



## Guest Presenter(s)

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## Agenda

- ICD O and Solid Tumor Updates
  - Lois Dickie,
- SSDI Updates
  - Jennifer Ruhl

# 2022 ICD-O-3.2 Histology Code & Behavior Update: Understanding the Changes

NAACCR 2022 ICD-O-3.2 Update

December 13, 2021

Lois Dickie, Chair NAACCR ICD-O Work Group

## Objectives

- Changes in reportability for 2022
- Changes in terminology
- 2022 ICD-O-3.2 Update
- Coding histology: rules, database, or ICD-O
- ICD-O 101
- ICD-O-4

## Implementation Guidelines for ICD-O-3.2 Update

- Effective for cases diagnosed January 1, 2022, forward
- Use of implementation guidelines is **required** for determining reportability and accurate coding
- Tables provide information on changes to reportability
- Access at NAACCR website
  - <https://www.naaccr.org/icdo3/>

## Guidelines for 2022 ICD-O-3.2 Histology Code & Behavior Update

- The 2022 ICD-O-3.2 Update Guidelines includes comprehensive tables listing all changes to ICD-O-3.2 including new ICD-O codes, terminology and reportability changes effective for cases diagnosed 1/1/2022 forward. The 2022 update represents changes identified in recently published 5<sup>th</sup> Ed WHO Classification of Tumors books. Included in these guidelines are instructions for using the tables together with ICD-O-3.2. ***This update includes important information on reportable versus non-reportable high-grade dysplasia in gastrointestinal sites.***

## 2022 ICD-O-3.2 Update

- The 2022 ICD-O-3.2 histology code and behavior update includes comprehensive tables listing all changes made **after** the 2021 update and is effective for cases diagnosed 1/1/2022 forward. *New to the 2022 update tables are columns for each standard setter which indicates if that code and/or term is required for data collection and submission.*

## Example of New Table Format

| ICD-O Code | Term   | Required SEER | Required NPCR | Required CoC | Required CCCR | Remarks                               |
|------------|--|---------------|---------------|--------------|---------------|---------------------------------------|
| 8483/2     | Adenocarcinoma in situ, HPV-associated (C530-C531, C538-C539)      | N             | N             | N            | N             | New ICD-O code/term<br>Not reportable |
| 8484/2     | Adenocarcinoma in situ, HPV-independent, NOS C530-C531, C538-C539) | N             | N             | N            | N             | New ICD-O code/term<br>Not reportable |
| 8483/3     | Adenocarcinoma, HPV-associated C530-C531, C538-C539)               | Y             | Y             | Y            | Y             | New ICD-O code/term                   |

## 2022 ICD-O-3.2 Update: What's Included

- 51 New Terms: Preferred or related
- 8 New terms and behaviors
- 12 New ICD-O-3 codes and terms
- 2022 Implementation Guidelines
- Alpha and Numeric Tables
- 2022 Annotated ICD-O-3.2 Table

## Important Changes for 2022

- Major changes apply to behavior code & reportable terminology
  - GI high grade dysplasias: WHO versus North America
    - Reportable/required sites: colorectal versus other GI
  - Change in reportability of LAMN

## Low Grade Appendiceal Mucinous Neoplasm (LAMN)

- Both 5<sup>th</sup> Ed GI BB and ICD-O-3.2 list LAMN as 8480/1
- 5<sup>th</sup> Ed GI BB suggests these neoplasms be staged as Tis
- AJCC petitioned the standard setters asking LAMN be required/reportable as /2
  - **Approved by NAACCR MLTG for cases diagnosed 1/1/2022 forward**
- High grade appendiceal mucinous neoplasm (HAMN) also coded 8480/2
- Both LAMN and HAMN can be malignant with widespread disease making it 8480/3
  - A diagnosis of LAMN or HAMN does not require the pathology report state the tumor is comprised of greater than 50% mucinous

## LAMN, cont'd

- The following updates have been made to Colorectal Solid Tumor Rules for 2022:
  - New section in T&D: ***Important Changes for 2022***
  - Table 1: added LAMN/HAMN with coding notes (basic)
  - Table 2 (non-reportable): added reportable dates for LAMN
  - New H rule to address LAMN/HAMN

## New Colon Solid Tumor Rule H5

Code **low grade appendiceal mucinous neoplasm (LAMN)** and **high grade appendiceal mucinous neoplasm (HAMN) 8480/2** when:

- Diagnosis date is 1/1/2022 forward **AND**
- Behavior is stated to be in situ/non-invasive **OR**
- Behavior is not indicated

**Note 1:** ICD-O-3.2 lists LAMN with behavior of /1. WHO 5th Ed Digestive Systems Tumors indicates this neoplasm is considered in situ. After consulting with WHO Digestive System editors, College of American pathologists, and AJCC GI chapter experts, the standard setting organizations have agreed LAMN should be collected and should be assigned a behavior code of /2 beginning with cases diagnosed 1/1/2022 forward.

**Note 2:** A diagnosis of LAMN or HAMN does not require the tumor be comprised of greater than 50% mucinous in order to be coded 8480.

**Note 3:** If the pathologist indicates LAMN or HAMN is invasive or has a malignant behavior, continue through the rules.

