**Measure Description**

Percentage of all eligible pathology reports for gastric, esophageal, colorectal, and hepatocellular carcinoma specimens for which all required data elements of the gastrointestinal Cancer Protocols are recorded **AND**

meet the maximum 4 business day turnaround time (TAT) requirement (Report Date – Accession Date ≤ 4 business days).

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

1. Percent of cases for which required 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%)

<table>
<thead>
<tr>
<th>Denominator Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>All final pathology reports for eligible gastric, esophageal, colorectal, and hepatocellular carcinoma specimens that require the use of a CAP Cancer Protocol</td>
</tr>
</tbody>
</table>

**CPT®: 88307, 88309**

**AND**

Any of the ICD10:

- C18.0: Malignant neoplasm of cecum
- C18.2: Malignant neoplasm of ascending colon
- C18.3: Malignant neoplasm of hepatic flexure
- C18.4: Malignant neoplasm of transverse colon
- C18.5: Malignant neoplasm of splenic flexure
- C18.6: Malignant neoplasm of descending colon
- C18.7: Malignant neoplasm of sigmoid colon
- C18.8: Malignant neoplasm of overlapping sites of colon
- C18.9: Malignant neoplasm of colon, unspecified
- C19: Malignant neoplasm of rectosigmoid junction
- C20: Malignant neoplasm of rectum
- C22.0: Liver cell carcinoma
- C22.7: Other specific carcinoma of liver
- C22.8: Malignant neoplasm of liver, primary, unspecified as to type
- C22.9: Malignant neoplasm of liver, not specified as primary or secondary
- C15.3: Malignant neoplasm of upper third of esophagus
- C15.4: Malignant neoplasm of middle third of esophagus
- C15.5: Malignant neoplasm of lower third of esophagus

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- C15.8: Malignant neoplasm of overlapping sites of esophagus
- C15.9: Malignant neoplasm of esophagus, unspecified
- C16.0: Malignant neoplasm of cardia
- C16.1: Malignant neoplasm of fundus of stomach
- C16.2: Malignant neoplasm of body of stomach
- C16.3: Malignant neoplasm of pyloric antrum
- C16.4: Malignant neoplasm of pylorus
- C16.5: Malignant neoplasm of lesser curvature of stomach, unspecified
- C16.6: Malignant neoplasm of greater curvature of stomach, unspecified
- C16.8: Malignant neoplasm of overlapping sites of stomach
- C16.9: Malignant neoplasm of stomach, unspecified

The denominator must be met between 01/01/2021 and 12/26/2021. This is to provide sufficient time for the performance of the numerator to be met within the performance period.

### Denominator Exclusions
- Biopsy specimens
- Cytology specimens
- Lymphoma
- Sarcoma
- Resection specimens with no residual tumors
- Well-differentiated neuroendocrine tumors
- Hepatoblastoma
- Gastrointestinal stromal tumor (GIST)
- Metastatic malignancy to these organs

### Denominator Exceptions
- 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
- Tumor Site
- Tumor Size
- Histologic Type
- Histologic Grade
- Margin status including all applicable required margins
- Tumor Extension
- Treatment Effect
- Tumor Focality (Hepatocellular only)
- Macroscopic Tumor Perforation (Colorectal only)
- Tumor Deposits (Colorectal only)
- Perineural Invasion (Colorectal only)
- Relationship of Tumor to Esophagogastric Junction (Esophageal only)
- Lymphovascular (Colorectal, Esophageal and Gastric specimens) or vascular (Hepatocellular) invasion
- 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)*
* Required only if appropriate tissue/sample is present, can be omitted if no lymph nodes/distant metastases are provided

AND
Final pathology report in the laboratory/hospital information system with result verified by the pathologist and available to the requesting physician(s) within 4 business days.

