**CMS Measure ID/CMS QCDR ID:** CAP 37  
**Measure Title:** Cancer Protocol for Gynecologic and Genitourinary Carcinomas: Carcinoma of the Endometrium, Prostate, and of Renal Tubular Origin

### Measure Specifications

<table>
<thead>
<tr>
<th>Measure Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of all eligible pathology reports for specimens of carcinoma of the endometrium, prostate and renal tubular origin in which the required data elements of the gynecologic and genitourinary Cancer Protocols are recorded AND meet the maximum 4 business day turnaround time (TAT) requirement (Report Date – Accession Date ≤ 4 business days).</td>
</tr>
</tbody>
</table>

**INSTRUCTIONS:** This measure has two performance rates that contribute to the overall performance score:

1. Percent of cases for which specified data elements for all cancer protocols are recorded.
2. Percent of cases that meet the maximum 4 business day turnaround time.

The overall performance score submitted is a weighted average of:

(Performance rate 1 x 70%) + (Performance rate 2 x 30%)

### Denominator Statement

All final pathology reports for eligible specimens of carcinoma of the endometrium, prostate, and renal tubular origin that require the use of a CAP Cancer Protocol.

CPT®\(^1\): 88307, 88309

**AND**

Any of the ICD10:
- C61: malignant neoplasm of prostate
- C64.1: malignant neoplasm of right kidney, except renal pelvis
- C64.2: malignant neoplasm of left kidney, except renal pelvis
- C64.9: malignant neoplasm of unspecified kidney, except renal pelvis
- C54.0: malignant neoplasm of isthmus uteri
- C54.1: malignant neoplasm of endometrium
- C54.3: malignant neoplasm of fundus uteri
- C54.8: malignant neoplasm of overlapping sites of corpus uteri
- C54.9: malignant neoplasm of corpus uteri, unspecified

The denominator must be met between 01/01/2022 and 12/26/2022. This is to provide sufficient time for the performance of the numerator to be met within the performance period.

### Denominator Exclusions

None

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## Denominator Exceptions

- Biopsy procedures
- Cytology procedures
- Lymphomas
- Sarcomas
- Resection specimens with no residual tumors
- Carcinomas arising in the uterine cervix
- Metastatic malignancy to one of these organs
- OR
- Cases requiring intradepartmental or extra-departmental consultation

## Numerator Statement

All eligible cases where the following required elements found in the current CAP Cancer Protocol are recorded:

- Procedure
- Histologic Grade
- Histologic Type
- Margin status
- Lymphovascular invasion (endometrial and renal tubular carcinoma only)
- Regional Lymph Nodes*
  - Number of Nodes Examined
  - Number of Nodes Involved
- Pathologic Stage Classification: AJCC 8th Edition
  - TNM Descriptors
  - Primary Tumor (pT)
  - Regional Lymph Nodes (pN)*
  - Distant Metastases (pM)*
- Myometrial Invasion (endometrial carcinoma only)
- Uterine Serosa Involvement (endometrial carcinoma only)
- Cervical Stroma Involvement (endometrial carcinoma only)
- Extraprostatic extension (prostate carcinoma only)
- Urinary Bladder Neck Invasion (prostate carcinoma only)
- Seminal Vesicle Invasion (prostate carcinoma only)
- Treatment Effect (prostate carcinoma only)
- Specimen Laterality (renal tubular carcinoma only)
- Tumor Extension (renal tubular carcinoma only)
- Tumor Size (renal tubular carcinoma only)
- Tumor Focality (renal tubular carcinoma only)
- Tumor Necrosis (renal tubular carcinoma only)
- Sarcomatoid Features (renal tubular carcinoma only)
- Rhabdoid Features (renal tubular carcinoma only)

* Required only if appropriate tissue/sample is present, can be omitted if no lymph nodes/distant metastases are provided

**AND**
<table>
<thead>
<tr>
<th>Numerator Exclusions</th>
<th>None</th>
</tr>
</thead>
</table>

**Guidance**

Denominator definitions:

Eligible uterine resection cases include:
- Total Hysterectomy
- Supracervical Hysterectomy
- Radical Hysterectomy

Eligible kidney resection cases include:
- Partial Nephrectomy
- Total Nephrectomy
- Radical Nephrectomy

Eligible prostate resection cases include:
- Radical prostatectomy

The numerator of Rate 1 is defined as cases of carcinoma of the endometrium or renal tubular origin for which all required data elements of the Prostate Resection, Kidney Resection, and Endometrium Uterus Cancer Protocols are included. If a case does not include one of the listed data elements, it may not be included in the Numerator for Rate 1 (including cases that qualify for the Kidney Biopsy, Prostate TURP, Ovary Fallopian Tube Peritoneum and Uterine Cervix protocols). A case that does not include all the required data elements may be included in the Numerator of Rate 2 if the required turnaround time is met.

