Directly Coded Summary Stage Is Back

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With the advent of Collaborative Staging some registries have lost touch with or have never been exposed to directly coded Summary Stage. Directly coded Summary Staging is required from all reporters by CDC's National Program of Cancer Registries (NPCR) beginning with diagnosis year 2015. Registries that report to the American College of Surgeons or SEER will meet additional criteria as set forth by the ACoS or the NIH.

The following slides will look at how a registrar needs to approach Summary Staging. It will be a review for some and new information for others.

Outline

- **What is SEER Summary Stage 2000 (SS2000)?**
- **Summary Stage Housekeeping**
- **Summary Stage Manual Organization**
- **Summary Stage Code Review**
- **How to Stage**
- **About Lymph nodes**
- **Abstractor Tips**
- **Staging Exercises**

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What is SEER Summary Staging?

- The most basic way to categorize how far a cancer has spread from its point of origin to other parts of the body
  - Anatomic Staging
- Applies to every anatomic site, including the lymphomas and leukemia's
  - *Can be used for pediatric cancers*
- Uses all information available in the medical record
- Is a combination of the most precise *clinical and pathologic* documentation of the extent of disease.
- Efficient staging tool
  - Provides a standardized measure of anatomic extent of disease for cancer surveillance.
  - Staging categories are broad enough to measure the success of cancer control and other epidemiologic efforts
  - Epidemiologists/Researchers use Summary Stage NOT Physicians.

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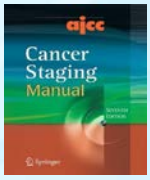
- As the slide states, Sum Stg is the most basic way to categorize tumor extension.
- Summary Stage can also be used to stage pediatric cancers.
  - There are no specific pediatric scheme; you code pediatric cases as you would adult cases.
  -

Summary Stage is not used by physicians and you will not see Summary Stage documented in medical records.

Summary Stage & AJCC TNM Stage

- Two Different Staging Systems with Different Rules
- Often don't align-cannot convert TNM to Summary Stage



SEER Summary Staging
- Epidemiologic Purposes
- (Population Information)

AJCC TNM System
- Individual Patient Assessment/Treatment
  - T=Tumor
  - N=Nodes
  - M=Metastasis

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Summary stage is different from AJCC TNM. TNM is geared toward individual patient assessment and treatment. Summary Stage is used by epidemiologists and other researchers.

IMPORTANT: TNM cannot be converted to Summary Stage and vice versa. They are based on different rules. Some lymph nodes designated as regional in one system may be considered distant in the other which results in different stage assignments. I will give some examples in later slides.

What is Summary Stage

Summary Stage Groups

- 0 In Situ
- 1 Local
- 2 Regional by Direct Extension (D.E.)
- 3 Regional Lymph Nodes only involved
- 4 Regional by *both* D.E. and to Regional Nodes
- 5 Regional, NOS
- 7 Distant Sites and/or Distant Nodes
- 8 Brain/CNS (benign or borderline), Not applicable
- 9 Unknown

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This is the complete list of the Summary Stage categories/codes. The extent of tumor involvement, lymph node involvement or distant disease is assessed and the cancer is staged/assigned to one of these categories/codes. There are a total of nine Summary Stages. We will review these categories and what they mean in more detail in later slides.

The Summary Stage 2000 Manual

Housekeeping:

- **Paper Manual - Needs updating with Errata**


Updates and Errata
- Updates to Manual and Files (12/2012) [105 KB]
- Errata (8/20/2002) [30 KB]
- Errata (6/14/2001) [21 KB]

http://seer.cancer.gov/tools/ssm

- Stage Group 8 - added in 2003
- Histology codes added to some schema
- Clarifications to notes in some schema
- **TNM references not current;** they are from the AJCC 5th Edition
  - ✓ Check AJCC 7th Ed definitions to compare definitions; especially important for PROSTATE
- **FIGO stage references are not current**

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First, a little light housekeeping…..

If you plan to use the paper manual there are errata which you need to download to update your manual. New histology codes were added to many scheme, as well as additional or revised notes in specific scheme.

Code 8 was in added in 2003 to be used for benign brain.

IMPORTANT: TNM & FIGO references are out of date; USE CAUTION in situations where the only stage information you have is a MD statement of TNM or FIGO stage and which Summary Stage code you assign.

Summary Stage Manual

Housekeeping:

- **Online Manual Recommended:http://seer.cancer.gov/tools/ssm**

- **Online manual contains all updates with the exception of code 8**
  - Remember Code 8 does exist

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This screen shot (sorry a little blurry) shows the links in the online Summary Stage Manual for downloading the errata.

Try out the online manual. Navigating is much easier than you think!

Summary Stage Manual

- Review SS2000 Manual: **Know how to use the manual before you start**
- Read first chapters carefully-lots of good info!

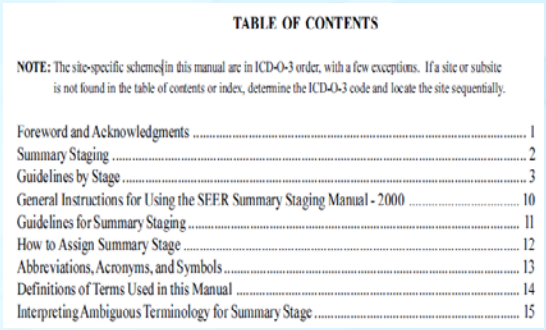

TABLE OF CONTENTS

NOTE: The site-specific schemes in this manual are in ICD-O-3 order, with a few exceptions. If a site or subsite is not found in the table of contents or index, determine the ICD-O-3 code and locate the site sequentially.