<table>
<thead>
<tr>
<th>Numerator Exclusions</th>
<th>None</th>
</tr>
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<thead>
<tr>
<th>Guidance</th>
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</thead>
<tbody>
<tr>
<td>Denominator Definitions:</td>
</tr>
<tr>
<td>Eligible procedures for gastric carcinoma include:</td>
</tr>
<tr>
<td>- Partial gastrectomy</td>
</tr>
<tr>
<td>- Complete gastrectomy</td>
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<tr>
<td>Eligible procedures for esophageal carcinoma include:</td>
</tr>
<tr>
<td>- Esophagectomy</td>
</tr>
<tr>
<td>- Esophagogastrectomy</td>
</tr>
<tr>
<td>Eligible procedures for hepatocellular carcinoma include:</td>
</tr>
<tr>
<td>- Partial hepatic resection</td>
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<tr>
<td>- Total or complete hepatic resection</td>
</tr>
<tr>
<td>Eligible procedures for colorectal carcinoma include:</td>
</tr>
<tr>
<td>- Partial colectomy/resection</td>
</tr>
<tr>
<td>- Total colectomy/resection</td>
</tr>
<tr>
<td>- Segmental colectomy/resection</td>
</tr>
<tr>
<td>- Low anterior rectal resection</td>
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<tr>
<td>- Abdominoperineal resection</td>
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</tbody>
</table>

The numerator of Rate 1 is defined as gastric, esophageal, colorectal, and hepatocellular carcinoma specimens for which all required data elements are included. If a case does not include one of the required data elements, it may not be included in the Numerator for Rate 1. A case that does not include all 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 and reported by the laboratory and is available to the requesting physician(s) (signed out).
4. Signed Out: The pathology report with a final diagnosis is released.

**Measure Information**

<table>
<thead>
<tr>
<th>NQS Domain</th>
<th>Communication and Care Coordination</th>
</tr>
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<tbody>
<tr>
<td>Meaningful Measures Area(s)</td>
<td>Transfer of Health Information and Interoperability</td>
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**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 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 (2-4).

1. Shi, C. Protocol for the Examination of Specimens From Patients With Carcinoma of the Esophagus v 4.1.0.0 (February 2020)  
<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>With respect to synoptic reports of gastrointestinal cancers, limited results from the College of American Pathologists (CAP) Pathologists’ Quality Registry show significant gaps in performance. Of the cancer types included in this measures, only hepatocellular carcinoma has been previously tracked in the Registry. The average performance rate for the hepatocellular carcinoma cancer protocol measure was 13.9%. Data is from all cases entered in 2019, totaling 531 specimens. This indicates significant room for improvement in this measure. A CAP Q-Probes study demonstrated that about 30% of cancer reports do not have all the scientifically validated elements required by the ACS CoC (1). More recent 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) (2). 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.</td>
</tr>
<tr>
<td>Measure Owner</td>
<td>College of American Pathologists</td>
</tr>
<tr>
<td>NQF ID</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of Performance Rates</td>
<td>1</td>
</tr>
<tr>
<td>Overall Performance Rate</td>
<td>1st Performance Rate</td>
</tr>
</tbody>
</table>

1. Michael O. Idowu, MD; Leonas G. Bekeris, MD; Stephen Raab, MD; Stephen G. Ruby, MD, MBA; Raouf E. Nakhleh, MD. Adequacy of Surgical Pathology Reporting of Cancer A College of American Pathologists Q-Probes Study of 86 Institutions Arch Pathol Lab Med. 2010;134:969–974. |
<table>
<thead>
<tr>
<th>High-priority</th>
<th>Yes</th>
</tr>
</thead>
</table>
| Improvement Notation | Inverse Measure: No  
Proportional Measure: Yes (Higher score indicates better quality)  
Continuous Variable Measure: No  
Ratio Measure: No  
Risk-adjusted: No |
| Care Setting and Specialty | Care Setting: Other—Laboratories; Telehealth not applicable  
Specialty: Pathology |
| Current Clinical Guideline the Measure is Derived From | Guideline: None.  
Cancer Protocols: Shi, C. Protocol for the Examination of Specimens From Patients With Carcinoma of the Esophagus v 4.1.0.0 (February 2020)  
Burgart, LJ Protocol for the Examination of Specimens From Patients With Hepatocellular Carcinoma v 4.1.0.0. (February 2020)  
Burgart, LJ Protocol for the Examination of Resection Specimens From Patients With Primary Carcinoma of the Colon and Rectum v 4.1.0.0 (February 2020)  
Shi, C. Protocol for the Examination of Specimens From Patients With Carcinoma of the Stomach v 4.1.0.0 (February 2020)  
Measure Flow
Performance Rate 1