Quality ID #405: Appropriate Follow-up Imaging for Incidental Abdominal Lesions
– National Quality Strategy Domain: Effective Clinical Care
– Meaningful Measure Area: Appropriate Use of Healthcare

2021 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Process – High Priority

DESCRIPTION:
Percentage of final reports for imaging studies for patients aged 18 years and older with one or more of the following noted incidentally with a specific recommendation for no follow-up imaging recommended based on radiological findings:

- Cystic renal lesion that is simple appearing* (Bosniak I or II)
- Adrenal lesion less than or equal to 1.0 cm
- Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign or diagnostic benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols

INSTRUCTIONS:
This measure is to be submitted each time a patient undergoes an imaging study with an incidental abdominal lesion finding during the performance period. There is no diagnosis associated with this measure. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide the professional component of diagnostic imaging studies will submit this measure.

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 final reports for imaging studies for patients aged 18 years and older with one or more of the following incidentally noted:

- Cystic renal lesion that is simple appearing (Bosniak I or II) or
- Adrenal lesion less than or equal to 1.0 cm or
- Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign or diagnostic benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols

DENOMINATOR NOTE: The intent of this measure is to ensure patients with incidental findings that are highly likely to be benign do not receive follow up imaging routinely.

* “Simple-appearing criteria”:

- Incidental renal mass on non-contrast enhanced abdominal CT that does not contain fat, is homogenous in appearance, -10-20 HU or ≥70 HU. (ACR, 2017)
Incidental renal mass on contrast-enhanced abdominal CT that does not contain fat, is homogenous in appearance, -10-20 HU. (ACR, 2017)

When reporting this measure, masses and lesions that do not meet all the criteria for “no further work-up” as provided in Management of the Incidental Renal Mass on CT: A White Paper of the ACR Incidental Findings Committee or the Management of the Incidental Adrenal Mass on CT: A White Paper of the ACR Incidental Findings Committee should not be considered in the context or intent of this measure. However, generally accepted radiology practices should be followed with respect to communication and management of any characteristically benign findings. A measure performance goal of 100% should not substitute for clinical judgment in individual cases.

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years on date of encounter
AND
Patient procedure during the performance period (CPT): 71250, 71260, 71270, 71275, 71555, 72131, 72191, 72192, 72193, 72194, 72195, 72196, 72197, 72198, 74150, 74160, 74170, 74176, 74177, 74178, 74181, 74182, 74183, G0297
AND
Incidental finding: Cystic renal lesion that is simple appearing (Bosniak I or II), or Adrenal lesion less than or equal to 1.0 cm or Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols: G9547

NUMERATOR:
Final reports for imaging studies that include a description of incidental cystic renal lesion or adrenal lesion stating follow-up imaging is not recommended

Numerator Instructions:
A short note can be made in the final report, such as:

- “No follow-up imaging is recommended as incidental lesions are likely benign” or
- “No follow-up imaging is recommended per consensus recommendations based on imaging criteria. Further lab evaluation could be pursued based on clinical findings.”

Numerator Options:
Performance Met: Final reports for imaging studies stating no follow-up imaging is recommended (G9548)

OR

Denominator Exception: Documentation of medical reason(s) that follow-up imaging is indicated (e.g., patient has lymphadenopathy, signs of metastasis or an active diagnosis or history of cancer, and other medical reason(s) (G9549)

OR

Performance Not Met: Final reports for imaging studies with follow-up imaging recommended, or final reports that do not include a specific recommendation of no follow-up (G9550)

RATIONALE:
Incidental renal and adrenal lesions are commonly found during imaging studies where the abdomen can be viewed, with most of the findings being benign. Given the low rate of malignancy, unnecessary follow-up procedures
are costly and present a significant burden to patients. To avoid excessive testing and costs, follow-up is not recommended for these small lesions.

**CLINICAL RECOMMENDATION STATEMENTS:**

The ACR Incidental Findings Committee recommends the following considerations for incidental renal masses:

**Overview:**
Incidental renal masses are a common problem in imaging; an algorithm is provided to guide management of the incidental renal mass based on imaging features.

- Key properties of the algorithm include (1) guidance based on the CT examination on which the mass was detected; (2) guidance for solid, cystic, and fat-containing masses; (3) acknowledgment that many renal masses that are too small to characterize (TSTC) are either benign or otherwise insignificant; (4) incorporation of renal mass biopsy as a diagnostic tool; and (5) surveillance of subcentimeter solid renal masses.

- The importance of shared decision making between patients and physicians is emphasized, particularly in patients with limited life expectancy and comorbidities.

1) Although most renal masses on unenhanced CT are incompletely characterized, a homogenous lesion between -10 and 20 HU is highly likely to be a benign cyst. (ACR, 2017)

2) Although the majority of lesions are characterized on initial imaging, one definition for the indeterminate renal mass is a lesion containing areas that measure 20-70 Hounsfield units (HU) on noncontrast imaging. Homogenous lesions measuring <20 HU or >70 HU can be considered benign, whereas lesions either entirely or partially within the 20-70 HU range should be considered indeterminate and warrant further evaluation. (ACR, 2015)

3) A homogenous lesion 70 HU or greater on unenhanced CT can confidently be diagnosed as a hyperdense Bosniak II cyst requiring no further characterization or treatment. Further characterization of these masses would add anxiety and cost and is unlikely to alter the diagnosis. (ACR, 2017)

4) The hyperdense cyst can present a diagnostic problem in that its initial attenuation coefficients are high, which can theoretically obscure tiny papillary projections along its wall. However, a homogenous renal mass measuring >70 HU at unenhanced CT has been shown to have a >99.9% chance of representing a high-attenuation renal cyst rather than RCC. (ACR, 2015)