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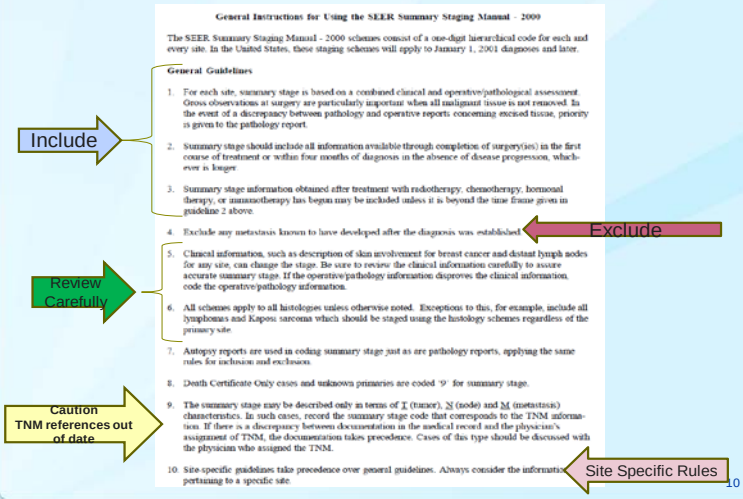
Here is a screen shot of the Table of Contents in the Summary Stage Manual. It is important to familiarize yourself with the manual organization .

Summary Stage Manual



General Instructions for Using the SEER Summary Staging Manual - 2000

The SEER Summary Staging Manual - 2000 schemes consist of a one-digit hierarchical code for each and every site. In the United States, these staging schemes will apply to January 1, 2001 diagnoses and later.

General Guidelines

1. For each site, summary stage is based on a combined clinical and operative/pathological assessment. Gross observations at surgery are particularly important when all malignant tissue is not removed. In the event of a discrepancy between pathology and operative reports concerning excised tissue, priority is given to the pathology report.
2. Summary stage should include all information available through completion of surgery(ies) in the first course of treatment or within four months of diagnosis in the absence of disease progression, whichever is longer.
3. Summary stage information obtained after treatment with radiotherapy, chemotherapy, hormonal therapy, or immunotherapy has begun may be included unless it is beyond the time frame given in guideline 2 above.
4. Exclude any metastasis known to have developed after the diagnosis was established.
5. Clinical information, such as description of skin involvement for breast cancer and distant lymph nodes for any site, can change the stage. Be sure to review the clinical information carefully to assure accurate summary stage. If the operative/pathology information disproves the clinical information, code the operative/pathology information.
6. All schemes apply to all histologies unless otherwise noted. Exceptions to this, for example, include all lymphomas and Kaposi sarcoma which should be staged using the histology schemes regardless of the primary site.
7. Autopsy reports are used in coding summary stage just as are pathology reports, applying the same rules for inclusion and exclusion.
8. Death Certificate Only cases and unknown primaries are coded '9' for summary stage.
9. The summary stage may be described only in terms of T (tumor), N (node) and M (metastasis) characteristics. In such cases, record the summary stage code that corresponds to the TNM information. If there is a discrepancy between documentation in the medical record and the physician's assignment of TNM, the documentation takes precedence. Cases of this type should be discussed with the physician who assigned the TNM.
10. Site-specific guidelines take precedence over general guidelines. Always consider the information pertaining to a specific site.

Include

Exclude

Review Carefully

Caution TNM references out of date

Site Specific Rules

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The General Guidelines are on page 10. Read these completely and carefully…..**each point is important**. We will cover some of these in upcoming slides.

Summary Stage Manual

- Instructions & guidelines are all in the first 15 pages!
  - Includes description and overview of the Summary Stage codes 0-9
  - Includes definitions of terms used in manual
- Site specific chapters are in ICD-O-3 primary/site order
  - Exception: Lymphoma/Leukemia/Kaposi sarcoma & other hematopoietic cancers are based on histology specific scheme.
  - Many anatomic drawings included and tables for reference.
- Each site specific schema provides:
  - Definitions, names organ structures, tissues, regional and distant lymph nodes and metastatic sites.
  - Anatomic drawings and Notes for coding consideration.

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Summary Stage Manual - Scheme example

COLON
C18.0-C18.9
C18.0 Cecum
C18.1 Appendix
C18.2 Ascending (right) colon
C18.3 Hepatic flexure of colon
C18.4 Transverse colon
C18.5 Splenic flexure of colon
C18.6 Descending (left) colon
C18.7 Sigmoid colon
C18.8 Overlapping lesion of colon
C18.9 Colon, NOS

SUMMARY STAGE

0 In situ: Noninvasive, intraepithelial
(Adeno)carcinoma in a polyp or adeno

1 Localized only

Invasive tumor confined to:
Intramucosa, NOS
Lamina propria
Mucosa, NOS
Muscularis mucosae
Muscularis propria
Perimuscular tissue invaded
Polyp, NOS:
Head of polyp
Stalk of polyp
Submucosa (superficial invasion)
Subserosal tissue*(sub)serosal fat
Transmural, NOS
Wall, NOS

Confined to colon, NOS
Extension through wall, NOS
Invasion through muscularis propria or mu

Localized, NOS

2 Regional by direct extension only

Extension to:
All colon sites:
Invasion of through serosa (mesothelium) (visceral peri
Extension into/through
Abdominal wall***
Adjacent tissue(s), NOS
Connective tissue
Fat, NOS
Greater omentum
Mesenteric fat
Mesentery
Mesocolon
Pericolic fat
Retroperitoneum (excluding fat)***
Small intestine

Ascending colon:
Kidney, right***
Liver, right lobe
Retroperitoneal fat***
Ureter, right***

Transverse colon and flexures:
Bile ducts***
Gallbladder***
Gastrocolic ligament
Kidney
Liver
Pancreas
Spleen
Stomach***

Descending colon:
Kidney, left***
Pelvic wall***
Retroperitoneal fat***
Spleen
Ureter, left

Sigmoid colon:
Pelvic wall***

3 Regional lymph node(s) involved only

REGIONAL Lymph Nodes

All colon subsites
Colic, NOS
Epicolic (adjacent to bowel wall)
Mesenteric, NOS
Pericolic/paracolic

