



NAACCR

Guest Presenter

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Agenda Data Item Relationships General Focus on Pediatrics Focus on Staging and Primary Site/Histology

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Data Item Relationship

- Relationships between data items are used to create edits, carry out quality control, conduct analysis, and perform visual review.
- What we are focusing on today is visual review.



Data Item Relationship

- Date of Diagnosis
- · Class of Case
- Scope of Regional Node Surgery
- Miscellaneous



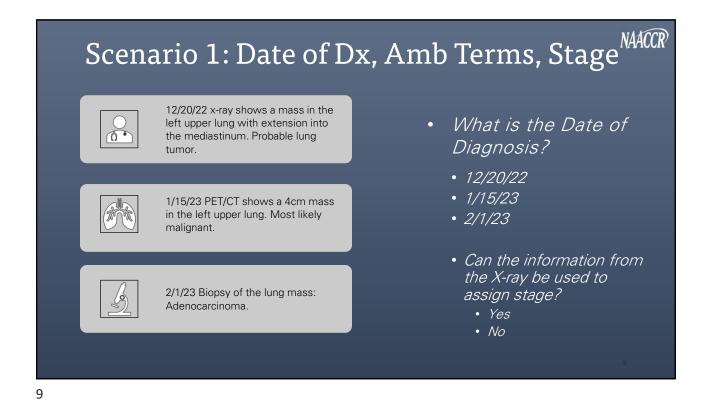
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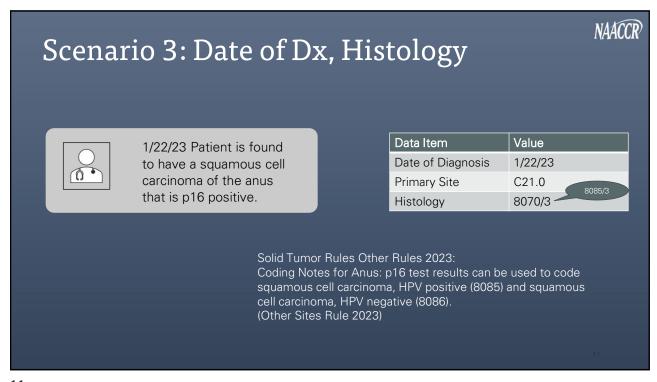
Date of Diagnosis

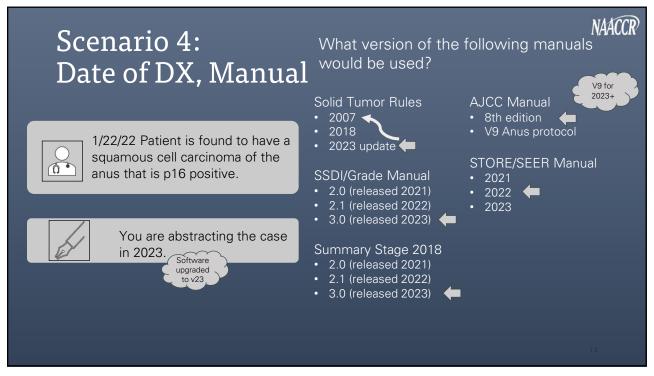
- Ambiguous terminology
- Date First Contact
- Histology
- Staging
- Treatment

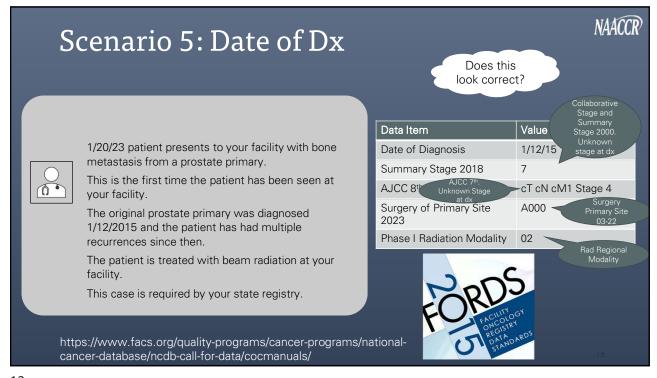




NAACCR Scenario 2: Date of Dx, Date First Contact Does this look correct? Patient was admitted as an Data Item Value inpatient on 1/1/23 for pneumonia. Date of Diagnosis 1/4/23 No history of cancer at that time. 1/1/23 **Date First Contact** 1/4/23 (during inpatient stay) patient had a biopsy of a lung mass that was diagnostic of Date of First Contact malignancy. should not be before Date of Diagnosis!