## Reportable vs. Non-reportable High-Grade Dysplasia in GI Sites

| ICD-O Code | Term  | Req SEER | Req NPCR | Req CoC | Remarks  |
|------------|---|----------|----------|---------|--|
| 8144/2     | Intestinal-type adenoma high grade (C160-C166; C168-C169; C170-C173; C178-C179) | Y        | Y        | Y       | Reportable for stomach & small intestines <b>ONLY</b> beginning 1/1/2022 |
| 8210/2     | Adenomatous polyp, high grade (C160-C166; C168-C169; C170-C173; C178-C179)      | Y        | Y        | Y       | Reportable for stomach & small intestines <b>ONLY</b> beginning 1/1/2022 |
| 8211/2     | Tubular adenoma, high grade   | N        | N        | N       | Term is <b>NOT</b> reportable in the US                                  |

## Reportable vs. Non-reportable High-Grade Dysplasia in GI Sites

| ICD-O Code | Term   | Req SEER | Req NPCR | Req CoC | Remarks  |
|------------|--|----------|----------|---------|--|
| 8213/2     | Serrated dysplasia, high grade ( <b>C160-C166; C168-C169; C170-C173; C178-C179</b> ) | Y        | Y        | Y       | Reportable for stomach & small intestines <b>ONLY beginning 1/1/2022</b> |
| 8261/2     | Villous adenoma, high grade  | N        | N        | N       | Term is <b>NOT</b> reportable in the US                                  |
| 8263/2     | Tubulovillous adenoma, high grade  | N        | N        | N       | Term is <b>NOT</b> reportable in the US                                  |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term  | Remarks  |
|------------|---|--|
| 8033/3     | Carcinoma with sarcomatoid component                      | New related term                                 |
| 8044/3     | Small cell carcinoma, large cell variant ( <b>C56.9</b> ) | New related term: <b>ovary only</b>              |
| 8085/3     | Squamous cell carcinoma, HPV-associated                   | New term: uterine cervix, vagina, vulva 1/1/2022 |
| 8086/3     | Squamous cell carcinoma, HPV-independent                  | New term: uterine cervix, vagina, vulva 1/1/2022 |
| 8262/3     | Adenoma-like adenocarcinoma                               | New related term                                 |
| 8310/3     | Adenocarcinoma, HPV-independent, clear cell type          | New related term                                 |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term   | Remarks   |
|------------|--|---|
| 8455/2     | Intraductal oncocytic papillary neoplasm, NOS (C250-C254, C257-C259)                               | New ICD-O code/term. Valid for 1/1/2022 forward   |
| 8455/3     | Intraductal oncocytic papillary neoplasm with associated invasive carcinoma (C250-C254, C257-C259) | New ICD-O code/term. Valid for 1/1/2022 forward   |
| 8480/2     | Low grade appendiceal mucinous neoplasm (LAMN) (C181)  | Beginning with cases diagnosed 1/1/2022 forward, LAMN should be assigned a behavior code of /2. LAMN diagnosed prior to 1/1/2022 is not reportable. |
| 8480/2     | High grade appendiceal mucinous neoplasm (HAMN) (C181)   | New behavior/term   |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term   | Remarks                                      |
|------------|--|--|
| 8482/3     | Adenocarcinoma, HPV-independent, gastric type (C530-C531, C538-C539) | New ICD-O code/term                          |
| 8483/2     | Adenocarcinoma, HPV-associated C530-C531, C538-C539)                 | New ICD-O code/term<br><b>Not reportable</b> |
| 8483/3     | Adenocarcinoma, HPV-associated C530-C531, C538-C539)                 | New ICD-O code/term                          |
| 8484/2     | Adenocarcinoma in situ, HPV-independent, NOS C530-C531, C538-C539)   | New ICD-O code/term<br><b>Not reportable</b> |
| 8484/3     | Adenocarcinoma, HPV-independent, NOS C530-C531, C538-C539)           | New ICD-O code/term                          |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term  | Remarks  |
|------------|---|--|
| 8500/2     | DCIS of low nuclear grade<br>DCIS of intermediate nuclear grade<br>DCIS of high nuclear grade | New related terms                                      |
| 8503/2     | Ductal carcinoma in situ, papillary   | New preferred term for intraductal papillary carcinoma |
| 8509/3     | Tall cell carcinoma with reversed polarity  | New preferred term for solid papillary                 |
| 8590/1     | Uterine tumor resembling ovarian sex cord tumor   | Behavior code change from /0 to /1- not reportable     |
| 8859/3     | Myxoid pleomorphic liposarcoma  | New ICD-O code/term                                    |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term   | Remarks             |
|------------|--|---------------------|
| 8912/3     | <ul style="list-style-type: none"> <li>Congenital spindle cell rhabdomyosarcoma with VGLL2/NCOA2/CITED2 rearrangements</li> <li>MYOD1-mutant spindle cell/sclerosing rhabdomyosarcoma</li> <li>Intraosseous spindle cell rhabdomyosarcoma with TFCP2/NCOA2 rearrangements</li> </ul> | New related terms   |
| 8976/3     | Gastroblastoma (C160-C169)   | New ICD-O code/term |
| 8990/3     | NTRK-rearranged spindle cell neoplasm (emerging)   | New related term    |
| 9110/3     | Adenocarcinoma, HPV-independent, mesonephric type  | New preferred term  |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term  | Remarks  |
|------------|---|--|
| 9111/3     | • Mesonephric-like adenocarcinoma   | New ICD-O code/term for ovary and corpus uterus              |
| 9120/3     | Post radiation angiosarcoma of the breast   | New related term   |
| 9133/3     | <ul style="list-style-type: none"> <li>• Epithelioid hemangioendothelioma with WWTR1-CAMTA1 fusion</li> <li>• Epithelioid hemangioendothelioma with YAP1-TFE3 fusion</li> </ul> | New related terms  |
| 9200/1     | Osteoblastoma   | Behavior change from /0 to /1. Remains <b>non-reportable</b> |

## Notable ICD-O-3.2 Changes for 2022

| ICD-O Code | Term  | Remarks  |
|------------|---|--|
| 9222/3     | Chondrosarcoma, grade 1                       | Behavior change from /1 to /3. Reportable 1/1/2022 forward |
| 9261/1     | Osteofibrous dysplasia-like adamantinoma      | New behavior code/term. Not reportable                     |
| 9366/3     | Round cell sarcoma with EWSR1-non-ETS fusions | New ICD-O code/term  |
| 9367/3     | CIC-rearranged sarcoma                        | New ICD-O code/term  |
| 9368/3     | Sarcoma with BCOR genetic alterations         | New ICD-O code/term  |

## Resources for Coding Histology

- Solid Tumors: Histology Tables
- Hematopoietic: Use the Hematopoietic Database
- ICD-O-3.2 and all updates
  - Includes previous updates from 2018, 2021, and 2022
- ICD-O-3.2 Annotated table