Nodule(s) in pericolic fat

Cecum and Appendix:
Cecal, NOS
Anterior (prececal)
Posterior (retrocecal)
Ileocolic
Right colic

Ascending colon:
Ileocolic
Middle colic
Right colic

Transverse colon and flexures:
Inferior mesenteric for splenic flexure only
Left colic for splenic flexure only
Middle colic*
Right colic for hepatic flexure only

Descending colon:
Inferior mesenteric
Left colic
Sigmoid***

Sigmoid:
Inferior mesenteric
Sigmoidal (sigmoid mesenteric)
Superior hemorrhoidal***
Superior rectal***

Regional lymph node(s), NOS

4 Regional by BOTH direct extension AND regional lymph node(s) involved

Codes (2) + (3)

Note: Ignore intraluminal extension to adjacent segment(s) of colon/rectum or to the ileum from the cecum

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Here is an example of the Colon Summary Stage Schema. Now I have three pages layered here to illustrate the format; this is not the complete scheme...

Note up at the top you have the listing of the topography codes…

Followed by the Summary Stage Codes, LOCALIZED, REGIONAL, REGIONAL WITH LYMPH NODE, etc. in ascending order along with the names of the tissues, organs, involved in that category.

Each site specific scheme is set up in the same way.

Summary Stage Code Review

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Now lets look at each of the Summary Stage codes in more detail……..

Stage 0 - IN SITU

- **In-situ is defined as malignancy without invasion.**
- No potential to metastasize
- No invasion of the basement membrane
- No lymph-vascular invasion
- No foci of invasion present
- No micro-invasion present
- No evidence of nodal involvement
- Can only be determined pathologically - can never be a clinical diagnosis

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In situ tumors have no potential to metastasize……

Only carcinoma's and Melanoma's can be in situ. Sarcomas can never be in situ nor any of the lymphoma's or leukemia's.

IN SITU- Is it really ?

Be careful when reading pathology report

Example 1:
Large in situ carcinoma of breast with 3 of 15 axillary nodes positive for cancer

Example 2:
Final diagnosis of carcinoma in situ with focus of microinvasion on the lateral margin.

Would you stage either of these in situ?

No

Linda Mulvihill, CTR "General Rules SEER SS2000" 14

Example 1: Sometimes when a tumor is resected the invasive portion is not found. However since there are lymph node mets even though the primary tumor is reported as in situ, at some point invasive tumor cells were present and metastasized to the lymph nodes. If Lymph node mets are present, the tumor cannot be staged as in situ. **This case would be coded as Stage 3, regional LNs involved.**

Example 2: If the tumor has a component of **Microinvasion,** the tumor is no longer in situ. **This case would be coded as Stage 1 Localized.**

Read reports carefully!

Stage 1 - LOCAL

- **There is infiltration past the basement membrane into functional part of organ-*but not beyond*.**
- **Cancer must be confined to the organ of origin**
- **A tumor can show metastases *within* the organ itself and still be confined to the organ of origin-localized**
- **Rule out any nodal involvement**
- **Rule out extension to regional organ(s) or tissues**
- **Rule out distant disease**

Example:1.2 cm adenoca sigmoid colon with focal invasion of muscularis propria; 0/13 regional LNs positive. CT Ab/Pelvis no evidence of disease. Code as Stage 1 Local disease

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For organs that have definite boundaries (prostate, testis, stomach), or sites where there is a clear line between the organ of origin and the surrounding region (breast or bladder), it is usually relatively straight forward to determine whether the disease is localized.

For many internal organs it is not as easy to determine if tumor is localized without surgery; however increased sophisticated imaging can help define extent of disease in many cases.

- **Caution with hollow organs; know layers of the wall of these organs to confirm the tumor is still contained *within* the organ**

Stage 1- LOCALIZED – Special notes

- **If still within the organ of origin**
  - Blood vessel invasion
  - Perineural lymphatic invasion
  - Vascular invasion

    OR
  - Multiple tumors, same cell type
  - Metastases within the organ of origin
  - Multifocal disease

Does not change the stage
"Indicates - *Potential* for Spread"

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It is important to understand that a localized tumor confined to the organ of origin, **could still show blood vessel invasion, perineual lymphatic invasion or vascular invasion, however, this does not mean the tumor is not still localized.** If any of these prognostic factors are noted, it means there is **potential for this tumor to spread**, but if there is no disease elsewhere and negative LNS, the tumor has not yet spread and the disease is localized.

Another way to think of this is the **cancer cells may have boarded the train, but the train has not left the station as yet.**

Additionally, a tumor can be widespread or show metastases WITHIN the original organ, but not beyond, and therefore is still considered local disease.

EXAMPLE: Right breast with multiple areas or metastases of infiltrating breast carcinoma, IS STILL CONSIDERED LOCAL DISEASE; if it's confined within the organ of origin.

Regional Disease
Stages 2 , 3, 4 or 5

- **Regional tumors may demonstrate metastases via direct extension, via regional lymphatics or *both*.**
- **Regional Disease is the Broadest Category**
- **Subdivided into Stages 2-5**
  - **Stage 2- Regional by Direct Extension**
    - **Tumor through entire wall of organ into surrounding organ or adjacent tissues**
    - **Tumor has demonstrated it can metastasize by direct extension.**
- Example: Descending colon adenoca with extension completely through bowel wall extending to and adherent to pelvic side wall.
  - Code as Stage 2 Regional by direct extension

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Regional Stage may take the most time to consider and stage because it's subdivided into 4 levels. BUT you can usually rule out in-situ and distant disease quite quickly so your time is maximized in determining the level of regional disease to assign the correct code

Tumors which are "regional" have a greater potential to metastasize.