Class of Case

- Defines the relationship between the patients experience at a CoC accredited hospital based on the NCDB reporting requirements.
- If the reporting facility is not a CoC accredited hospital, Class of Case reflects the relationship between the reporting facility and the central registry.

Sometimes

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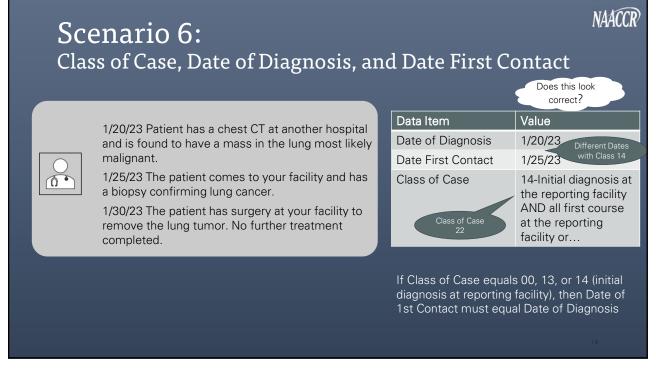
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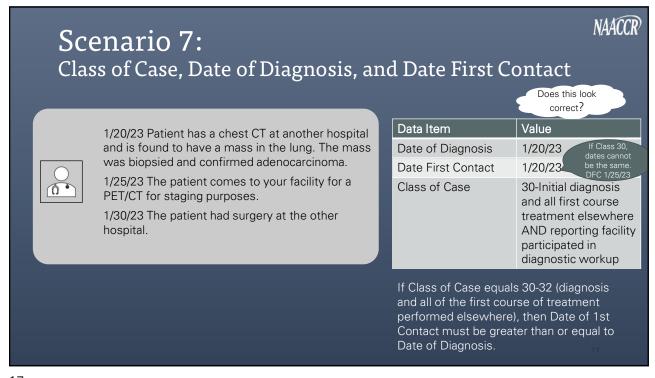
Class of Case

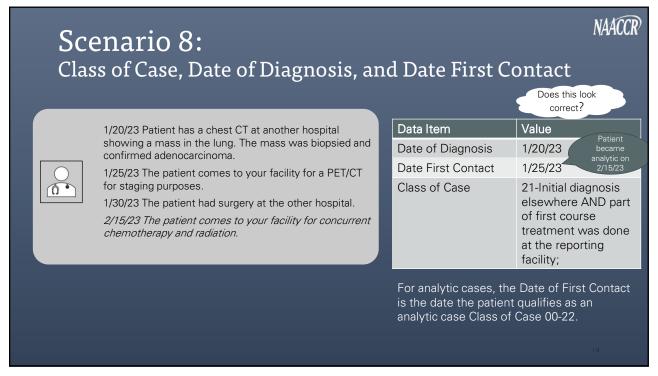
- Class of Case does not define reportability.
 - CoC and central registry reportability requirements define reportability
 - Class of Case reflects why the registrar is abstracting the case.

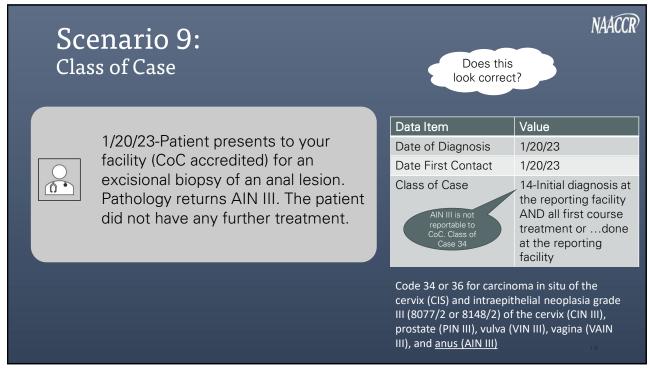
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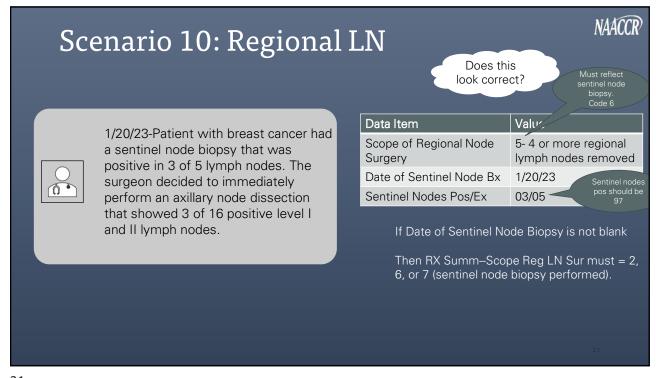