## Practical Approach to Assigning Histology for **2022** cases

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Solid Tumor Rules           <ul style="list-style-type: none"> <li>• Tables may not have <b>all</b> synonyms listed or may have synonyms not found in WHO BB's or CAP</li> <li>• <b>Coming soon: Other sites histology tables</b></li> </ul> </li> <li>• ICD-O-3.2 and updates</li> <li>• Ask A SEER Registrar</li> </ul> | <ul style="list-style-type: none"> <li>• Hematopoietic &amp; Lymphoid Neoplasms           <ul style="list-style-type: none"> <li>• Hematopoietic Database &amp; Manual</li> <li>• Ask A SEER Registrar</li> </ul> </li> </ul> |
|--|---|

## Preview Other Sites Histology Tables

- Tables are to assist with coding histologies for sites currently included in the Other Sites module and ***are not directly linked to the rules***
- Completed tables as of October 2021:
  - Prostate
  - Other GI sites (esophagus, stomach, small bowel, anus, liver, GB, ducts)
- Under development:
  - Pancreas
  - Thyroid
  - GYN (ovary, peritoneum, fallopian tube, uterine corpus, uterine cervix, vagina, and vulva)
  - Testis
  - Skin
  - Soft Tissue/Bone

## Example: Prostate Histology Table

| Specific or NOS Terms and Codes | Synonym   | Subtypes/Variants   |
|---------------------------------|---|---|
| Acinar Adenocarcinoma 8140      | Acinar carcinoma<br>Adenocarcinoma in situ <b>8140/2</b><br>Adenocarcinoma, NOS<br>Atrophic adenocarcinoma <b>8140/3</b><br>Foamy gland adenocarcinoma <b>8140/3</b><br>Microcystic adenocarcinoma <b>8140/3</b><br>Pseudohyperplastic adenocarcinoma <b>8140/3</b> | Acinar adenocarcinoma, sarcomatoid variant <b>8572/3</b><br>Adenocarcinoma with neuroendocrine differentiation <b>8574/3</b><br>Ductal/intraductal adenocarcinoma <b>8500</b><br>Cribriform adenocarcinoma <b>8201/3</b><br>Papillary adenocarcinoma <b>8260/3</b><br>Solid adenocarcinoma <b>8230/3</b><br>Mucinous (colloid) adenocarcinoma <b>8480/3</b><br>Signet ring-like cell adenocarcinoma |

# ICD-O 101

## Document Priority

- Addendum(s) and/or comment(s):
  - These documents contain results from special tests such as biomarkers, genetics, stains
  - These findings may confirm or provide a definitive diagnosis
  - Comments may include information gathered from other sources to arrive at a definitive diagnosis

## Document Priority

- **Final diagnosis/synoptic report** as required by CAP
  - Final diagnosis: Found at the end of the pathology report and are commonly a single paragraph with findings from the CAP protocol consolidated into paragraph format.

## Document Priority

- **Final diagnosis/synoptic report** as required by CAP
  - All core and conditionally required data elements outlined on the surgical case summary from the cancer protocol must be displayed in synoptic report format. Synoptic format is defined as:
    - Data element: followed by its answer (response).
    - The data element should be represented in the report as it is listed in the case summary. The response for any data element may be modified from those listed in the case summary, including "Cannot be determined" if appropriate.
    - Each diagnostic data element/response is listed on a separate line or in a tabular format to achieve visual separation.
  - The following exceptions are allowed to be listed on one line:
    - o Anatomic site or specimen, laterality, and procedure
    - o Pathologic Stage Classification (pTNM) elements
    - o Negative margins, as long as all negative margins are specifically enumerated where applicable
  - The synoptic portion of the report can appear in the diagnosis section of the pathology report, at the end of the report or in a separate section, but all Data element: Responses must be listed together in one location

## Document Priority

- CAP Protocol

- The CAP Cancer Reporting Protocols provide guidelines for collecting the essential data elements for complete reporting of malignant tumors and optimal patient care. The protocol is a **check list** which allows the pathologist to note their observations while reviewing the slides and/or gross specimen. CAP Protocols include all relative data elements including site, surgical procedure, tumor size, histology, grade, margins, lymph node status, and staging along with other site-specific elements. The protocols are multiple pages.

## Document Priority

- Which document to use when there is conflicting information between final DX, synoptic report, or CAP protocol:
  - When there are discrepancies between the final diagnosis and synoptic report, use the document that provides the more specific histology. This will likely be found in the synoptic report. The CAP Protocol should be used only when a final diagnosis or synoptic report are not available.

## Limitations Using ICD-O-3.2

- Excel format only
- Limited to numerical list
- Searchable but will likely produce multiple entries
- Does not provide topography codes (C-codes)
- Does not include important “user” instructions as previous versions

## ICD-O Principal Rules

- Rule F: Morphology code matrix concept
  - Use the appropriate 5<sup>th</sup> digit behavior code even if the exact term is not listed in ICD-O. This rule allows you to change the behavior code based on the physician’s statement of invasion.

## ICD-O Rule F Edit

- Histology/Behavior Interfield Review (Field Item Edit Morph and Interfield Edit 31)
- This data item is used to identify whether a case was reviewed, and coding confirmed for those cases where the behavior code differs from the ICD-O-3 behavior code, i.e., ICD-O-3 only lists a behavior code of /3 and the case was coded /2, or the ICD-O-3 only lists behavior codes of /0 and /1 and the case is coded /3.
  - Blank: Not reviewed or reviewed and corrected
  - 1: Reviewed and confirmed that the pathologist states the primary to be “in situ” or “malignant” although the behavior code of the histology is designated as “benign” or “uncertain” in ICD-O

## Site/Type Validation List

- This file is intended as a reference file for ICD-O coding only and is **not to be used for casefinding purposes OR assigning histology code**. Its primary use is in registry software edits.
- The list includes allowed site/histology/behavior combinations. All other cases must be reviewed.

