Quality ID #360: Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies – National Quality Strategy Domain: Patient Safety

2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Process

DESCRIPTION:
Percentage of computed tomography (CT) and cardiac nuclear medicine (myocardial perfusion studies) imaging reports for all patients, regardless of age, that document a count of known previous CT (any type of CT) and cardiac nuclear medicine (myocardial perfusion) studies that the patient has received in the 12-month period prior to the current study

INSTRUCTIONS:
This measure is to be submitted each time a procedure for a CT imaging report is performed during the performance period. There is no diagnosis associated with this measure. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

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 submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:
All final reports for patients, regardless of age, undergoing a CT procedure

DENOMINATOR NOTE: *Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for registry-based measures.

Denominator Criteria (Eligible Cases):
All patients regardless of age
AND
Patient procedure during the performance period (CPT): 70450, 70460, 70470, 70480, 70481, 70482, 70486, 70487, 70488, 70490, 70491, 70492, 70496, 70498, 71250, 71260, 71270, 71275, 72125, 72126, 72127, 72128, 72129, 72130, 72131, 72132, 72133, 72191, 72192, 72193, 72194, 73200, 73201, 73202, 73206, 73700, 73701, 73702, 73706, 74150, 74160, 74170, 74174, 74175, 74176, 74177, 74178, 74261, 74262, 74263*, 75571, 75572, 75573, 75574, 75635, 76390, 76497, 77011, 77012, 77014, 77013, 77078, 78072, 78451, 78452, 78453, 78454, 78491, 78492, 78814, 78815, 78816, 0042T

NUMERATOR:
CT and cardiac nuclear medicine (myocardial perfusion studies) imaging reports that document a count of known previous CT (any type of CT) and cardiac nuclear medicine (myocardial perfusion) studies that the patient has received in the 12-month period prior to the current study

Numerator Instructions:
Physicians will need to document in the final report all known previous CT and cardiac nuclear medicine (myocardial perfusion) studies the patient has received in the 12-month period prior to the current study as a count that includes studies from the Radiology Information System, patient-provided radiological history or other source.

**Numerator Options:**

**Performance Met:** Count of previous CT (any type of CT) and cardiac nuclear medicine (myocardial perfusion) studies documented in the 12-month period prior to the current study (G9321)

**OR**

**Performance Not Met:** Count of previous CT and cardiac nuclear medicine (myocardial perfusion) studies not documented in the 12-month period prior to the current study, reason not given (G9322)

**RATIONALE:**
Increased CT use has resulted in growing rates of repeat or multiple imaging. (Griffey RT, Sodickson A, 2009)

Physicians may lack important information that could inform their decisions in ordering imaging exams that use ionizing radiation. Ordering physicians may not have access to patients' medical imaging or radiation dose history. Due to insufficient information, physicians may unnecessarily order imaging procedures that have already been conducted. (US Food and Drug Administration, 2010)

**CLINICAL RECOMMENDATION STATEMENTS:**
Radiologists, medical physicists, radiologic technologists, and all supervising physicians have a responsibility to minimize radiation dose to individual patients, to staff, and to society as a whole, while maintaining the necessary diagnostic image quality. (ACR, 2008)

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2018 Registry Flow for Quality ID #360: Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies

**Denominator**

Start

- Not Included in Eligible Population/Denominator

All Patients Regardless of Age

- Procedure Codes as Listed in Denominator* (1/1/2016 thru 12/31/2016)

- Include in Eligible Population/Denominator (60 procedures)

**Numerator**

Count of Previous CT (any Type of CT) and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies Documented in the 12 Month Period Prior to the Current Study

- Data Completeness Met = Performance Met G0321 or Equivalent (60 procedures)

- Data Completeness Met = Performance Met G0322 or Equivalent (10 procedures)

- Data Completeness Not Met = Quality Data Code or Equivalent Not Submitted (10 procedures)

**Sample Calculations:**

Data Completeness:

Performance Met (60 procedures) + Performance Not Met (10 procedures) = 70 procedures = 100%

Eligible Population / Denominator (60 procedures) = 60 procedures

Performance Rate:

Performance Met (60 procedures) = 60 procedures = 87.50%

Data Completeness Numerator (70 procedures) = 70 procedures

* See the posted Measure Specification for specific coding and instructions to submit this measure.

**NOTE:** Submission Frequency: Procedure

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Version 2.0

12/11/2017
2018 Registry Flow For Quality ID

#360: Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies

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

1. Start with Denominator

2. Check Patient Age:
   a. If the All patients, Regardless of Age equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the All patient, Regardless of Age equals Yes during the measurement period, proceed to check Procedure Performed

3. Check Procedure:
   a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Procedure as Listed in the Denominator equals Yes, include in the Eligible Population.

4. 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 procedures in the Sample Calculation.

5. Start Numerator

6. Check Count of Previous CT (any Type of CT) and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies Documented in the 12-Month Period Prior to the Current Study:
   a. If Count of Previous CT (any Type of CT) and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies Documented in the 12-Month Period Prior to the Current Study 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 60 procedures in the Sample Calculation.
   c. If Count of Previous CT (any Type of CT) and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies Documented in the 12-Month Period Prior to the Current Study equals No, proceed to Check Count of Previous CT and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies not Documented in the 12-Month Period Prior to the Current Study, Reason Not Given.

7. Check Count of Previous CT and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies not Documented in the 12-Month Period Prior to the Current Study, Reason Not Given:
   a. If Count of Previous CT and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies not Documented in the 12-Month Period Prior to the Current Study, Reason Not Given equals Yes, include in 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 10 procedures in the Sample Calculation.

c. If Count of Previous CT and Cardiac Nuclear Medicine (Myocardial Perfusion) Studies not Documented in the 12-Month Period Prior to the Current Study, Reason Not Given equals No, proceed to Data Completeness Not Met.

8. Check Data Completeness Not Met:

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

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<thead>
<tr>
<th>SAMPLE CALCULATIONS:</th>
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<tbody>
<tr>
<td>Data Completeness =</td>
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<tr>
<td>Performance Met (a=60 procedures) + Performance Not Met (c=10 procedures) = 70 procedures,  = 87.50%</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d=80 procedures) = 80 procedures</td>
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Performance Rate:|
| Performance Met (a=60 procedures) = 60 procedures,  = 85.71% |
| Data Completeness Numerator (70 procedures) = 70 procedures |