Regional Disease
Stages 3 & 4

- **Stage 3- Invasion of Regional Lymph Nodes only**
  - **Example: Infiltrating ductal breast carcinoma with 1/2 sentinel lymph nodes positive for mets.**
    - **Tumor is confined to the breast and regional LNs are involved.**
- **Stage 4- Both Direct Extension & Positive Lymph Nodes**
  - **Example: Endometrial ca extending into vagina with 6/17 pelvic LNs positive**
    - **Tumor directly extends out of the organ of origin to adjacent tissues or structure AND involvement of regional lymph nodes.**

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Stage 3 is extension only to the regional lymph nodes. See breast example on slide. Another example: Descending colon cancer with invasion of the muscularis propria and 6/13 mesenteric LNs positive for metastases would be Summary Stage 3. The tumor has not invaded beyond the organ, however the regional LNs are also involved.

Stage 4 is **direction extension out of the organ of origin** to adjacent tissues or structure AND involvement of regional lymph nodes.

Stage 5- Regional, NOS

- **Unclear whether tissues are involved by direct extension or if lymph nodes involved**
  - **Insufficient workup**
  - **Evidence of disease is more than local but less than distant**
  - **LNs status unknown**
  - **Clinical diagnosis only**
  - **MD statement only of "regional disease"**
  - **Other categories not applicable**
- **Example: Invasive colon cancer without metastatic workup or surgical resection.**
- **NOTE: Regional NOS / Stage 5 is used for Lymphoma's with 2 or more lymph node chains involved (same side of diaphragm).**

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In some cases you may know the tumor is no longer in situ, however you have no evidence of distant mets. You may also have no information about LN status. In these situations you may only be able to assign stage 5 Regional NOS.

This might be because the patient was unable to undergo a full workup, it's a clinical diagnosis only, or all you have is an MD statement of "regional disease". Use code 5 in these situations.

Example: MD statement patient with regional breast cancer, or a colon cancer without metastatic workup or surgical resection.

Stage 7 - DISTANT

Diffuse disease and/or advanced spread:

- to distant organs or tissues
- to distant nodes
- seeding in a body cavity
  - Peritoneal cavity or pleural cavity

Systemic cancers:

- Leukemia/Hematopoietic
- Multiple Myeloma

Always distant – Stage 7

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When there is evidence tumor has advanced to distant LNs, distant organs or other tissues, the stage is Distant, code 7

All systemic cancers such as leukemia's, hematopoietic disease, are always staged as Distant, code 7.

Stage 8
Benign & Borderline CNS & Not Applicable

- **Benign & Borderline CNS**
  - Never use for malignant tumors
- **"Not applicable"**
  - Other benign/borderline reportable tumors
- **Code added in 2003**
  - Not in Manual (paper OR online)
  - Remember Code 8 exists!

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The Registrar should be aware of Summary Stage code 8 which is used for benign or borderline CNS tumors, as well as tumors which are "not applicable" for staging. **Code 8 does not apply to malignant brain tumors. Malignant brain tumors have their own scheme.**

Stage 9 - Unknown

- Insufficient information to stage
- Patient expired before workup
- Patient refused workup
- Limited workup due to age, or comorbid conditions
- No MD statement regarding extent of disease
- Primary Site is Unknown -
- Death certificate only case
- Assign unknown stage sparingly
- ✓ Document the reason case is unknown stage in the text.

NOTE: If you have enough information to determine the case is not in situ and not distant, but somewhere in between, you should be able to stage the case!

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Unknown primary and death certificate only cases are always coded as Stage 9. Unknown stage cases cannot be used in data analysis or research.

Hodgkins & Non-Hodgkin Lymphoma–all sites

- **Site based on histology**
  - Can never be in situ - there is no basement membrane
- **Only Stages 1, 5, 7 or 9 apply**
  - No stage 2, 3 or 4
  - Stage 1- involvement of single lymph node region
    - Single extralymphatic organ/site
    - Multifocal involvement of one extralymphatic organ/site
  - Stage 5 – Involvement of 2 or more LN region on same side of diaphragm
- **Any mention of lymphadenopathy is considered involvement of nodes**

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For the lymphomas only stage 1, 5, 7 or 9 apply. You can never have stage 2, 3 or 4. Staging indicates one or more nodal chains involved, so you cannot have spread to regional lymph nodes stage 3.

Any mention of lymphadenopathy considered involvement of nodes.

Malignant Brain and Meninges

Malignant brain and meninges

- **Only Stages 1, 5, 7 or 9 possible**
- **Disease spread split between Stage 1 Local and Stage 5 Regional NOS**
  - **Read manual for involved tissues/spread.**
- **Stage 3 & 4 not possible**
  - **No anatomic lymph nodes nor nodal drainage area in these sites**

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The anatomy of the brain does not contain any lymph nodes or nodal drainage areas; therefore codes 3 & 4 are not possible.

Hematopoietic, Reticuloendothelial, Immunoproliferative, and Myeloproliferative neoplasms

Leukemia, Multiple Myeloma and other hematopoietic diseases are "systemic" conditions

- **Always Summary Stage 7 – Distant**

- **Localized Stage 1 allowable only for these histologies:**
  - ***9731/3 Plasmacytoma of bone, solitary*** *(or Stage 7 or 9 as applicable)*
  - ***9734/3 Plasmacytoma, extramedually*** *(or Stage 7 or 9 as applicable)*
  - ***9750/3 Malignant histiocytosis*** *(or Stage 7 or 9 as applicable)*
  - ***9751/3 Langerhans cell histiocytosis NOS*** *(Stage 1 or 9 only)*
  - ***9752/3 Langerhans cell histiocytosis, unifocal*** *(Stage 1 or 9 only)*

If you did not download your errata for your paper manual, you would not have the information regarding allowable localized stage 1 histologies noted on this slide!

Summary Stage – How To

Summary Stage - How to

Summary Stage Should Answer 4 basic Questions

1. Where did the cancer start? (primary site)
2. Where did the cancer go? (extent of disease)
3. How did the cancer get to the other organ or structure?
4. What is the correct stage / code for this cancer?