## Site/Type Edit

- Site/Type Interfield Review (Interfield Edit 25/ IF25)
  - This data item is used to flag those cases where the primary site and histology are unusual (not included in the site/type validation list)
  - Blank: Not reviewed, or reviewed and corrected
  - 1: Reviewed and confirmed as reported

## Impossible Site/Type Combinations

- Primary Site, Morphology-Impossible ICD-O (IF38)
- Combinations of site and type are designated as impossible by this edit because the combination is histologically impossible meaning the form of cancer does not arise in the specified site, or because standard cancer registry conventions have been established to code certain combinations certain ways
  - Example: SCC of the brain is impossible as squamous cells do not exist or originate in the brain

## Dealing with Impossible Site/Type Cases

- Correction of these errors will usually require:
    - Inspection of abstracted text
    - Reference to original medical record
    - Follow-up with pathologist to confirm histology type
    - Checking if primary site is coded correctly
- These cases WILL NOT clear the edit and must be changed

## Compound Histology Terms

- Some neoplasms have more than one histology in the term
- Some neoplasms have “mixed” in the term
- Pathologists often change the order of the word roots if that term is not listed in ICD-O

## Compound Histology Terms

- Some neoplasms have more than one histology in the term which may have an ICD-O code
  - Examples:
    - Papillary serous adenocarcinoma
    - Papillary squamous cell carcinoma
- Instruction for coding these neoplasms: For all solid tumor sites, review H rules and tables. For “Other sites”, first check ICD-O and updates, then H rules

## Compound Histology Terms

- Neoplasms with “mixed” in the term
- ICD-O-3.2 lists 76 mixed terms
  - Examples:
    - Mixed small cell carcinoma (combined small cell carcinoma)
    - Mixed basal-squamous cell carcinoma
    - Mixed neuroendocrine non neuroendocrine neoplasm (MiNEN)
- Instructions for identifying and coding mixed neoplasms: Review Solid Tumor H rules and applicable histology tables. If mixed or combination code not found, query ICD-O-3.2

## Compound Histology Terms

- Change order of word roots
- Primarily occurs in soft tissue neoplasms
- Examples of re-order word roots listed in ICD-O-3.2
  - Myxofibrosarcoma (8811/3)
  - Fibromyxosarcoma (8811/3)
- Instructions for identifying and coding these neoplasms: Check ICD-O-3.2 and all updates **FIRST**. If you don't find a match, try switching terms around.

## Absent Terms

- Not all related terms or synonyms may be listed in ICD-O-3.2, updates, Solid Tumor Rules, and Heme Database
- Pathologists may use “non-standard” or non-preferred terms
- Emerging histologies: not yet recognized by WHO. WHO may propose an ICD-O code in future editions of blue books. It is possible these emerging neoplasms can be cross walked to another code. It is also possible they will not be reportable until such time they are approved by WHO

## Future ICD-O Updates

- WHO continues to publish new editions of Classification of Tumors books
  - 5th Ed Breast, GI, GYN, and Soft Tissue & Bone
- ICD-O-4 will be released **after** all 5<sup>th</sup> Ed blue books are released
  - Estimate 2023
- Unknown if WHO/IARC will provide reference materials for each 5<sup>th</sup> Ed
- NAACCR ICD-O Implementation WG will continue to review each 5<sup>th</sup> Ed
- Work Group will provide coding guidelines as needed
  - Based on calendar year
  - Approval to implement

## Resources for Coding Histology

- Histology Coding Module in SEER\*Educate
- Ask A SEER Registrar
  - <https://seer.cancer.gov/registrars/contact.html>

Questions?



*Thank you*

*Lois Dickie*

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# SSDIs: updates and clarifications

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## Agenda

- Schema ID changes
- Updates to General Instructions
- Review of changes for 2022 updates
- Clarifications based on review of 2018 data



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## Soft Tissue Rare/Soft Tissue Other

- Soft Tissue Other split into two schemas
  - Soft Tissue Rare
    - Includes the primary site histology/combinations covered in AJCC 8<sup>th</sup> edition Chapter 45
  - Soft Tissue Other
    - Remaining primary site histology/combinations for histologies 8800-9582 not covered in another schema (mostly the other Soft Tissue schemas)
- Cases automatically converted; no registrar input needed
- No affect on AJCC staging, EOD or Summary Stage
  - New EOD Schema (Soft Tissue Rare, same code structure as Soft Tissue Other)
- Software will direct you to correct Schema



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## New Schema

- Cervix Sarcoma Schema ID 00528
  - TNM based on Chapter 54.1 Corpus Uteri: Leiomyosarcoma and Endometrial Stromal Sarcoma
  - New EOD Schema
  - Cases will still be in the Summary Stage Cervix Chapter (no changes required for hospitals/registries that do Summary Stage only)
  - Grade and SSDIs: Same as the Corpus Sarcoma schema
  - Applies to all cases diagnosed 2021 forward
  - **Manual review required**

Histologies moving from Cervix Schema to Cervix Sarcoma are primarily adenosarcoma (8933/3), leiomyosarcoma (8890/3), endometrial stromal sarcoma (8930/3)

Carcinosarcoma/Malignant Mixed Mullerian Tumors (8980/3) will remain in the Cervix schema/Cervix AJCC chapter



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## Manual Review

- Patient diagnosed in 2021 with adenosarcoma of the cervix.

|   | V21   | V22  |
|---|---|--|
| Primary Site  | C53.9 Cervix, NOS   |  |
| Histology   | 8933/3 Adenosarcoma   |  |
| Schema ID   | Cervix Uteri v9 (09520)   | Cervix Sarcoma (00528)   |
| AJCC ID   | 52 Cervix Uteri (9 <sup>th</sup> )  | 54.1 Corpus Uteri Sarcoma (8 <sup>th</sup> )   |
| AJCC Stage  | Chapter 52 Cervix Uteri   | Chapter 54 Corpus Uteri Sarcoma -All T,N,M values will be reset to blank. Stage groups reset to 99.  |
| Summary Stage 2018  | Cervix  |  |
| EOD <ul style="list-style-type: none"> <li>• Primary Tumor</li> <li>• Regional Nodes</li> <li>• Mets</li> </ul> | Cervix 00520 <ul style="list-style-type: none"> <li>• 300 Localized, NOS (L)</li> </ul> | Cervix Sarcoma 00528 <ul style="list-style-type: none"> <li>• Values not reset. Will require manual review</li> <li>• 300 Extension of metastasis within true pelvis (RE)</li> </ul> |
| Grade   | G1-3  | FIGO Grade (Values not reset. Will require manual review)  |
| SSDI's  | Cervix SSDI's   | All SSDI's will be set to blank. Will require manual review  |



