Measure #147: Nuclear Medicine: Correlation with Existing Imaging Studies for All Patients Undergoing Bone Scintigraphy – National Quality Strategy Domain: Communication and Care Coordination

2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES: CLAIMS, REGISTRY

DESCRIPTION:
Percentage of final reports for all patients, regardless of age, undergoing bone scintigraphy that include physician documentation of correlation with existing relevant imaging studies (e.g., x-ray, MRI, CT, etc.) that were performed

INSTRUCTIONS:
This measure is to be reported each time bone scintigraphy is performed during the reporting period. There is no diagnosis associated with this measure. It is anticipated clinicians who perform the professional component of the bone scintigraphy study will report on this measure.

Measure Reporting via Claims:
CPT codes are used to identify patients who are included in the measure’s denominator. CPT Category II codes are used to report the numerator of the measure.

When reporting the measure via claims, submit the listed CPT codes, and the appropriate CPT Category II code OR the CPT Category II code with the modifier. The modifiers allowed for this measure are: 3P- system reasons, 8P- reason not otherwise specified. All measure-specific coding should be reported on the claim(s) representing the eligible encounter.

Measure Reporting via Registry:
CPT codes are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of 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 final reports for patients, regardless of age, undergoing bone scintigraphy

Denominator Criteria (Eligible Cases):
Patient encounter during the reporting period (CPT): 78300, 78305, 78306, 78315, 78320

NUMERATOR:
Final reports that include physician documentation of correlation with existing relevant imaging studies (e.g., x-ray, MRI, CT, etc.)

Definition:
Relevant Imaging Studies – Relevant imaging studies are defined as studies that correspond to the same anatomical region in question.

Numerator Quality-Data Coding Options for Reporting Satisfactorily:
Bone Scintigraphy Report Correlated with Existing Studies

Performance Met: CPT II 3570F:
Final report for bone scintigraphy study includes correlation with existing relevant imaging studies (eg, x-ray, MRI, CT) corresponding to the same anatomical region in question
OR

**Bone Scintigraphy Report not Correlated for System Reasons**
Append a modifier (3P) to CPT Category II code 3570F to report documented circumstances that appropriately exclude patients from the denominator.

*System Performance Exclusion: 3570F with 3P:* Documentation of system reason(s) for not documenting correlation with existing relevant imaging studies in final report (eg, no existing relevant imaging study available, patient did not have a previous relevant imaging study)

*Note:* Correlative studies are considered to be unavailable if relevant studies (reports and/or actual examination material) from other imaging modalities exist but could not be obtained after reasonable efforts to retrieve the studies are made by the interpreting physician prior to the finalization of the bone scintigraphy report.

OR

**Bone Scintigraphy Report not Correlated, Reason not Otherwise Specified**
Append a reporting modifier (8P) to CPT Category II code 3570F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

*Performance Not Met: 3570F with 8P:* Bone scintigraphy report not correlated in the final report with existing relevant imaging studies, reason not otherwise specified

**RATIONALE:**
Radionuclide bone imaging plays an integral part in tumor staging and management; the majority of bone scans are performed in patients with a diagnosis of malignancy, especially carcinoma of the breast, prostate gland, and lung. This modality is extremely sensitive for detecting skeletal abnormalities, and numerous studies have confirmed that it is considerably more sensitive than conventional radiography for this purpose. However, the specificity of bone scan abnormalities can be low since many other conditions may mimic tumor; therefore, it is important that radionuclide bone scans are correlated with available, relevant imaging studies. Existing imaging studies that are available can help inform the diagnosis and treatment for the patient. Furthermore, correlation with existing radiographs is considered essential to insure that benign conditions are not interpreted as tumor. While there are no formal studies on variations in care in how often correlation with existing studies is not performed, there is significant anecdotal information from physicians practicing in the field that there is a gap in care and that correlation is not occurring frequently when images are available.

Literature suggests that as many as 30% of Radiology reports contain errors, regardless of the imaging modality, radiologists’ experience, or time spent in interpretation. Evidence has also suggested that Radiology reports are largely non-standardized and commonly incomplete, vague, untimely, and error-prone and may not serve the needs of referring physicians. Therefore, it is imperative that existing imaging reports be correlated with the Nuclear Medicine bone scintigraphy procedure to ensure proper diagnosis and appropriate patient treatment.

**CLINICAL RECOMMENDATION STATEMENTS:**
Bone scintigraphic abnormalities should be correlated with appropriate physical examination and imaging studies to ascertain that osseous or soft-tissue abnormalities, which might cause cord or other nerve compression or pathologic fracture in an extremity, are not present. (SNM, 2003)

**Interpretation criteria**
Bone scans are very sensitive for disease, but specificity of findings is low and must be interpreted in light of other information

1. History
2. Physical exam
3. Other test results
4. Comparison with previous studies

(SNM, 2003)

Reporting

1. Description of technique
2. Description of abnormal tracer uptake
3. Correlation with other studies
4. Comparison with previous studies
5. Interpretation

(SNM, 2003)

Comparisons with previous examinations and reports, when possible, should be a part of the imaging consultation and report. Integrated PET/CT studies are more valuable when correlated with previous diagnostic CT, previous PET, previous PET/CT, previous MRI, and all appropriate imaging studies and clinical data that are relevant. (SNM, 2010)