These questions are basically the same for all staging systems.

Summary Stage - How to

Understand How Cancer Spreads

Methods of spread:

- Local Invasion
- By direct extension beyond local organ
- Via lymphatic system
- Via blood-borne metastases
- Intracavitary metastatic seeding

How did the cancer get to the other organ or structure?

- Continuous line of cancer cells from the primary site
  - *Probably direct extension*
- Cancer cells break away from primary cancer and traveled through blood stream or body fluids?
  - *Probably distant*

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In Summary stage it is important to know how the cancer spread to other organs. This will affect your stage selection.

How did the cancer get to the other organ or structure?

●Continuous line of cancer cells from the primary site

→*Probably direct extension*

●Cancer cells break away from primary cancer and traveled through blood stream or body fluids?

→*Probably distant*

NOTE: Ovary is an exception to the distant rule. Extension and tumor implants within the pelvis is coded as Regional disease.

Summary Stage - How to

- **Summary Stage Uses Ambiguous Terminology**
  - 2 lists of terms clarify whether or not a finding is part of the malignant process.
  - Instruct registrar to either
    - **Consider as Involvement, or…**
    - **Do Not Consider as Involvement**
- **Review terms to interpret tumor involvement & select correct stage.**

SEER Summary Stage 2000, Page 15

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Ambiguous terminology IS used in Summary Stage.

Summary Stage - How to

Summary Stage –Timing Rule

Should include all information through completion of surgery(s) in the first course of treatment

OR

Within four months of diagnosis in the absence of disease progression

--Whichever is longer—

- Disease progression is defined as further direct extension, regional node involvement, or distant metastasis known to have *developed after the diagnosis was established.*

SEER Summary Stage page 10

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Just like TNM, Summary Stage has a timing rule!

This timing rule allows you to include tumor information following neoadjuvant treatment provided there has been no disease progression. Summary stage uses all clinical and pathologic information combined. See page 10, #3.

Summary Stage – How To

Timing Rule Example:

- **2/10 Prostate biopsy c/w Adenocarcinoma, grade 3**
- **3/15 Radical Prostatectomy**
- **7/01 Patient complains of hip pain**
- **7/04 Bone scan reveals metastatic disease from prostate cancer**

- **Would you include all of this information to determine stage?**
  - **No - the bone scan is disease progression**

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Here's a timing rule example….

Patient was diagnosed via biopsy with prostate carcinoma and underwent radical prostatectomy. Then in July the patient is diagnosed with bone mets. Would you include all this in determining stage? NO.

Since the patient/MD treatment plan was radical prostatectomy, if the MD has any suspicion there was metastatic disease, prostatectomy would not be an appropriate treatment choice, therefore we can assume there was no suspected mets at diagnosis. Thus, the bone mets found in July indicates progression of disease, and this information is excluded in determining the stage.

Exclude any progression or mets known to have developed after diagnosis was established.

Summary Stage- How To

Where to find information for staging:

- Admitting Notes
- History and Physical Exam
- Consultation Reports
- MD Progress Notes
- Discharge Summary
- Diagnostic Imaging Report(s)
- Endoscopy report(s)
- Operative Report(s)
- Pathology Report(s)
- Laboratory and Specialty Tumor markers
- Any records relevant to case

Look for the same information as you would to code CS or TNM

Reminders:

- **Summary Stages uses all clinical and pathologic info to code the highest applicable stage**
- **Clinicians do *not* document Summary Stage**

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You have already been applying anatomic staging principals with Collaborative Stage or TNM (if you have been collecting TNM). Summary Stage uses these same principals. You just need to learn how to use and follow the SS manual Instructions and Guidelines.

Summary Stage- How To

Determine the Extent of Disease

After you have reviewed the medical record:

- **Determine the primary site**
  - Select appropriate Summary Stage Schema
    - ICD-O-3 solid tumor scheme
    - Histology specific scheme

- **Review schema** & match names of structures and organs involved
  - **Important: Carefully review the "NOTES" at the end of staging scheme for special rules.**
  - **If more than one structure or organ is involved, select the highest category that includes an involved structure.**

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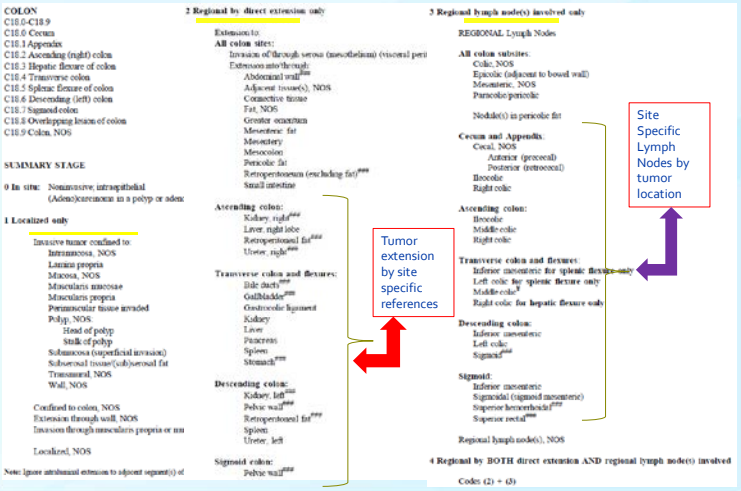
- Begin your chart review
- Review the complete diagnostic workup
- Select your anatomic scheme, or a histology scheme if your case is a lymphoma, leukemia or other "heme" disease.
- If there are notes at the end of the scheme, carefully review for instructions.

Summary Stage - How to



Here is the colon scheme example again.

- Read the different stage categories and note the involved tissues from your case.
- See how in the colon section under Regional by direct extension, it lists **tumor extension to other organs based on the location of the** tumor in the colon.
- Also note under Stage 3 it notes the specific **regional lymph nodes/names relevant to the tumor location in the colon.**

Summary Stage – How To
Determining Stage - Process of Elimination

What Can Be Ruled Out?