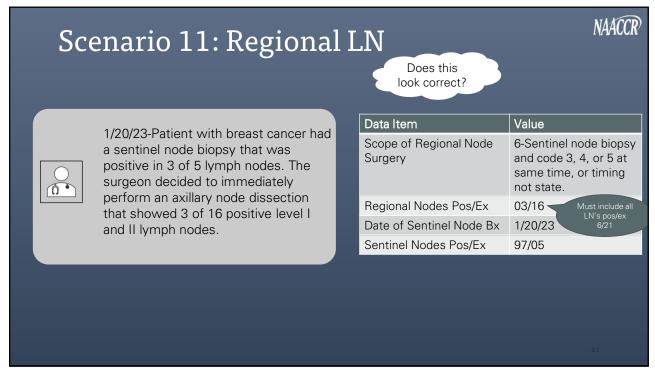


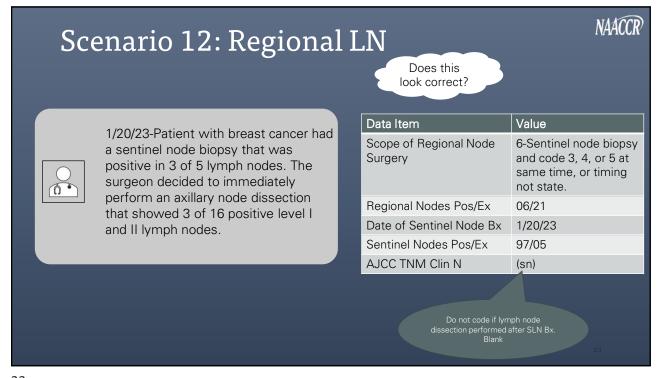
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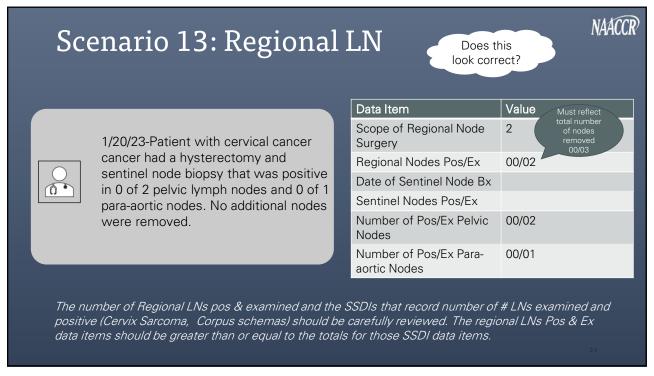
Regional Lymph Nodes

- Scope of Regional LN Surgery
- Regional Nodes Pos/Ex
- Date of Sentinel Node Biopsy
- Sentinel Nodes Pos/Ex
- N Suffix (f, sn)
- SSDIs
 - Cervix-LN Status: Para-aortic
 - Breast-Lymph Nodes Positive Axillary Level I-II







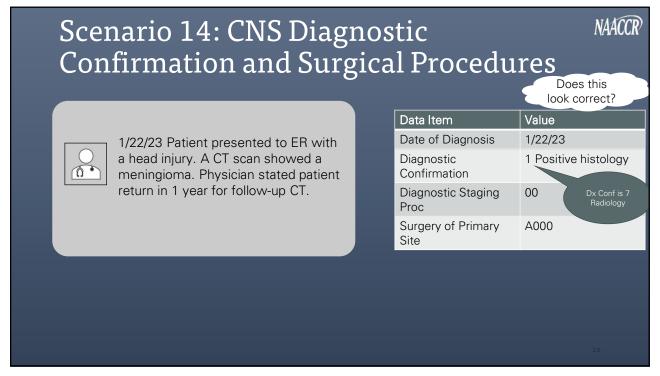


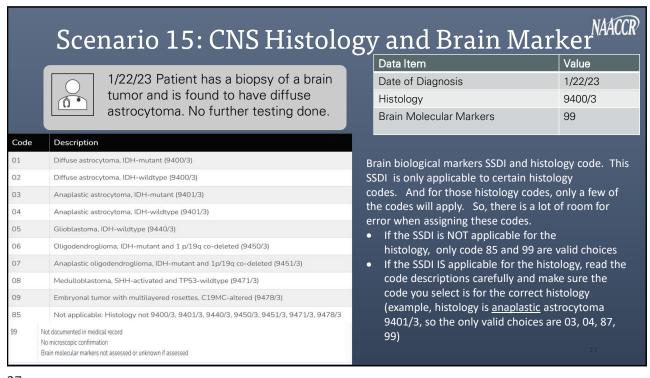
CNS

- Diagnostic Confirmation and Dx Staging Procedure/Surgery Primary Site
 - One thing I saw when performing QC on Brain/CNS cases is not recognizing the relationship between Diagnostic Confirmation codes and Diagnosed/Surgical Procedures.
- Histology and Brain Molecular Markers

