### Measure Description

Percentage of urinary bladder carcinoma pathology reports that include the procedure, histologic tumor grade, histologic type, presence/absence of muscularis propria, presence/absence of lymphovascular invasion and tumor extent AND meet the maximum 2 business day turnaround time (TAT) requirement (Report Date – Accession Date ≤ 2 business days).

**INSTRUCTIONS:** This measure has two performance rates that contribute to the overall performance score:
- **Stratum 1:** Percent of cases for which data elements listed above are included in the urinary bladder carcinoma pathology report.
- **Stratum 2:** Percent of cases that meet the maximum 2 business day turnaround time.

The overall performance score is a weighted average of:

\[(\text{Stratum 1 rate } \times 70\%) + (\text{Stratum 2 rate } \times 30\%)

### Denominator Statement

Surgical pathology reports for bladder biopsies and transurethral resection of bladder tumor (TURBT) with a pathological diagnosis of carcinoma of the urinary bladder (urothelial carcinoma)

CPT: 88305, 88307 AND ICD10:
- C67.0 Malignant neoplasm of trigone of bladder
- C67.1 Malignant neoplasm of dome of bladder
- C67.2 Malignant neoplasm of lateral wall of bladder
- C67.3 Malignant neoplasm of anterior wall of bladder
- C67.4 Malignant neoplasm of posterior wall of bladder
- C67.5 Malignant neoplasm of bladder neck
- C67.6 Malignant neoplasm of ureteric orifice
- C67.8 Malignant neoplasm of overlapping sites of bladder
- C67.9 Malignant neoplasm of bladder, unspecified

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

### Denominator Exclusions

Urachal Carcinoma (ICD-10 C67.7)

### Denominator Exceptions

Stratum 1 (Pathology Report Data Elements) Only:
1. Specimen contains metastatic carcinoma
2. No residual carcinoma/specimen does not contain cancer
3. Insufficient tissue provided for analysis
### Numerator Statement

**Stratum 1**: Urinary bladder biopsy carcinoma pathology reports that include:
- Procedure
- Histologic tumor grade
- Histologic type
- Presence/absence of muscularis propria
- Presence/absence of lymphovascular invasion
- Tumor Extent

**AND**

**Stratum 2**: Final pathology report that is verified in the laboratory/hospital information system and available to the requesting physician(s) within 2 business days.

### Numerator Exclusions

None

### Guidance

Numerator definitions:
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 is available to the requesting physician(s).

### Measure Information

<table>
<thead>
<tr>
<th>NQS Domain</th>
<th>Communication and Care Coordination</th>
</tr>
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<tbody>
<tr>
<td><strong>Meaningful Measures Area(s)</strong></td>
<td>Transfer of Health Information and Interoperability</td>
</tr>
<tr>
<td><strong>Meaningful Measure Rationale</strong></td>
<td>The vast majority (more than 95%) of carcinomas of the urinary bladder, renal pelvis, and ureter are urothelial cell in origin, previously termed transitional cell cancer. Utilization of the most recent 2016 World Health Organization (WHO) classification of tumors of the urothelial tract and the updated AJCC (8th ed) TNM Staging System for carcinomas of the urinary bladder is recommended. (1) These cancers may be heterogeneous in histologic appearance, including...</td>
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</table>
adenocarcinoma, squamous cell carcinoma or small cell carcinoma elements; however, they should still be classified as urothelial carcinoma unless the cancer is composed entirely of the aforementioned histologic types (1-7).

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 can play 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 (8-10).


<table>
<thead>
<tr>
<th>Measure Type</th>
<th>Process</th>
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<tbody>
<tr>
<td>Data Source</td>
<td>Laboratory Information Systems; pathology reports</td>
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### Summary of Performance Gap Evidence

For performance year 2021, 16 reporting entities submitted data on this measure to CMS, ranging from 21 cases to 628 cases. Performance scores ranged from 44.4% to 100% with an average performance of 85.98%. We performed an analysis to determine whether this measure was topped out. Because the truncated coefficient of variance is > 10%, the measure would not be considered topped out.

For January 1st to July 1st 2022, 13 reporting entities have entered data on this measure into the Pathologists Quality Registry, ranging from 18 to 1,226 cases. Performance scores range from 38.35% to 100% with an average performance of 84.1%.

Prior to review by genitourinary pathologists, "[a]mong 78 patients with urothelial carcinoma (UC) who presented with either stage T1, T2, or T4a, the presence or absence of LVI, concomitant CIS, and VH was reported only in 27 (34.6%), 20 (25.6%), and 16 (20.5%) cases, respectively" (1) where LVI is lymphovascular invasion, CIS is carcinoma in situ and VH is variant histology. The latter two are components of the histologic type, which is required by the measure, and the former is required by the measure.