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## General rules



## Timing Rules for Laboratory Values

- Laboratory values refer to any tests based on blood, urine, ascites, or spinal fluid (most will be blood)
- All laboratory values must be done no earlier than approximately 3 months before diagnosis AND
  - Unless instructions for a specific laboratory tests state otherwise, record only tests results obtained
    - Before any cancer directed treatment is given
    - If multiple laboratory results are available, record the highest laboratory value



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## Timing Rules for Laboratory Values

- Table will be available which shows which of the SSDIs are based on Laboratory values, and will also indicate if there are specific instructions

| Schema  | SSDI# | SSDI  | SSDI Specific Coding Rules |
|---|-------|---|----------------------------|
| Colon and Rectum                                    | 3820  | CEA Pretreatment Lab Value                          | Yes                        |
| Colon and Rectum                                    | 3819  | CEA Pretreatment Interpretation                     | Yes                        |
| Liver   | 3810  | AFP Pretreatment Lab Value                          |                            |
| Liver   | 3809  | AFP Pretreatment Interpretation                     |                            |
| Liver   | 3813  | Bilirubin Pretreatment Total Lab Value              |                            |
| Liver   | 3814  | Bilirubin Pretreatment Unit of Measure              |                            |
| Liver   | 3820  | Creatinine Pretreatment Total Lab Value             |                            |
| Liver   | 3825  | Creatinine Pretreatment Unit of Measure             |                            |
| Liver   | 3860  | International Normalized Ratio for Prothrombin Time |                            |
| Lymphoma (CLL/SLL)                                  | 3811  | Anemia  |                            |
| Lymphoma (CLL/SLL)                                  | 3933  | Thrombocytopenia                                    |                            |
| Mycosis Fungoides                                   | 3910  | Peripheral Blood Involvement                        |                            |
| Ovary, Fallopian Tube, Primary Peritoneal Carcinoma | 3818  | CA-125 Pretreatment Interpretation                  |                            |
| Melanoma Skin                                       | 3932  | LDH Lab Value                                       | Yes                        |
| Melanoma Skin                                       | 3869  | LDH Level   | Yes                        |



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## Lab Value Example

- **Question:** Prostate case, PSA done 10/2/2020. Biopsy done 1/26/2021, confirming adenocarcinoma. Can the PSA be used, or should I document XXX.9 for unknown
- **Answer:** The PSA is greater than 3 months prior to the biopsy, so according to the general rules, it cannot be used
  - Code XXX.9, but document in your test the information on the PSA



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## Timing Rules for Tissue Based

- Unless instructions for a specific tissue test state otherwise, record the highest value (positive versus negative, or actual numerical value) obtained from any tissue-based examination (biopsy, surgical resection, bone marrow biopsy)
- If the SSDI specific coding rules column is yes, then check the SSDI for additional coding instructions



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## Timing Rules for Tissue Based

| Schema     | SSDI# | SSDI   | SSDI Specific Instructions |
|------------|-------|--|----------------------------|
| Brain, CNS | 3801  | Chromosome 1p: Loss of Heterozygosity                    |                            |
| Brain, CNS | 3802  | Chromosome 19q: Loss of Heterozygosity                   |                            |
| Brain, CNS | 3889  | Methylation of O6-Methylguanine-Methyltransferase (MGMT) |                            |
| Breast     | 3827  | Estrogen Receptor Summary                                | Yes                        |
| Breast     | 3826  | Estrogen Receptor Percent Positive or Range              | Yes                        |
| Breast     | 3828  | Estrogen Receptor Total Allred Score                     | Yes                        |
| Breast     | 3915  | Progesterone Receptor Summary                            | Yes                        |
| Breast     | 3914  | Progesterone Receptor Percent Positive or Range          | Yes                        |
| Breast     | 3916  | Progesterone Receptor Total Allred Score                 | Yes                        |
| Breast     | 3855  | HER2 Overall Summary                                     | Yes                        |



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## NEW SSDI: Cervix: p16

- Very similar to the p16 collected for Oropharynx
- Looking for p16 results only
  - Negative
    - Includes weak intensity or limited distribution
  - Positive, Diffuse, Strong reactivity
  - Unknown; not tested
  - Blank: Diagnosis year prior to 2020
    - Once you get your software updated, can be coded for 2021 cases
    - Do not have to go back and redo 2021 cases if some done prior to software update



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## NEW SSDI: Cervix: p16

- 3956: p16
  - CoC
    - Registrars are being asked to complete this SSDI for all Cervix Schema cases starting with diagnosis date 1/1/2021
    - For cases diagnosed 2018-2020, leave this SSDI blank
    - **Manual review of Cervical cases diagnosed 2021 forward is required**
  - NPCR
    - Required for cases diagnosed 1/1/2022 and forward
    - May be blank for or may be completed for 2021 cases
    - For cases diagnosed 2018-2020, leave this SSDI blank
  - SEER
    - Required to collect p16 from CoC facilities for cases diagnosed 2021
    - Required to collect p16 from all reporting facilities for cases diagnosed 2022+



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## Question...

- 2/1/2021-Pathology from TAHBSO shows squamous cell carcinoma, HPV-associated.
- What histology would be assigned?
  - 8070/3 Squamous cell carcinoma ←
  - 8085/3 Squamous cell carcinoma, HPV-associated
  - 8086/3 Squamous cell carcinoma, HPV-independent
  - None of the above
- What would be assigned to p16?
  - 0-p16 Negative; Nonreactive
  - 1-p16 Positive; Diffuse, Strong reactivity
  - 9-Unknown ←
  - Blank



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## Question...