- ***First Rule out In situ or distant disease, or benign reportable disease.***
  - **These are the easiest to quickly identify and rule out**
- ***Then Rule out Localized disease***
  - **Has the disease spread outside the outer limits of the organ or origin?**
  - **Remember vascular invasion, perineural invasion, blood vessel invasion – does not change stage**
- ***Determine if it's Regional disease:***
  - **If other stages have been ruled out - then the stage is regional**
  - **Lymph node involvement NOS – stage is "at least" regional nodes**
  - **Assume ipsilateral, unless stated otherwise**
- ***Is Stage Unknown:***
  - **Unknown primary site or Not enough Information**

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For efficient assignment of summary stage, utilize a *Process of Elimination.*

- Three of the Summary Stage categories can be ruled out quickly, In situ, Distant or reportable Benign disease. If the tumor is distant, there is no need to review further, since there is no greater extent of disease possible.
- Next rule out localized disease.
- If it's regional, then narrow down to the correct regional category.
- Finally, is there is insufficient information the case may be unstageable/Unknown Stage

About Lymph Nodes - Site Specific

- **Each Site Specific scheme/chapter lists:**
  - **Regional Lymph Nodes**
  - **Distant Lymph Nodes**
- **If LN chain is not listed as regional or distant in SS2000**
  - **Determine if LN in medical record is a synonym for one listed in SS***
  - **If term not synonymous, can assume LNs are distant**
  - **If MD refers to "*local nodal involvement*" Summary Stage is still regional per rules so code accordingly. (See slide 39)**
- ***Review Appendix III in SS2000 Manual for LN synonyms**
  - Example: Superficial axillary (low axillary) (Level 1 axillary)
- **Excellent additional reference for LN names is the AJCC Staging Manual**

✓ ***DOCUMENT / NAME "INVOLVED" NODES IN TEXT!***

SEER Summary Stage 2000, page 7

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If you don't find the named lymph nodes from the medical record in your chosen scheme, **refer to the list of lymph node synonyms on page 284 to see if you can find a synonym for the LN in the medical record**.

Example: Superficial axillary (low axillary) (Level 1 axillary).

If there is no synonym you can assume the lymph node(s) is distant.

If MD refers to "local nodal involvement", it's still regional and would be coded accordingly.

About Lymph Nodes – Solid Tumors

- ***Don't Overstage:***
  - **Palpable, visible, swelling or shotty lymph nodes are <u>not</u> considered involved**
  - **Enlarged nodes or lymphadenopathy should be ignored EXCEPT for lung.**
- **Terms "fixed or matted lymph nodes" or "mass in the mediastinum, retroperitoneum, and/or mesentery <u>are</u> considered involvement of lymph nodes** (With no specific information [stated] as to tissue involved)
- **Any unidentified nodes included with resected primary site specimen are to be considered as *regional LNS***

SEER Summary Stage 2000 Manual, page 7 37

Refer to the list of terms which indicate lymph node involvement. Make sure to not overstage.

The next slide shows a table which may make this decision quicker……

About Lymph Nodes & Terms

Ambiguous Lymph Node Terms Table

TUMOR	INVOLVED	TUMOR	NO INVOLVEMENT
SOLID TUMORS	Fixed, matted mass in the mediastinum, retroperitoneum and/or mesentery	SOLID TUMORS	Palpable, visible, swelling, shotty (without clinical or path statement)
LUNG	Enlarged, Lymphadenopathy	SOLID TUMORS (Except Lung)	Enlarged, Lymphadenopathy
LYMPHOMAS	Any mention of lymph nodes		

- However: MD/clinical statement of involvement takes precedence over terms

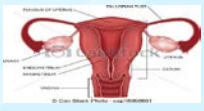
Table Created by Linda Mulvihill, CTR 38

This table was created by Linda Mulvihill, CTR which she is happy to share. She created this simple table for a quick reference for herself to easily determine when terms for LNs are considered involved versus not-involved, rather than having to read through the paragraph explanation as demonstrated on the previous slide. I think it does a really good job of showing at a glance when LNs are considered involved versus not involved per the SS interpretation of terms.

About Lymph Nodes – Inaccessible Sites

SITES

Lung	**Liver**
Esophagus	**Stomach**
Kidney	**Bladder**
Prostate	**Ovary**
Corpus Uteri	



- **Review CT's/PET**
- **Surgical Observations by MD**

SEER Summary Stage 2000 Manual, page 7 39

Regional LNs are not palpable for inaccessible sites such as bladder, kidney, prostate, etc. The sites here are not all the sites with inaccessible LNs, but some of the major sites you are likely to abstract.

In assessing LNs for these sites, if no LNs are removed for pathologic exam, the best description concerning regional lymph nodes will be imaging studies and/or the surgeons evaluation at time of surgery.

About Lymph Nodes

TNM Stage and Summary Stage Differences

- **Some lymph nodes in Summary stage schemes may be regional but distant per TNM *and vice versa.***
- **Prostate Example**
  - **71-year old male**
  - **Negative metastatic imaging workup**
  - **Pathology reveals Adenoca of prostate bilaterally**
  - **2 of 8 pelvic LNs positive**
    - **Summary Stage = Regional LNs involved, Stage 3**
    - **AJCC TNM = T2c N1 M0 Stage IV**
- **Remember you cannot convert TNM to Summary Stage**

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LNs are not created equal in Summary Stage versus AJCC TNM.
This case scenario illustrates a situation where the Summary Stage and TNM equal different stages. In Summary Stage involvement of the prostate regional lymph nodes is coded as Regional LNs involved, Stage 3.

While in TNM ANY lymph node involvement automatically equals Stage IV disease, the most advanced stage.