As bone tracer concentration reflects osteoblastic activity which is a common response to a wide range of pathologies, a focus of abnormal tracer concentration should not be confidently assigned to a particular pathology without a typical pattern of tracer distribution such as multiple randomly placed foci in metastatic bone disease or multiple aligned foci of rib uptake in trauma. In the absence of this, correlation of foci or uptake with alternative modality images such as plain radiographs, MR or CT images should be reviewed when available as this can significantly increase the accuracy of bone scintigraphy interpretation. (BNMS, 2014)

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2016 Claims/Registry Individual Measure Flow

PQRS #147: Nuclear Medicine: Correlation with Existing Imaging Studies for All Patients Undergoing Bone Scintigraphy

Start

Denominator

Not Included in Eligible Population/Denominator

No

Encounter as Listed in Denominator* (1/1/2016 thru 12/31/2016)

Yes

Include in Eligible Population/Denominator (8 procedures) d

Final Report for Bone Scintigraphy Study Includes Correlation with Existing Relevant Imaging Studies Corresponding to the Same Anatomical Region in Question

Yes

Reporting Met + Performance Met 3570F or equivalent (3 procedures) a

No

Documented System Reason(s) for Not Documenting Correlation with Existing Relevant Imaging Studies in Final Report

Yes

Reporting Met + Performance Exclusion 3570-3P or equivalent (2 procedures) b

No

Bone Scintigraphy Report Not Correlated in the Final Report with Existing Relevant Imaging Studies, Reason Not Specified

Yes

Reporting Met + Performance Not Met 3570-6P or equivalent (2 procedures) c

No

Reporting Not Met Quality Data Codes or equivalent not reported (1 procedure)

SAMPLE CALCULATIONS:

<table>
<thead>
<tr>
<th>Performance Met (≥3 procedures)</th>
<th>Performance Exclusion (≥2 procedures)</th>
<th>Performance Not Met (≥7 procedures)</th>
<th>Eligible Population / Denominator (≥8 procedures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Rate = 87.50%</td>
<td>Eligible Population / Denominator = 8 procedures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting Rate = Performance Met (≥3 procedures)</th>
<th>Performance Exclusion (≥2 procedures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Numerator (≥7 procedures) – Performance Exclusion (≥2 procedures) = 60.00%</td>
<td></td>
</tr>
</tbody>
</table>

* See the posted Measure Specification for specific coding and instructions to report this measure. 
NOTE: Report Frequency – Procedure
2016 Claims/Registry Individual Measure Flow
PQRS #147: Nuclear Medicine: Correlation with Existing Imaging Studies for All Patients Undergoing Bone Scintigraphy

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

1. Start with Denominator

2. 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, include in the Eligible population.

3. 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 8 procedures in the sample calculation.

4. Start Numerator

5. Check Final Report for Bone Scintigraphy Study Includes Correlation with Existing Relevant Imaging Studies Corresponding to the Same Anatomical Region in Question:
   a. If Final Report for Bone Scintigraphy Study Includes Correlation with Existing Relevant Imaging Studies Corresponding to the Same Anatomical Region in Question equals Yes, include in Reporting Met and Performance Met.
   b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 3 procedures in Sample Calculation.
   c. If Final Report for Bone Scintigraphy Study Includes Correlation with Existing Relevant Imaging Studies Corresponding to the Same Anatomical Region in Question equals No, proceed to Documentation of System Reason(s) for Not Documenting Correlation with Existing Relevant Imaging Studies in Final Report.

6. Check Documentation of System Reason(s) for Not Documenting Correlation with Existing Relevant Imaging Studies in Final Report:
   a. If Documentation of System Reason(s) for Not Documenting Correlation with Existing Relevant Imaging Studies in Final Report equals Yes, include in Reporting Met and Performance Exclusion.
   b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter b equals 2 procedures in the Sample Calculation.
   c. If Documentation of System Reason(s) for Not Documenting Correlation with Existing Relevant Imaging Studies in Final Report equals No, proceed to one Scintigraphy Report Not Correlated in the Final Report with Existing Relevant Imaging Studies, Reason not Specified.
7. Check Bone Scintigraphy Report Not Correlated in the Final Report with Existing Relevant Imaging Studies, Reason not Specified:
   

b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c equals 2 procedures in the Sample Calculation.


8. Check Reporting Not Met:
   
a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 procedure has been subtracted from the reporting numerator in the sample calculation.

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**SAMPLE CALCULATIONS:**

<table>
<thead>
<tr>
<th>Reporting Rate</th>
<th>Performance Met (a=3 procedures) + Performance Exclusion (b=2 procedures) + Performance Not Met (c=2 procedures) = 7 procedures, = 87.50%</th>
</tr>
</thead>
</table>
|                | Eligible Population / Denominator (d=8 procedures) = 8 procedures

<table>
<thead>
<tr>
<th>Performance Rate</th>
<th>Performance Met (a=3 procedures) = 3 procedures = 60.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Numerator (7 procedures) – Performance Exclusion (b=2 procedures) = 5 procedures</td>
<td></td>
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</table>