructions:**
This measure is to be submitted each time a patient meets the requirements as indicated in the denominator. If the clinician documents that the clinical event surrounding the patient, with or without performance of trans-abdominal or trans-vaginal ultrasound, does not meet the intent of the measure, submit quality-data code G8807.

**Numerator Options:**

**Performance Met:**
Performance of trans-abdominal or trans-vaginal ultrasound and pregnancy location documented (G8806)

**Denominator Exception:**
Trans-abdominal or trans-vaginal ultrasound not performed for reasons documented by clinician (e.g., patient has visited the ED multiple times within 72 hours, patient has a documented intrauterine pregnancy [IUP]) (G8807)

**Performance Not Met:**
Trans-abdominal or trans-vaginal ultrasound not performed, reason not given (G8808)

**RATIONALE:**
Ectopic Pregnancy is a relatively common condition which can result in morbidity or mortality if misdiagnosed resulting in a delay to appropriate treatment. Abdominal pain is a frequent presenting complaint of women with ruptured ectopic pregnancy. Pelvic ultrasound can establish a pregnancy as intrauterine and identify high risk features for ectopic pregnancy (pelvic free fluid, complex adnexal mass). Early ultrasound can shorten the time to diagnosis of ectopic pregnancy and can help risk stratify pregnant patients with the complaint of abdominal pain or vaginal bleeding for discharge with routine follow-up, discharge with early follow-up or admission.

**CLINICAL RECOMMENDATION STATEMENTS:**
Use of emergency ultrasound in pelvic disorders centers on the detection of intrauterine pregnancy (IUP), detection of ectopic pregnancy, detection of fetal heart rate in all stages of pregnancy, dating of the pregnancy, and detection of significant free fluid. Bedside pelvic ultrasound during the first trimester of pregnancy can be used to exclude ectopic pregnancy by demonstrating an intrauterine pregnancy. Studies of EP-performed ultrasound in this setting have demonstrated sensitivity of 76-90% and specificity of 88-92% for the detection of ectopic pregnancy. In one study, EPs were able to detect an intrauterine pregnancy in 70% of patients with suspected ectopic pregnancy (first trimester pregnancy with abdominal pain or vaginal bleeding). When intrauterine fetal anatomy was visualized at the bedside, ectopic pregnancy was ruled out with a negative predictive value of essentially 100%. When bedside ultrasound evaluation was incorporated into a clinical algorithm for the evaluation of patients with suspected ectopic pregnancy, the incidence of discharged patients returning with ruptured ectopic pregnancy was significantly reduced.

Perform or obtain a pelvic ultrasound for symptomatic pregnant patients with any β-hCG level. (Level B Recommendation) (ACEP, 2016)

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2019 Clinical Quality Measure Flow for Quality ID #254:
Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain

Start

Denominator

Pregnant Female Patient Age
on Date of Encounter
14 to 50 Years

No

Diagnosis of Other Current Condition in the Mother Classifiable Elsewhere but Complicating Pregnancy, Childbirth or the Puerperium

No

Diagnosis of Vaginal Bleeding as Listed in Denominator

No

Diagnosis of Abdominal Pain as Listed in Denominator

Yes

Performance of Trans-Abdominal or Trans-Vaginal Ultrasound and Pregnancy Location Documented

Yes

Data Completeness Met = Performance Met G8806 or equivalent (40 episodes)

a

No

Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed for Reasons Documented by Clinician

Yes

Data Completeness Met = Denominator Exception G8807 or equivalent (10 episodes)
b

No

Trans-Abdominal or Trans-Vaginal Ultrasound Not Given

Yes

Data Completeness Met = Performance Not Met G8808 or equivalent (20 episodes)
c

No

Data Completeness Not Met the Quality Data Code or equivalent was not submitted (10 episodes)


Numerator

Encounter as Listed in Denominator
(1/1/2019 thru 12/31/2019)

No

Not Included in Eligible Population / Denominator

Yes

Place of Service: 23 Emergency Department (ED)

Yes

Include in Eligible Population / Denominator (60 episodes)

d

See the pasted Measure Specification for the specific coding and instruction to submit this measure.