5) Any homogenous renal mass on contrast-enhanced CT between -10 and 20 HU is a benign simple cyst, not requiring further evaluation. (ACR, 2017)

6) For a lesion characterized as a cystic renal mass, that is, one predominantly consisting of homogenous round or oval regions without measurable enhancement, we advocate using the Bosniak classification system. Bosniak I and II cystic masses are reliably considered benign and need no follow up. (ACR, 2017)

7) Although there are no data to suggest how to manage very small (<1 cm) renal masses, some feel that if the lesion in question appears to be a simple cyst—i.e., a low-attenuation (0-20 HU) mass containing no septations, nodularity, calcifications, or enhancement—it can be presumed to be benign and need not be further pursued. (ACR, 2015)

sequences or equivalent protocols examinations for adrenal masses:

1) If an adrenal mass has diagnostic features of a benign lesion such as a myelolipoma (presence of macroscopic fat) or cyst (simple cyst-appearing without enhancement), no additional workup or follow-up imaging is needed.

2) If the lesion is 1 to 4 cm and has a density of $\leq 10$ HU on CT or signal loss compared with the spleen on out-of-phase images of a chemical-shift MRI (CS-MRI) examination, it is almost always diagnostic of a lipid-rich adenoma. If there are no diagnostic benign imaging features but the adrenal mass has been stable for $\geq 1$ year or longer, it is very likely benign requiring no additional imaging. (ACR, 2017)


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2021 Clinical Quality Measure Flow for Quality ID #405:
Appropriate Follow-up Imaging for Incidental Abdominal Lesions

Disclaimer: Please refer to the measure specification for specific coding and instructions to submit this measure.

Data Completeness =
Performance Met (a=40 procedures) + Denominator Exception (b=10 procedures) + Performance Not Met (c=20 procedures) = 70 procedures = 87.50%
Eligible Population / Denominator (d=80 procedures) = 80 procedures

Performance Rate =
Performance Met (a=40 procedures) = 40 procedures = 66.67%
Data Completeness Numerator (70 procedures) – Denominator Exception (b=10 procedures) = 60 procedures

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

NOTE: Submission Frequency: Procedure
2021 Clinical Quality Measure Flow Narrative for Quality ID #405:
Appropriate Follow-up Imaging for Incidental Abdominal Lesions

Disclaimer: Please refer to the measure specification for specific coding and instructions to submit this measure.

1. Start with Denominator

2. Check Patient aged greater than or equal to 18 years on date of encounter:
   a. If Patient aged greater than or equal to 18 years on date of encounter equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Patient aged greater than or equal to 18 years on date of encounter equals Yes, proceed to check Patient procedure during the performance period as listed in Denominator*.

3. Check Patient procedure during the performance period as listed in Denominator*:
   a. If Patient procedure during the performance period as listed in Denominator* equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Patient procedure during the performance period as listed in Denominator* equals Yes, proceed to check Incidental Finding: Cystic renal lesion that is simple appearing (Bosniak I or II), or Adrenal lesion less than or equal to 1.0 cm or Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols.

4. Check Incidental Finding: Cystic renal lesion that is simple appearing (Bosniak I or II), or Adrenal lesion less than or equal to 1.0 cm or Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols:
   a. If Incidental Finding: Cystic renal lesion that is simple appearing (Bosniak I or II), or Adrenal lesion less than or equal to 1.0 cm or Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Incidental Finding: Cystic renal lesion that is simple appearing (Bosniak I or II), or Adrenal lesion less than or equal to 1.0 cm or Adrenal lesion greater than 1.0 cm but less than or equal to 4.0 cm classified as likely benign by unenhanced CT or washout protocol CT, or MRI with in- and opposed-phase sequences or other equivalent institutional imaging protocols equals Yes, include in Eligible Population/Denominator.

5. Denominator Population:
   • Denominator Population is all Eligible Procedures 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.

6. Start Numerator

7. Check Final reports for imaging studies stating no follow-up imaging is recommended:
   a. If Final reports for imaging studies stating no follow-up imaging is recommended equals Yes, include in Data Completeness Met and Performance Met.
b. If Final reports for imaging studies stating no follow-up imaging is recommended equals No, proceed to check Documentation of medical reason(s) that follow-up imaging is indicated.

8. Check Documentation of medical reason(s) that follow-up imaging is indicated:
   a. If Documentation of medical reason(s) that follow-up imaging is indicated equals Yes, include in Data Completeness Met and Denominator Exception.

   • 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 procedures in the Sample Calculation.

   b. Documentation of medical reason(s) that follow-up imaging is indicated equals No, proceed to check Final reports for imaging studies with follow-up imaging recommended.

9. Check Final reports for imaging studies with follow-up imaging recommended:
   a. If Final reports for imaging studies with follow-up imaging recommended equals Yes, include in Data Completeness Met and Performance Not Met.

   • 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 procedures in the Sample Calculation.

   b. If Final reports for imaging studies with follow-up imaging recommended equals No, proceed to check Data Completeness Not Met

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

**Sample Calculations**

Data Completeness equals Performance Met (a equals 40 procedures) plus Denominator Exception (b equals 10 procedures) plus Performance Not Met (c equals 20 procedures) divided by Eligible Population/Denominator (d equals 80 procedures). All equals 70 procedures divided by 80 procedures. All equals 87.50 percent.

Performance Rate equals Performance Met (a equals 40 procedures) divided by Data Completeness Numerator (70 procedures) minus Denominator Exception (b equals 10 procedures). All equals 40 procedures divided by 60 procedures. All equals 66.67 percent.

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

**NOTE: Submission Frequency: Procedure**

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 substitution for the measure specification.