- 2/1/2022 Pathology from TAHBSO shows squamous cell carcinoma. Patient had a positive p16 test.
- What histology would be assigned?
  - 8070/3 Squamous cell carcinoma
  - 8085/3 Squamous cell carcinoma, HPV-associated ←
  - 8086/3 Squamous cell carcinoma, HPV-independent
  - None of the above
- What would be assigned to p16?
  - 0 p16 Negative; Nonreactive
  - 1 p16 Positive; Diffuse, Strong reactivity ←
  - 9 Unknown
  - Blank



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## 3936: Ulceration (Melanoma Skin)

- **Note 2:** Ulceration can only be confirmed by microscopic examination. Do not use findings from physical exam.
  - *It is possible for a patient to present with an ulcerated lesion noted on physical exam, but this is not the same thing as ulceration seen on a microscopic exam*



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## 3936: Ulceration (Melanoma Skin)

- **Note 3:** Melanoma ulceration is the absence of an intact epidermis overlying the primary melanoma based upon microscopic (histopathological) examination.
  - *Code 1 if any biopsy (punch, shave, excisional, etc.) or wide excision is positive for ulceration in the presence of an underlying melanoma*
  - *Code 0 if all specimens are negative OR one specimen is negative and the other is unknown*
  - *Ulceration must be caused by an underlying melanoma. Ulceration caused by trauma from a previous procedure should not be coded as positive for this SSDI*



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## 3882: Lymph Nodes Positive Axillary Level II (Breast)

- **Updated Note 4:** For cases where neoadjuvant therapy is administered
- If clinical nodal involvement is more extensive, include only those nodes that are positive during clinical workup
  - Positive nodes can be from an FNA, core biopsy or sentinel lymph node biopsy
    - *Example:* Patient with positive FNA of axillary lymph node, neoadjuvant therapy administered. Lymph node dissection revealed negative lymph nodes. Code X6 for the positive FNA.
- If the post-neoadjuvant nodal involvement is more extensive, include only those nodes positive during surgery
  - Positive nodes can be from an FNA, core biopsy, sentinel lymph node biopsy or lymph node dissection
    - *Example:* Patient with large breast mass, lymph node negative on clinical exam. Neoadjuvant therapy administered. Mastectomy and sentinel lymph node biopsy done, 1 of 2 SLN's positive. Code 01.



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## 3827: ER Summary/3914: PR Summary (Breast), 3855: HER2 Summary)

- **Note 4:** In cases where there are invasive and in situ components in the primary tumor and ER is done on both, ignore the in-situ results.
  - If ER is positive on an in-situ component and ER is negative on all tested invasive components **in the primary tumor**, code ER as negative (code 0)
  - If in situ and invasive components present and ER only done on the in-situ component **in the primary tumor**, code unknown (code 9)
- Added clarification that this note refers to in-situ and invasive components **in the primary tumor**
  - This does not refer to in-situ in the primary tumor and invasive in the lymph nodes



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## 3827: ER Summary/3914: PR Summary (Breast), 3855: HER2 Summary)

- *Example:* Needle core biopsy, DCIS, ER/PR negative. Sentinel node biopsy, 2/3 positive nodes. Right mastectomy, DCIS, 14/25 LNs, which are ER and PR positive, HER2 negative
  - ER Summary and PR Summary: Negative
  - HER 2 Summary: Unknown
- DCIS in the primary tumor, so therefore the results for ER, PR, and HER2 from the lymph nodes cannot be used



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## Question

- Needle core biopsy, invasive ductal carcinoma, ER/PR negative, HER2 negative.
- Right mastectomy, DCIS only, ER/PR positive Sentinel lymph node biopsy, 0/3 LNs.
  - What is ER Summary?
    - 0-ER negative (0.0% or less than 1%) ←
    - 1-ER positive
    - 7-Test ordered, results not in chart
    - 9-Unknown
  - What is HER2 Summary?
    - 0-HER2 negative; equivocal ←
    - 1- HER2 positive
    - 7-Test ordered, results not in chart
    - 9-Unknown



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## 3884: LN status femoral-inguinal, para-aortic, pelvic (cervix, vulva, vagina)

- This SSDI has been split into three different SSDIs
  - This is how these data items were collected in CS
- LN Status Femoral-Inguinal
  - Collected for Vulva and Vagina only (includes the assessment methods SSDIs)
- LN Status Para-aortic
  - Collected for Vagina and Cervix only (includes the assessment methods SSDIs)
- LN Status Pelvic
  - Collected for Vulva, Vagina and Cervix
  - Note: For Vulva, pelvic lymph nodes are distant, but are still coded in this SSDI



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## 3884: LN status femoral-inguinal, para-aortic, pelvic (cervix, vulva, vagina)

- Data for 2018+ will be automatically converted during the 2022 software updates
  - No registrar input needed
- Once your software is updated, the appropriate SSDIs will show up for the schemas



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## 3871, 3872, 3873: LN Assessment methods

- 3871: Lymph Nodes Assessment Method Femoral-Inguinal
- 3872: Lymph Nodes Assessment Method Para-aortic
- 3873: Lymph Nodes Assessment Method Pelvic
- “Sentinel node biopsy” has been added to Code 2
  - Sentinel node biopsies are becoming more common for the GYN cancers



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## 3838: gleason patterns clinical (Prostate)

- **Note 2:** Code the Gleason Patterns Clinical from a **needle core biopsy, trans rectal ultrasound (TRUS) guided biopsy, transurethral resection of prostate (TURP), and/or simple prostatectomy in this field.**
  - Same clarification in Gleason Score Clinical
- **Note 5:** If the only information available is the Gleason Score, code the patterns X6 (primary pattern unknown, secondary pattern unknown).
- Reminder: Simple Prostatectomy is clinical evaluation only. Must have a radical prostatectomy for a pathological evaluation



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## 3889: Gleason Patterns Pathological (Prostate)

