Directly Coded Summary Stage
Colon Cancer
Directly Coded Summary Staging

- Summary Staging (known also as SEER Staging) bases staging of solid tumors solely on how far a cancer has spread from its point of origin.

- It is an efficient tool to categorize how far the cancer has spread from the original site as the staging categories are broad enough to measure the success of cancer control and other epidemiologic efforts.

- Summary Stage uses all information available in the medical record as it is a combination of clinical and pathologic information on the extent of disease.

- Information within four (4) months of diagnosis.
To begin the staging process, abstractors should always review:

- History and Physical Exam
- Radiology Reports
- Colonoscopy/Endoscopy
- Operative Reports
- Pathology Reports
- Medical Consults
- Pertinent Correspondence
Determining how the Colon Tumor should be Staged requires the Registrar to:

- Determine which segment of the colon is involved.
- Read the physical exam and work up documents.
- Read operative and pathology reports.
- Review imaging reports for documentation of any spread.
- Become familiar with the anatomy of the colon and the regional and distant lymph node chains with the involved segment of colon to avoid incorrect staging if nodes are involved.
- Refer to the online manuals regularly and periodically check the site for updates and/or changes.
Assigning the Correct Summary Stage Code

Nine possible codes for Summary Stage

- 0 = In-Situ
- 1 = Local
- 2 = Regional disease by direct extension only
- 3 = Regional disease with only regional lymph nodes involved
- 4 = Regional disease by both direct extension and regional lymph node(s)
- 5 = Regional disease that is not otherwise specified
- 7 = Distant sites or distant lymph node involvement
- 8 = benign and borderline CNS tumors
- 9 = Unknown if there is extension or metastatic disease (unstaged, death certificate only cases)
What does In-Situ Mean?

- **In-Situ** is defined as malignancy without invasion:
  - Only in epithelial or mucosal tissue
  - Must be microscopically diagnosed

- **In-Situ** of the colon may also be referred to as non-invasive, pre-invasive, intraepithelial, or it may be described as a non-invasive carcinoma in a polyp or adenoma:
  - If pathology states the tumor is in-situ with microinvasion it is no longer staged as In-Situ but is considered to be at least a localized disease.
In Situ Equivalent Terms

Behavior Code of 2
Intracystic, non-infiltrating – located within a cyst
Non-infiltrating
Non-invasive
Pre-invasive
Summary Stage Code 0
No penetration below basement membrane

http://www.seer.cancer.gov/tools/ssm/
Staging In-Situ Cancers Requires Knowledge of a Specific Exception

In-Situ is a non-invasive malignancy and is coded as 0, **UNLESS**

- Primary Tumor was documented in the pathology report as having only an “in-situ behavior” but there is an additional statement confirming malignancy has spread and is present in regional node(s) or in a distant site....... 

- Should that occur, the in-situ stage is not valid and the stage **must** be documented to reflect the regional or distant disease.
What does Localized Mean?

Localized Colon Cancer is a malignancy confined to:

- Intramucosa, NOS
- Lamina Propria
- Mucosa, NOS
- Muscularis Mucosae
- Perimuscular tissue invaded
- Polyp, NOS
  - Head of Polyp
  - Stalk of Polyp
- Submucosa (consider superficial invasion)
- Subserosal tissue (sub) serosal fat
- Transmural, NOS
- Wall, NOS
- Confined to the colon, NOS
- Extension through wall, NOS
- Invasion through Muscularis propria or muscularis, NOS
- Localized, NOS
What Does Regional Disease Mean?

Regional Disease indicates that the tumor has gone beyond the organ of origin but is not considered distant.

- **Regional by direct extension (code 2)**
  Tumor has invaded surrounding organ(s) or adjacent tissues. May also be referred to as direct extension or contiguous spread.

- **Regional to lymph nodes (code 3)**
  Tumor cells may have traveled through the lymphatic system to regional lymph nodes where they remain and begin to “grow.”

- **Regional by direct extension and lymph nodes (code 4)**
  Extension into adjacent structures or organs and lymph node involvement are both present.

- **Regional (as stated by the physician but the site[s] of regional spread is/are not clearly documented) (code 5)**
Regional Disease Pathways

- Regional to Lymph Nodes
- Regional Direct to or Through Serosa
- Direct Extension to Regional Sites
Staging of Regional Disease

- Review records to confirm that tumor is more than localized.
- Review all pertinent reports looking for specific regional disease references and exclusions of distant spread. Terms to watch for are seeding, implants and nodules – scrutinize diagnostic reports for regional disease spreading references to eliminate that spread is not distant.

**Caution:** Colon cancer with lymph node metastases means some nodes have involvement by tumor – always confirm that the lymph nodes are regional.
Regional Direct Extension in All Colon Cancers –Code 2

For all colon cancer segmental sites, direct extension is:

- Invasion of or through the serosa (mesothelium, visceral peritoneum)*
- Extension into or through:
  - Abdominal wall **
  - Adjacent tissue, NOS
  - Connective tissue
  - Fat, NOS
  - Greater omentum
  - Mesenteric fat
  - Mesentery
  - Mesocolon
  - Pericolic fat
  - Retroperitoneum (excluding fat) **
- Small intestine

* In historical cases, these would have been considered local.
** In historical cases, these would have been considered distant.
Regional Direct Extension in All Colon Cancers – cont’d

- **Ascending Colon**
  - Right Kidney only **
  - Right lobe of the Liver
  - Retroperitoneal fat **
  - Right Ureter **

- **Transverse Colon and the Flexures**
  - Bile Ducts **
  - Gallbladder **
  - Gastrocolic ligament
  - Kidney
  - Liver
  - Pancreas
  - Spleen
  - Stomach**