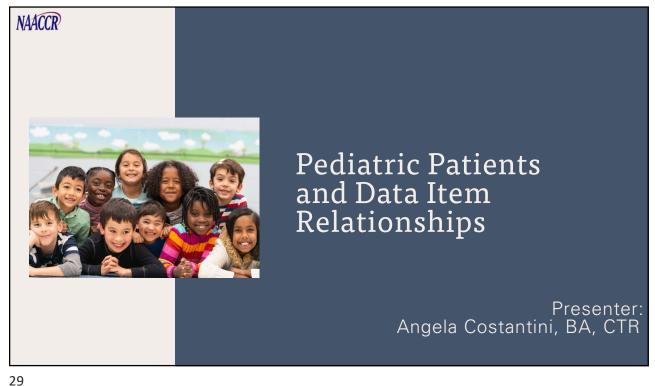
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Overview of Presentation

- · General data item relationships
 - Patient demographics in pediatrics
- Pediatric Tumors
 - Specific tumor types
 - Site/histo combinations
- Radiation Treatment
 - First course vs subsequent course

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First Few Questions

- How does the quality of the coded data and associated text impact cancer statistics?
- How does text "substantiate" coded data? Well....
 - Text gives a summary of the case
 - It provides information for the central registry, especially during consolidation
 - Code your abstract by the text
 - This will ensure that your text is complete and supports your codes
 - For some states, text is required

Determining Data Relationships

- · Ask yourself:
 - What is the standard work-up for this cancer?
 - What is the standard treatment for this cancer?
 - Is there any treatment that is not associated with this cancer?
 - Does stage or risk level affect treatment type?
 - Are SSDIs associated with a particular stage or treatment?

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Demographic Data Relationships

- AGE:
 - DX Marital status will be 1. (only in extremely rare cases will this be different – if they are from a state where they can legally be married at a younger age)
 - https://worldpopulationreview.com/state-rankings/marriage-age-by-state
 - Mississippi is the only state where a person aged 15+ can get married without parental consent. In Nebraska it's 19 and all other states are 18.
 - WITH parental consent, most of the states allow it at age 16/17/18, but HI/MO is age 15, NH is 13 and MA is 12. These would be the rare cases.

NAACCR Demographic Data Relationships Other Special Cases Child If the patient is under 14 years of age, then record: - Occupation: "child" Student If patient was a student at time of diagnosis and had never held a job, then record: **USUAL OCCUPATION** - Occupation: "student" - Industry: type of school ("high school," "college") AND INDUSTRY If patient was part of the military for most of his/her working life, then record: - Occupation: "military" - Industry: "military" No other specifics (such as rank) are needed. Never worked If patient was not a student or homemaker and had never worked, then record: - Occupation: "never worked" - Industry: "none"

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Demographic Data Relationships

- INTERNATIONAL PATIENTS:
 - Country is KNOWN put in country code, county is 999, zip is 88888, state is XX
 - Country unknown put in ZZU for country code, county is 999, zip is 88888, state is ZZ
 - Applies to ALL international patients, not just pediatric

Pediatric Data Relationships

- Data items need to tell the same story
 - How you code one data item may affect how another one is coded
 - You want to make sure those data items agree with each other

Data Items for All Peds

Age

DX Marital Status

Usual Occupation

Usual Industry

Data Items for Intl PTs

DX Country

DX Country

DX State Zip Code

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Demographics Scenario

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- 9-year-old patient from UAE presented to reporting hospital for BMT. Was diagnosed at OSH in UAE with AML, went through induction and consolidation therapy and is now preparing for haploidentical bone marrow transplant.
- Based on this, you know the following and can code accordingly very quickly:

Data Item	Value
DX Marital Status	1 (single)
Usual Occupation	CHILD
Usual Industry	CHILD
DX Country	ARE
DX County	999
DX State	XX
DX Zip Code	88888
Topography	C42.1

POP QUIZ!!