- **Note 2:** Code the Gleason primary and secondary patterns from prostatectomy or autopsy only in this field. Unlike Grade Group Pathological, do not include patterns from tissues taken prior to prostatectomy.
  - **Code results from a transurethral resection of prostate (TURP) or simple prostatectomy in Gleason Patterns Clinical**
  - Same clarification in Gleason Score Pathological



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## 3839, 3841: Gleason Pathological (Prostate)

- Code X7 has been updated
- No **radical** prostatectomy/autopsy performed
- Reminder: There must be a radical prostatectomy to qualify for pathological evaluation



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## Rai SSDI (9823/3: CLL/SLL)

- Confirmed with expert medical oncologist
  - Rai Stage only applicable when bone marrow is involved (primary site C421)
- New code 5 added to the 5 SSDIs
  - Code 5: Not applicable: Primary site is not C421
- When software update is implemented, automatic conversions will be done for CLL/SLL cases where primary site is **not C421 (bone marrow)**
  - Until you receive the 2022 Software update, for cases **NOT coded to C421**, default to code 9 for all 5 SSDIs
- In addition, have received further clarification on how to code the SSDIs when a Rai stage is documented by the physician
  - These guidelines can be used for 2018+



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## 3855: Lymphocytosis (Lymphoma-CLL/SLL)

| Code | Description  |
|------|--|
| 0    | Lymphocytosis not present<br>Absolute lymphocyte count $\leq$ 5,000 cells/ $\mu$ L   |
| 1    | Lymphocytosis present<br>Absolute lymphocyte count $>$ 5,000 cells/ $\mu$ L  |
| 5    | Not applicable: Primary site is not C421   |
| 6    | Lab value unknown, physician states lymphocytosis is present<br>Physician states Rai stage 0-IV  |
| 7    | Test ordered, results not in chart   |
| 9    | Not documented in medical record<br>Lymphocytosis not assessed or unknown if assessed<br>No Rai stage is documented in the record and there is no documentation of lymphocytosis |



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## 3804: Adenopathy (Lymphoma-CLL/SLL)

| Code | Description  |
|------|--|
| 0    | Adenopathy not identified/not present<br>No lymph nodes $>$ 1.5 cm<br>Physician states Rai stage 0   |
| 1    | Adenopathy present<br>Presence of lymph nodes $>$ 1.5 cm<br>Physician states Rai stage I   |
| 5    | Not applicable: Primary site is not C421   |
| 9    | Not documented in medical record<br>Adenopathy not assessed or unknown if assessed<br>No Rai stage is documented in the record and there is no documentation of adenopathy<br>Physician states Rai stage II-IV and there is no documentation of adenopathy |



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## 3907: Organomegaly (Lymphoma-CLL/SLL)

| Code | Description  |
|------|--|
| 0    | Neither hepatomegaly (liver) nor splenomegaly (spleen) present<br>Physician states Rai stage 0-I   |
| 1    | Hepatomegaly (liver) and/or splenomegaly (spleen) present<br>Physician states Rai stage II   |
| 5    | Not applicable: Primary site is not C421   |
| 9    | Not documented in medical record<br>Organomegaly (hepatomegaly and/or splenomegaly) not assessed or unknown if assessed<br>No Rai stage is documented in the record and there is no documentation of organomegaly<br>Physician states Rai stage III-IV and there is no documentation of organomegaly |



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## 3811: Anemia (Lymphoma-CLL/SLL)

| Code | Description   |
|------|---|
| 0    | Anemia not present<br>Hgb $\geq$ 11.0 g/dL<br>Physician states Rai stage 0-II   |
| 1    | Anemia present<br>Hgb <11.0 g/dL  |
| 5    | Not applicable: Primary site is not C421  |
| 6    | Lab value unknown, physician states patient is anemic<br>Physician states Rai stage III   |
| 7    | Test ordered, results not in chart  |
| 9    | Not documented in medical record<br>Anemia not assessed or unknown if assessed<br>No Rai stage is documented in the record and there is no documentation of anemia<br>Physician states Rai stage IV and there is no documentation of anemia |



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## 3933: Thrombocytopenia (Lymphoma-CLL/SLL)

| Code | Description  |
|------|--|
| 0    | Thrombocytopenia not present<br>Platelets (Plt) $\geq 100,000/\mu\text{L}$<br>Physician states Rai stage 0-III   |
| 1    | Thrombocytopenia present<br>Platelets (Plt) $< 100,000/\mu\text{L}$  |
| 5    | Not applicable: Primary site is not C421   |
| 6    | Lab value unknown, physician states thrombocytopenia is present<br>Physician states Rai stage IV   |
| 7    | Test ordered, results not in chart   |
| 9    | Not documented in medical record<br>Thrombocytopenia not assessed or unknown if assessed<br>No Rai stage is documented in the record and there is no documentation of thrombocytopenia |



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Feedback on 2018 data



## Data Relationships with SSDIs

- During review of 2018 data, have noticed inconsistencies with the data
  - Edits were implemented for many of these in 2019 and 2021
- Better to understand the data relationships between data items
  - By understanding relationships between data items, easier to code and data is more consistent....PLUS you'll avoid the edits!



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## Benign and Borderline Brain Tumors

- **/0 and /1 tumors have a DEFAULT value**
  - Brain Molecular Markers
    - Code 86 for benign or borderline tumor
  - Chromosome 1p Status
    - Code 6 for Benign or Borderline tumor
  - Chromosome 19q Status
    - Code 6 for Benign or Borderline tumor
  - MGMT
    - Code 6 for Benign or Borderline tumor
- These codes cannot be used for /3 tumors



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## Breast: LN Positive Axillary Level I-II

- If this SSDI is coded as positive (01-99, X1, X5 or X6)
- Then Regional Nodes Positive must not equal
  - 00 (all nodes examined negative)
  - 98 (no nodes examined)
  - 99 (unknown)
- Reminder: This SSDI is based on nodes that are pathologically examined
  - Do not code clinical findings in this SSDI