Numerator definitions for Rate 2:

1. Turnaround Time (TAT): The day the specimen is accessioned in the lab to the day the final report is signed out. Business days counted only.
2. Accession Date: The date recorded in the laboratory/hospital information system that documents when a specimen was received by the laboratory.
3. Report Date: The date recorded in the laboratory/hospital information system that documents when a result is verified (i.e. released with a final diagnosis) by the pathologist, reported by the laboratory information system and available to the requesting physician(s)
Meaningful Measure Rationale

The CAP cancer protocols have been thoroughly researched and have been determined to contain all the elements that a clinician would need to appropriately treat a patient with a malignant disease. Therefore, utilizing all the required elements found in a CAP protocol for malignant cases should be the very definition of a high-quality report and serve as a measure of pathologist performance. An accurate and complete diagnosis as would be found in a high-quality pathology report with the CAP cancer template is crucial to successful patient treatment and outcomes. The cancer protocols standardize the collection and reporting of all cancer patient data, facilitates communication between pathologists, clinicians and cancer registrars, and improves and supports information exchange and data interoperability (1).

Turnaround time (TAT) is an indicator of efficiency in anatomic pathology and may affect coordination of patient care. Timely pathology reports are one of the most important tools physicians use to adequately manage the quality and safety of patient care. The implication of surgical pathology report delay, as shown in research evidence, is that prolonged turnaround time plays a major role in disease complications, including raising morbidity and mortality rates. Therefore, verifying pathology reports in an appropriate timeframe helps healthcare practitioners with timely diagnosis and more effective treatment planning (2-4).


<table>
<thead>
<tr>
<th>Measure Type</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source</td>
<td>Laboratory Information System; CAP cancer protocols; and pathology reports</td>
</tr>
<tr>
<td>Summary of Performance Gap Evidence</td>
<td>For January-December 2020, this measure existed as two separate measures, CAP 23 and CAP 27. For CAP 23, 6 reporting entities submitted data although one did not meet the 20-case minimum. The average performance rate was 77.4 with a standard deviation of 24.3. Performance rates ranged from 45.47% to 98.08% For CAP 27, 3 reporting entities submitted data although one did not meet the 20-case minimum. The average performance rate was 99.71 with a standard</td>
</tr>
</tbody>
</table>
deviation of 0.3. Performance rates ranged from 99.41% to 100%. Since this data represents only two practices, we cannot draw clear conclusions about performance. For January-1 November 2021, six practices have entered data. The average performance rate to date is 90.8%.

Studies have indicated that even among users of CAP Cancer Protocols, significant variability exists in rates of protocol completion, particularly dependent on the method of data capture (electronic cancer checklists versus printed paper forms versus web-based methods)(1). The CAP cancer protocols have been thoroughly researched and have been determined to contain all the elements that a clinician would need to appropriately treat a patient with a malignant disease. Therefore, utilizing all the required elements found in a CAP protocol for malignant cases should be the very definition of a high-quality report and serve as a measure of pathologist performance. Recent studies show that checklists are associated with improvement in completeness of surgical pathology reports, although completeness rates do not exceed 90% in most studies (2).


<table>
<thead>
<tr>
<th>Measure Owner</th>
<th>College of American Pathologists</th>
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</thead>
<tbody>
<tr>
<td>NQF ID</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of Performance Rates</td>
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</tr>
<tr>
<td>Overall Performance Rate</td>
<td>1st Performance Rate</td>
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<tr>
<td>High-priority</td>
<td>Yes</td>
</tr>
<tr>
<td>Improvement Notation</td>
<td>Inverse Measure: No</td>
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<tr>
<td>Proportional Measure: Yes (Higher score indicates better quality)</td>
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<tr>
<td>Continuous Variable Measure: No</td>
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<tr>
<td>Ratio Measure: No</td>
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<tr>
<td>Risk-adjusted: No</td>
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<tr>
<td>Care Setting and Specialty</td>
<td>Care Setting: Other—Laboratories; Telehealth not applicable</td>
</tr>
<tr>
<td>Specialty: Pathology</td>
<td></td>
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<tr>
<td>Current Clinical Guideline the Measure is Derived From</td>
<td></td>
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<tr>
<td>------------------------------------------------------</td>
<td></td>
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<tr>
<td>Guideline: None.</td>
<td></td>
</tr>
<tr>
<td><a href="https://documents.cap.org/protocols/Kidney_4.1.0.0.REL_CAPCP.pdf">https://documents.cap.org/protocols/Kidney_4.1.0.0.REL_CAPCP.pdf</a></td>
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<td>Krishnamurti, U, et. Al. CAP cancer protocols and pathology reports. Endometrium 4.2.0.0 (June 2021).</td>
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<td><a href="https://documents.cap.org/protocols/Uterus-Endo_4.2.0.0.REL_CAPCP.pdf">https://documents.cap.org/protocols/Uterus-Endo_4.2.0.0.REL_CAPCP.pdf</a></td>
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Measure Flow

Denominator

Start: 100 cases

Specimen types as listed in Denominator

Procedure as listed in denominator (CPT 88307 or 88309)

Diagnosis as listed in denominator (carcinoma of the endometrium, prostate and renal tubule origin)

Eligible Population/Denominator: 90 cases (x)

Exclusion: 10 cases (a)

Data Completeness Not Met: 10 cases (e)

Numerator 1

Pathology report includes all data elements required by CAP Cancer Protocols

Pathology report does not include all data elements required by CAP Cancer Protocols

Eligible Population/Denominator: 90 cases

Numerator/Performance Met: 60 cases (b)

Performance Not Met: 10 cases (d)

Data Completeness:
\[ \text{Met (b)} + \text{Not Met (d)} = 60 + 10 \]
\[ \text{Eligible Population (x)} = 90 \]

Performance Rate 1:
\[ \frac{\text{Met (b)}}{\text{Data Completeness Numerator}} = \frac{60}{70} \]