In addition, histologic grading remains a significant challenge for pathologists: "Interobserver variation in pT1 diagnosis and the associated pitfalls in pT1 assessment are the critical pathological issues" (2) In a study of 3,042 TURBTs, only 73% had muscularis propria mentioned (3). A similar study of 30, 498 pathology reports for bladder cancer found that grade was absent in 13.6% of cases, lymphovascular invasion was absent in 31.5% of cases, and muscularis propria was absent in 32.1% of cases (4)

(3) Automated Extraction of Grade, Stage, and Quality Information From Transurethral Resection of Bladder Tumor Pathology Reports Using Natural Language Processing Alexander P. Glaser, Brian J. Jordan, Jason Cohen, Anuj Desai, Philip Silberman, and Joshua J. Meeks JCO Clinical Cancer Informatics 2018 :2, 1-8
(4) Schroeck FR, Patterson OV, Alba PR, Pattison EA, Seigne JD, DuVall SL, Roberston DJ, Sirovich B and Goodney PP (2017) Development of a Natural
### CAP QCDR Measure
#### Urinary Bladder Cancer
### Complete Analysis and Timely Reporting

<table>
<thead>
<tr>
<th>Measure Owner</th>
<th>College of American Pathologists</th>
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<tbody>
<tr>
<td>NQF ID</td>
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<tr>
<td>Number of Performance Rates</td>
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<tr>
<td>Overall Performance Rate</td>
<td>1st Performance Rate</td>
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<tr>
<td>High-priority</td>
<td>Yes</td>
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<tr>
<td>Improvement Notation</td>
<td>Inverse Measure: No Proportional Measure: Yes (Higher score indicates better quality) Continuous Variable Measure: No Ratio Measure: No Risk-adjusted: No</td>
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<tr>
<td>Care Setting and Specialty</td>
<td>Care Setting: Other—Laboratories; Telehealth not applicable Specialty: Pathology</td>
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<tr>
<td>Submission Pathway</td>
<td>Traditional MIPS Only</td>
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<tr>
<td>Current Clinical Guideline the Measure is Derived From</td>
<td>Paner, GP et al. With guidance from the CAP Cancer and CAP Pathology Electronic Reporting Committees Protocol for the Examination of Biopsy and Transurethral Resection of Bladder Tumor (TURBT) Specimens From Patients With Carcinoma of the Urinary Bladder. v 4.1.0.0 (June 2021) <a href="https://documents.cap.org/protocols/Bladder.Bx.TURBT_4.1.0.0.REL_CAPCP.pdf">https://documents.cap.org/protocols/Bladder.Bx.TURBT_4.1.0.0.REL_CAPCP.pdf</a></td>
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**Language Processing Engine to Generate Bladder Cancer Pathology Data for Health Services Research. Urology 110: 84-91.**

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Measure Flow
Performance Rate 1

Denominator

Start: 100 cases

Procedure as listed in denominator (CPT 88305 or 88307)

Yes

NOT in Eligible Population/Denominator

No

Diagnosis as listed in denominator (carcinoma of the urinary bladder)

Urachal carcinoma (ICD-10 C67.7): 10 cases (a)

Yes

Eligible Population/ Denominator: 90 cases (x)

No

Numerator 1

Pathology report includes all required data elements

Yes

Numerator/ Performance Met: 60 cases (b)

No

Documented medical reason for not including required data elements

Yes

Denominator Exception: 10 cases (c)

No

Pathology report does not include all required data elements

Yes

Data Completeness Not Met: 10 cases (d)

No

Pathology report includes all required data elements

Yes

Data Completeness: Denominator Exceptions (c)+Met (b)+ Not Met (d) = 10+60+10

Eligible Population (x) = 90

Performance Rate 2:

Met (b) = 60

Data Completeness: Numerator – Denominator Exceptions (c) = 70

Documented medical reason for not including required data elements

Yes

Performance Not Met: 10 cases (d)
Performance Rate 2:

Denominator

Start: 100 cases

Procedure as listed in denominator (CPT 88305 or 88307)

Not in Eligible Population/Denominator

Yes

No

Diagnosis as listed in denominator (carcinoma of the urinary bladder)

Urachal carcinoma (ICD-10 C67.7): 10 cases (a)

Eligible Population/Denominator: 90 cases (x)

Numerator 2

Pathology report is verified and available to the requesting physician within 2 business days

Yes

No

Pathology report is not verified and available to the requesting physician within 2 business days

Numerator/Performance Met: 60 cases (b)

Performance Not Met: 10 cases (d)

Data Completeness Numerator = 60 + 10

Overall Performance Rate:

(Performance Rate 1*70%) + (Performance Rate 2*30%) = (85.7%*0.7) + (85.7%*0.3) = 85.7%

Data Completeness:

Met (b) + Not Met (d) = 60 + 10

Eligible Population (x) = 90

Performance Rate 2: 

Met (b) = 60

Data Completeness Numerator

70