For all sites review regional and distant LNs in the manual and assign to the proper category. Don't rely on your TNM memory about which LNs are regional versus distant. They may be classified differently between the staging systems.

Abstractor Tips

- **Physicians may use words differently than registrars**

Clinicians may use some terms differently than cancer registrars. Therefore, it is important to understand the words used to describe the spread of the cancer and how they are used in staging. For example:

1) "Local" as in "carcinoma of the stomach with involvement of the local lymph nodes." Local nodes are the first group of nodes to drain the primary. Unless evidence of distant spread is present, such a case should be staged as regional, not local.

2) "Metastases" as in "carcinoma of lung with peribronchial lymph node metastases." Metastases in this sense means involvement by tumor. Such a case would still be regional. Learn the names of regional nodes for each primary site.

If LNs are involved it's not local

LN mets- Not distant mets.

SEER Summary Stage Manual page 6

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MDs may use words differently than registrars. Therefore, it is important to understand the words used to describe tumor involvement…….

Abstractor Tips

- **If all malignant tissue is <u>not</u> removed**
  - Include information from gross surgical observation about any observed tumor involvement.
- **Disagreement concerning <u>excised</u> tissue**
  - Pathology report has precedence over operative report
- **Operative/pathology <u>disproves</u> clinical information**
  - Operative/pathology has precedence over clinical information

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◆An example which illustrates the first bullet point is a case where the surgeon observed liver mets/tumor im plants on the liver surface which he did not sample or resect. Any MD statement of gross tumor involvement is included to select the correct stage.

◆If the operative report indicates LNs were removed, however, the pathology reports reveales no LN specimen was submitted for exam, the pathology report takes precedence. Sometimes surgeons get into a "dictation routine" and may indicate in their narrative tissues removed (which they did not remove). Doctors are human too and sometimes make dictation mistakes.
◆3rd bullet Example: Colon ca of the transverse colon. CT scan of the abdomen indicates mets to the nearby mesenteric LNs. LN dissection including mesenteric LNs with pathologic review reveals all LNs negative; path report disproved the clinical CT findings.

Abstractor Tips

- If pathology reports contain statements of invasion, nodal-involvement or metastatic spread- the case 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 medical record or path report, *assume the nodes are regional.*
- For regional tissues, structures, and LNs, *assume ipsilateral unless stated to be contralateral or bilateral.*

SEER Summary Stage pages 7-10 43

Abstractor Tips

- 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 (lymphatic or blood-borne metastases).
- If the record does not contain enough information to assign a stage, it must be recorded as unstageable.

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Abstractor Tip- Accuracy of Text/Data

- Review your case/text
  - Does your text support the summary stage coded?
  - Name the involved LNs in text.
  - If disease is Regional NOS, does text document situation, MD statement, limited info, etc.
  - If stage is unknown, did you document situation, unknown primary, insufficient info, etc.
- Any staging conflicts?
  - In situ stage with only a clinical diagnosis is impossible
- Text review is important for quality abstracting and future data usage

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Reviewing your case for accuracy of text documentation to support coded information is a must.

Your text is the "source information" to support coded information. We rely on you the abstractor who has access to original source documents to document pertinent information. Visual editors and Researchers will rely on your text to confirm data quality AND to draw conclusions from data. If there are any questions about coded information we have to rely on the text.

Staging Exercises

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Prostate – How would you stage this case?

- 68 year old male admitted through ER with right hip fracture
- X-rays suggested pathologic fracture and bone scan confirmed metastatic disease in pelvis and femurs.
- PSA was elevated to over 600.
- Prostate biopsies were done with the findings of poorly differentiated adenocarcinoma.
- Answer: Summary Stage 7- Distant bone metastases

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Right away when reading the imaging report metastatic disease is noted. This case is STAGED. Once you have evidence of distant disease, there is no need to review further.

Important!

TNM definitions in Summary Stage 2000 from AJCC 5th Edition

PROSTATE CANCER
SUMMARY STAGE VS AJCC T,N,M Definitions

NOTICE: SEER Summary Stage 2000 Manual has explanations of extension which refer to the AJCC 5th Edition TNM "codes"

- **In some cases the T, N or M definitions changed from the AJCC 5th to 6th to 7th Edition TNM staging Manual and are incorrect in SS2000.**
- **Example below: Note T, N, M definitions that have changed (highlighted in pink).**

AJCC EDITION	5th Edition		6th Edition		7th Edition	
	CLINICAL	PATHOLOGIC	CLINICAL	PATHOLOGIC	CLINICAL	PATHOLOGIC
T2a	Involves one lobe	Unilateral	Involves one-half of one lobe or less	Unilateral, one-half of one lobe or less	Involved one-half or one lobe or less	Unilateral, one-half of one side or less
T2b	Involves both lobes	Bilateral	Involved more than one-half of one lobe **but not both lobes**	Unilateral, involving more than one-half of lobe **but not both lobes**	Involved more than one-half of one lobe **but not both lobes**	Unilateral, involving more than one-half of side **but not both sides**
T2, NOS	Confined within prostate	Organ Confined	Confined within prostate	Organ confined	Confined within prostate	Organ confined

Caution when selecting stage based only on TNM statement

T4, NOS in SS2000 Manual=Code 2/Regional by direct extension
T4 in AJCC 7th Edition =Stage IV disease(any T4 tumor is automatically Stage IV disease in prostate)

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This is a table I created to illustrate the importance of understanding the TNM references in the Summary Stage manual are out of date;they are from the AJCC 5th edition.

Make sure the "MD Statement" and the Summary Stage code still have the same meaning based on **current AJCC staging**. In some cases the SS code will remain the same, other times it may not. Example:If the only information you have to stage the case is a MD statement of T2b. In the 5th editionT2b meant both prostate lobes involved. However in the 7th edition T2b means only ONE lobe is involved; fortunately either one lobe or both lobes involved in Summary Stage still =Code 1 Localized.