*Diagnosis listed of Other Current Condition in the Mother Classifiable Elsewhere but Complicating Pregnancy, Childbirth or the Puerperium.

**Encounter must occur in the Emergency Department (ED).

NOTE: Submission Frequency: Episode

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The Measure diagrams were developed by CINR as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specifications.
2019 Clinical Quality Measure Flow for Quality ID #254: Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain

**SAMPLE CALCULATIONS:**

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Completeness</td>
<td></td>
</tr>
<tr>
<td>Performance Met (a≥40 episodes) + Denominator Exception (b≥10 episodes) + Performance Met (c≥20 episodes) - Eligible Population / Denominator (d≥50 episodes)</td>
<td>70 episodes = 87.50%</td>
</tr>
<tr>
<td>Performance Rate</td>
<td></td>
</tr>
<tr>
<td>Performance Met (a≥40 episodes)</td>
<td>50 episodes = 66.67%</td>
</tr>
<tr>
<td>Data Completeness Numerator (70 episodes) - Denominator Exception (b≥10 episodes)</td>
<td>90 episodes</td>
</tr>
</tbody>
</table>

**NOTE:** Submission Frequency: Episode
2019 Clinical Quality Measure Flow Narrative for Quality ID #254:
Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification.

1. Start with Denominator

2. 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 Other Current Condition in the Mother Classifiable Elsewhere.

3. Check Diagnosis of Other Current Condition in the Mother Classifiable Elsewhere:
   a. If Diagnosis of Other Current Condition in the Mother Classifiable Elsewhere as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of Other Current Condition in the Mother Classifiable Elsewhere as Listed in the Denominator equals Yes, proceed to check Diagnosis of Abdominal Pain.

4. Check Diagnosis of Abdominal Pain:
   a. If Diagnosis of Abdominal Pain as Listed in the Denominator equals No, proceed to check Diagnosis of Vaginal Bleeding.
   b. If Diagnosis of Abdominal as Listed in the Denominator equals Yes, proceed to check Encounter Performed.

5. Check Diagnosis of Vaginal Bleeding:
   a. If Diagnosis of Vaginal Bleeding as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of Vaginal Bleeding as Listed in the Denominator equals Yes, proceed to check Encounter Performed.

6. 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).

7. 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.
8. 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.

9. Start Numerator

10. Check Performance of Trans-Abdominal or Trans-Vaginal Ultrasound and Pregnancy Location Documented:
   a. If Performance of Trans-Abdominal or Trans-Vaginal Ultrasound and Pregnancy Location Documented equals Yes, include in Data Completeness Met and Performance Met.
   b. Data Completeness Met and Performance Met 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 Performance of Trans-Abdominal or Trans-Vaginal Ultrasound and Pregnancy Location Documented equals No, proceed to check Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed for Reasons Documented by Clinician.

11. Check Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed for Reasons Documented by Clinician:
   a. If Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed for Reasons Documented by Clinician equals Yes, include in Data Completeness Met and Denominator 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 Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed for Reasons Documented by Clinician equals No, proceed to check Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed, Reason Not Given.

12. Check Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed, Reason Not Given:
   a. If Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed, Reason Not Given equals Yes, include in the Data Completeness Met and Performance Not Met.
   b. Data Completeness Met and Performance Not Met 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 Trans-Abdominal or Trans-Vaginal Ultrasound Not Performed, Reason Not Given equals No, proceed to check Data Completeness Not Met.

13. 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.
**SAMPLE CALCULATIONS:**

Data Completeness

\[
\text{Performance Met (a=40 episodes)} + \text{Denominator Exception (b=10 episodes)} + \text{Performance Not Met (c=20 episodes)} = \frac{\text{Eligible Population}}{\text{Denominator (d=80 episodes)}} = \frac{70 \text{ episodes}}{80 \text{ episodes}} = 87.50\%
\]

Performance Rate

\[
\text{Performance Met (a=40 episodes)} = \frac{40 \text{ episodes}}{60 \text{ episodes}} = 66.66\%
\]

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