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## Breast: ER/PR Summary

- If ER or PR Summary is coded as negative (code 0)
  - ER or PR percent positive MUST be 000 (ER negative, or stated as less than 1%)
  - ER or PR Allred Score MUST be 0 or 1 (Total Allred score of 0 or 1)
- By definition, if a tumor is ER/PR negative, there are no positive cells (code 000) and there is no Allred Score (code 0), which is based on percent positive and the intensity score of the positive cells
  - A tumor that is less than 1% is also coded as negative



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## Breast: ER/PR Summary

- If ER/PR Percent Positive has a known value (01-99, or R10-R90), then ER Summary MUST be positive
  - Some registrars coding negative and unknown when ER/PR percent positive are coded a positive value



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## Breast: ER/PR Summary

- If ER/PR Allred Score is coded 02-08
  - This means that this is a positive tumor
  - ER/PR Summary must be positive
- If ER/PR Allred Score is coded 00-01
  - This means that this is a negative tumor
  - ER/PR Summary must be negative
  - Note: An Allred Score of 1 can be assigned for a tumor which has a less than 1% positivity (coded as negative in Summary SSDI) and where a weak intensity is documented



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## Breast: ER/PR Percent Positive/Allred

- Make sure that your percent positive and Allred Score also match
  - Reminder: It is possible to have an unknown Allred Score if the intensity is not documented
- If you are recording the pathologist's documented Allred Score, make sure that the percent positive matches the value



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## Breast: ER/PR Percent Positive/Allred

| Percent Positive  | Proportion Score | Allred Scores |
|-------------------|------------------|---------------|
| 001-010, R10      | 2                | 3-5, 9        |
| 011-033, R20, R30 | 3                | 4-6, 9        |
| 034-066, R50, R60 | 4                | 5-7, 9        |
| 067-100, R70-R99  | 5                | 6-8, 9        |

Reminder: Allred Score is

- Proportion Score (1-5) based on percent positive PLUS Intensity Score (1-3)

If you do not have an intensity score (found in the pathology report), then Allred Score is 9



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## Breast: ER/PR Percent Positive/Allred

- R40 (Stated as 31-40%)
  - Could be proportion score 3 (11-33) or proportion score 4 (34-67)
- R70 (Stated as 61-70)
  - Could be proportion score 4 (34-67) or proportion score 5 (>67)
- For these two ranges, cannot default to the higher proportion score
- Allred score would be 9 unless physician has documented the Allred Score



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## Colon and Rectum: CRM

- To have a CRM, you MUST have a surgical resection
  - For Colon primaries, that means Surgery of Primary Site is 30-80
    - If Surgery of Primary Site is 00-27, then CRM is XX.7 (no surgical resection)
  - For Rectum primaries, that means Surgery of Primary Site is 27, 30-80
    - If Surgery of Primary Site is 00-26, 28, then CRM is XX.7 (no surgical resection)
- See note 3 in the Coding Instructions for CRM



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## Colon and Rectum: Tumor Deposits

- To qualify for evaluation of tumor deposits, a surgical resection of the primary tumor must be done
- If Surgery of Primary Site is 00, then tumor deposits is X9
- If there are Tumor Deposits and Negative nodes
  - AJCC would be N1c
- If there are Tumor Deposits and Positive nodes
  - AJCC would be based on the number of positive nodes



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## GYN: LN Assessment Methods

- If Regional Nodes examined = 00,
  - Then LN Assessment MUST be 0 (Clinical Evaluation only)
- If Regional Nodes examined = 95
  - Then LN Assessment MUST be 1 (incisional biopsy, FNA)
- If Regional Nodes examined = 01-90, 96-98
  - Then LN Assessment MUST be 2 (lymphadenectomy)
  - Reminder: This also includes Sentinel Lymph Node biopsies
- If Regional Nodes examined = 99
  - Then LN Assessment MUST be 9 (unknown)



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## Prostate: Gleason SSDIs

- If surgery of primary site is 00-30
  - Then there is a clinical evaluation only
    - Gleason Patterns Pathological: X7
    - Gleason Score Pathological: X7
    - Gleason Tertiary Pattern: X7
    - Grade Pathological: 9
- If surgery of primary site is 50-80
  - Then this is a pathological evaluation
    - X7 cannot be used for the above SSDIs
- Reminder: Surgery code 30 is for a Simple Prostatectomy, which does not qualify for Pathological Staging



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Questions?



## Non-SSDI Data Items

- Macroscopic Evaluation of the Mesorectum
- CoC Fields
  - Rx Summ-- Surg Breast
  - Rx Hosp-- Surg Breast
  - Rx Hosp-- Recon Breast
  - Rx Hosp-- Recon Breast
- Required for 2022 forward cases
- Cancer Programs News: NCDB Announces Plans for 2022
  - Please consider registering for the December 15, 2021, [CAnswer Forum LIVE](#). Additional information is always available on our [website](#) and in the [RCRS Library](#).

<https://register.gotowebinar.com/register/4581068329790845195>



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## Field Study 2021

- Closes December 31, 2021
- CE eligible
- Test new data items/revised surgery codes for skin
- Provide feedback



### Participate in Field Testing of Proposed New Data Items NAACCR Mid-Level Tactical Group

The NAACCR Mid-Level Tactical Group (MLTG), which includes representations from all standard setters, now requires that field testing be done for proposed new data items, or major changes, before implementation in the registry field. This process will help standard setters to evaluate the feasibility of collecting new data items and clarify codes and coding instructions before implementation. The MLTG strongly encourages participation in this effort, which will facilitate better communication with the registrars in the field and provide critical information to the groups working on these data items.

The Field Test will be implemented using the same software used for the SEER Reliability Studies, with some modifications. Participation in the Field Test is not required by any of the standard setters, but it is strongly encouraged. This is your chance to comment on data items prior to implementation. CE credits will be available. ***Read more of the details.***

The field testing will take place from 8:00 AM EDT, November 1, 2021 to 12:00 AM EDT, December 15, 2021. Registration for Field Testing is now open. Participants must have access to the [SEER Reliability Studies Site](#) during this period.

The field testing objectives are to determine how well the new data items are understood. Individual results will remain confidential and not released. Results will be de-identified before analysis.