Use caution if all you have for disease extent is a TNM "T" category.

Colon #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 noted extension through the serosa.
- 5 nodes were removed with 4 positive for tumor.
- A liver biopsy at time of surgery was negative for mets.
- Answer- Summary Stage 4 -regional by both direct extension (through serosa) and regional Lymph nodes positive for involvement (Codes 2 +3)

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Colon #2 – How would you stage this case?

- Patient found to have large mass in the hepatic flexure of colon on colonoscopy.
- CT scan revealed 7cm section of hepatic flexure/transverse colon adherent to the right lobe of liver with likely tumor infiltration c/w metastatic disease to the liver. Suspicious enlarged regional LNs likely indicative of metastatic involvement.
- Patient underwent hemicolectomy and partial liver wedge resection. Path revealed 5cm adenocarcinoma extending through bowel wall with direct invasion into the liver. 0/15 regional LNs positive.
- Answer: Summary Stage 2- regional by direct extension only

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In Summary stage the direct extension into the liver from a transverse colon cancer is considered Stage 2- regional by direct extension. See page 89.

Also note the LNs were considered involved on imaging, but involvement was disproven pathologically.

This also illustrates another example when Summary Stage and AJCC TNM differ.

In TNM this would be coded as a Stage IV tumor regardless of how the tumor spread to the liver.

Breast #1– How would you stage this case?

- Patient presented after noting a mass in her left breast. Physical exam stated there was no discharge or retraction of the nipple.
- Physical exam revealed enlarged axillary lymph nodes.
- Needle biopsy identified infiltrating ductal carcinoma, moderately differentiated.
- A modified radical mastectomy identified tumor had infiltrated the dermis. Ten axillary nodes were examined and three were found to be involved.
- Answer: Summary Stage 4 - Direct extension to dermis *and* regional nodal involvement (codes 2+3)

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Breast #2– How would you stage this case?

- Patient presented after noting a mass in her left breast. Physical exam stated there was no discharge or retraction of the nipple.
- Physical exam revealed enlarged axillary lymph nodes which MD considered likely involved.
- Needle biopsy identified infiltrating ductal carcinoma, moderately differentiated
- A modified radical mastectomy revealed 1.8 cm invasive ductal carcinoma. Ten axillary nodes were examined and found negative
- Answer: Summary Stage 1 – Localized disease only

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Note while the MD felt the enlarged axillary LNs were likely involved, the pathologic exam disproved the clinical impression.

Breast #3– How would you stage this case?

- 81-year old patient presented with a hard nodule in her right breast with biopsy positive for infiltrating ductal carcinoma.
- She subsequently had work up and opted for a modified radical mastectomy results of which are not available
- Per MD following surgery she elected not to undergo any further workup or treatment for her regional disease.
- Answer: Summary Stage 5 - Regional Disease not otherwise specified

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Not enough info to stage other than regional NOS

Lung – How would you stage this case?

- Patient found to have a solitary mass in the LUL on CXR.
- Biopsy is positive for Adenocarcinoma.
- CT Scan reveals 3cm LUL mass with bilateral mediastinal lymphadenopathy.
- Bone Scan is Negative
- Answer: Distant LNs Stage 7- positive ***bilateral*** mediastinal lymph nodes

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However, in TNM this would be T1b N3 M0 Stage IIIB.

SUMMARY

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SUMMARY

- **Know how to use the SS2000 Manual**
  - Download SS2000 Errata for paper manual- Online Manual preferred
  - Stage 8 for benign/borderline brain added in 2003
  - First 15 pages contain most of the Guidelines and Instructions-READ!
  - Review notes about lymph nodes
- **Use list of Ambiguous Terms for determining involvement**
  - Instruct to "Consider as involvement"
  - Or "Do Not Consider as involvement"

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I can't stress enough how most of the guidelines and instructions you need are in the first 15 pages. It's not a difficult read. Also look for "notes" at the end of each scheme which you may need to consider when staging.

AND download your errata if using a paper manual.

SUMMARY

- **Site Specific chapters** (organized by ICD-O-3 primary site)
  - ✓ Exception: Lymphoma/Leukemia/Kaposi sarcoma, etc., have histology specific schemes
  - Regional tissues and nodes are listed for each site
  - Anatomy diagrams and tables available
  - Pay attention to any special notes at end of scheme
- **Site Specific rules (relatively few)**
  - Most Hematopoietic disease coded as distant code 7
    - Any mention of lymph nodes is indicative of involvement
  - Unknown Primary / Death Certificate cases always code 9

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Summary

- **Summary Stage can be used for pediatric cancers**
  - No specific pediatric scheme-stage as you would an adult.
- **Cannot convert TNM to Summary Stage & vice versa**
- **References to TNM and FIGO stage are out of date**
  - Use caution

SUMMARY

- **Staging Strategy – A Process of Elimination**
  - **Four of the summary stage categories can be ruled out quickly:**
    - **Benign, In-situ, Localized and Distant.**
      - **If review of records documents distant mets, the registrar can avoid reviewing further because all other categories are surpassed.**
- **Always assign highest code associated with involved structures**

SUMMARY

- **SEER Summary Stage 2000 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**
- **Uses Information within four (4) months of diagnosis**
- **Summary Stage is a combination of the most precise *clinical and pathologic* documentation of the extent of disease**
- **Summary Stage applies to every anatomic site.**

Excellent Resources for Summary Staging

SEER Summary Stage 2000 Manual:

- http://seer.cancer.gov/manuals/2013/SPCSM_2013_maindoc.pdf

SEER Summary Stage 2000, SEER Training modules:

- http://training.seer.cancer.gov
- http://training.seer.cancer.gov/modules_site_spec.html

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- SEER Summary Staging Manual 2000
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- Mary Lewis, CTR "Guidelines for Assigning SS2000"
- Steve Peace, CTR "Summary Stage 2000 Introduction and General Rules"

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