** In historical cases, these would have been considered distant.
Regional Direct Extension in All Colon Cancers—cont’d

- **Descending Colon**
  - Left Kidney **
  - Pelvic Wall **
  - Retroperitoneal Fat **
  - Spleen
  - Left Ureter

- **Sigmoid Colon**
  - Pelvic Wall **

** In historical cases, these would have been considered distant.
Become Familiar With What Constitutes Regional Lymph Nodes

- All colon subsites - Colic, NOS, Epicolic, Mesenteric - NOS, Paracolic/pericolic
- Cecum - Anterior and posterior Cecal Nodes
- Cecum and Ascending - Ileocolic Nodes
- Cecum, Ascending and Hepatic Flexure - Right Colic Nodes
- Ascending, Hepatic Flexure, Transverse and Splenic Flexure* - Middle Colic Nodes
- Splenic Flexure and Descending – Left Colic Nodes

*Nodules in the pericolic fat are considered involvement of regional nodes
Regional Lymph Nodes cont’d

- Splenic flexure, sigmoid and descending - Inferior Mesenteric Nodes
- Descending colon - Sigmoid Nodes**
- Sigmoid colon – Sigmoid Mesenteric
- Sigmoid colon - Superior Hemorrhoidal** and Superior Rectal**

* considered distant for splenic flexure in historic stage
** considered distant in historic stage
Regional, NOS

- It is unclear if the tissues involved are regional direct extension or lymph nodes.

- Physician statement says “Regional disease” with no additional documentation in the medical record.

- Regional Disease with no further information is coded as: Regional, NOS – Summary Stage Code 5
What is Distant Stage?

Distant Stage indicates that the tumor has spread to areas beyond the regional sites.

- These sites may be called:
  - Remote
  - Metastatic
  - Diffuse

- Distant lymph nodes are those that are not included in the drainage area of the primary tumor.

- Hematogenous metastases develop from tumor cells carried by the bloodstream and grow beyond the local or regional areas.
Distant Sites for Colon

- All colon sites – Involvement in organs or lymph node chains that were not specified as regional in previous slides.

- Each segment of the colon has distant direct extension pathways that are foreseeable extension paths.

- All colon sites – Adrenal gland, Bladder, Diaphragm, Fallopian Tube*, Fistula to skin, Gallbladder, Other colonic segments, Ovary*, Uterus*

- Cecum and Appendix – Right Ureter, Right Kidney, Liver**

- Transverse Colon and Flexures – Ureter

- Sigmoid Colon – Ureter, Rectouterine Pouch (Cul de sac)

* Considered regional for cecum, ascending, descending and sigmoid for Historic Stage

** Considered regional in Historic Stage
Tips for the Abstractor

- If review of the patient’s records documents distant metastases, the Registrar can avoid reviewing records to identify local or regional disease.

- Pathology reports that contain a statement of invasion, nodal involvement or metastatic spread cannot be staged as in-situ even if the pathology of the tumor states it.

- If there are nodes involved, the stage must be at least regional.

- If there are nodes involved but the chain is not named in the pathology report, assume the nodes are regional.
A way to remember the difference between regional direct extension and distant metastases is whether the secondary site has tumor on the surface (most likely direct extension) or in the organ (blood-borne metastases).

If the record does not contain enough information to assign a stage, it must be recorded as unstageable.
Important Notes to Remember

- The colon is a hollow organ with multiple segments.
- Localized disease involves only the wall of the colon.
- Each segment has its own regional nodes and direct extension sites.
- Distant sites for one segment may be regional for another.
Exercise 1 – How would you stage this case?

- Patient presented with history of bloody stool. Colonoscopy confirmed tumor in the transverse colon.

- Patient underwent surgery with findings of poorly differentiated adenocarcinoma.

- Path report stated extension through the serosa.

- 5 nodes were removed with 4 positive for tumor.

- A liver biopsy at time of surgery was negative for metastatic disease.
Exercise 1 – How would you stage this case?

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- Patient underwent surgery with findings of poorly differentiated adenocarcinoma.
- Path report stated extension through the serosa.
- 5 nodes were removed with 4 positive for tumor.
- A liver biopsy at time of surgery was negative for metastatic disease.

**Answer - Summary Stage Code 4 – extension to serosa and regional nodes positive for involvement.**
Exercise 2 – How would you stage this case?

- Patient presented with complaints of weight loss and weakness for several months. Physical exam noted hepatomegaly.

- There was no masses identified at time of the digital rectal exam. Barium enema noted a lesion in the sigmoid colon.

- Patient underwent left hemicolecetomy with findings of nodules in the left lobe of the liver positive for metastatic adenocarcinoma.

- Invasive tumor in the sigmoid colon was 5.4 cm in greatest dimension. Metastatic disease found in 4 mesocolic lymph nodes.
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- Invasive tumor in the sigmoid colon was 5.4 cm in greatest dimension. Metastatic disease found in 4 mesocolic lymph nodes.

**Answer -** Summary Stage Code 7 – Discontinuous metastatic tumor deposits in liver.
Excellent Resources for Summary Staging


The CDC gratefully acknowledges Terese Winslow for granting permission to incorporate her illustrations into this presentation.
For questions, please contact your designated CDC/NPCR Education Training Coordinator:

Donna M. Hansen, CTR
Auditor/Trainer
UC Davis Institute of Population Health
California Cancer Registry
1631 Alhambra Blvd, Suite #200
Sacramento, CA 95816
(916) 731-2543

Email: dhansen@ccr.ca.gov

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY:1-888-232-6348
E-mail: cdcinfo@cdc.gov  Web:www.cdc.gov
Centers for Disease Control and Prevention
Chamblee Campus, Atlanta GA