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- QUESTION: If a 19-year-old patient is referred to your facility from the local VA hospital because they were diagnosed with sarcoma during basic training, what will their occupation and industry be?
 - A. MILITARY/MILITARY
 - B. ARMY/ARMED FORCES
 - C. STUDENT/COLLEGE
 - D. UNKNOWN/MILITARY

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POP QUIZ!!



- QUESTION: If a 19-year-old patient is referred to your facility from the local VA hospital because they were diagnosed with sarcoma during basic training, what will their occupation and industry be?
 - A. MILITARY/MILITARY CORRECT ANSWER
 - B. ARMY/ARMED FORCES
 - C. STUDENT/COLLEGE
 - D. UNKNOWN/MILITARY

Adults versus Pediatrics

- TYPE of cancer
 - Tumors like neuroblastoma, retinoblastoma, hepatoblastoma and nephroblastoma are pediatric types.
 - They CAN be found in adults, but it's very rare and when it is, those adults will likely get treated at pediatric hospitals.
- SEX of patient
 - There may be soft tissue sarcoma-type tumors present in breast or prostate tissue, but it's not "breast or prostate cancer" in terms of histology. It WILL still be assigned to that primary site, though.
 - You may see rhabdomyosarcoma of the prostate, but you will NOT see adenocarcinoma of the prostate.
 - Just like in adults, an edit for topography and sex WILL appear if you code the primary site as "prostate" for a female child".

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NEUROBLASTOMA (NBL)

- It is a rare cancer that develops from immature nerve cells found in several different areas of the body.
- It accounts for about 6% of all pediatric cancer.
- 90% of cases are diagnosed by age 5.
- There is an 81% survival rate after 5 years, depending on certain factors.
- Children diagnosed under 18 months tend to have a better long-term outlook than older children. The prognosis is even better for children under 12 months.
- Low risk (and localized) NBL tumors sometimes appear in the first few months of life and OCCASIONALLY they completely disappear on their own! They may never get a biopsy or treatment, but they will still be diagnosed as a NBL and treatment will be "active surveillance".

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NBL: Primary Site and Histology

- Primary site will MOST LIKELY be one of these choices:
 - C749 Adrenal Gland
 - C470-C479 Paraspinal locations (Peripheral Nerves and Autonomic Nervous System)
 - C480 Retroperitoneum
 - C381-C383 Mediastinum (Anterior, Posterior or NOS)
 - C809 Unknown (usually chosen since it's likely a metastatic appearance and there is an occult primary tumor)
- 65% of Neuroblastomas begin in the adrenal glands
- With these primary sites, the histology will either be 9500/3 (Neuroblastoma) OR 9490/3 (Ganglioneuroblastoma).

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NBL: Intuitive Abstracting

- Workup imaging will most likely include: CT of NCAP, MRI, PET/CTs, but especially MIBG scans
 - MIBG stands for meta-iodobenzylguanidine (meh-tuh-i-oh-doh-BEN-zul-GWAH-nih-deen)
 - This scan is the most important one because ONLY the neuroblastoma cells will light up on the scan showing extent of disease.
- Workup labs will most likely include: biopsy of primary mass or most accessible lesion (often liver or lymph nodes if imaging shows lesions there). If MIBG scans show bone marrow involvement, a bone marrow biopsy will be done as well
 - You'll also look for MYC-N amplification results and SHIMADA classification along with some other labs or pathology components, but these are the most important two.
- Treatment depends on RISK LEVEL and ranges from active surveillance or a little bit of chemo (low risk) to aggressive treatment including multiple rounds of chemo, EBRT, brachytherapy (with 131-I-MIBG), resection, and PBSCTs (high risk).

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NBL: Staging Systems

 Currently, the combo of C749-9500/3 or 9490/3 is stageable using <u>SEER Summary Stage</u> if you use the soft tissue chapter.

INSS vs INRGSS

- INSS stands for the International Neuroblastoma Staging System.
- It is based on the <u>clinical results from</u> <u>the surgery</u> to remove a child's tumor instead of imaging studies.
- The tumor will only be staged using this system if a surgery was performed.
- Stage can be 1/2A/2B/3/4/4S

- INRGSS stands for the International Neuroblastoma Risk Group Staging System.
- It uses ONLY the <u>results of imaging tests</u> taken before surgery and/or biopsy.
- Knowledge regarding the presence or absence of image-defined risk factors (IDRF) are required.
- Stage can be L1/L2/M/MS

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POP QUIZ 1!!

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- QUESTION: Which of these topography codes is <u>NOT</u> a common primary site for neuroblastoma?
 - A. C749 Adrenal Gland
 - B. C383 Mediastinum, NOS
 - C. C480 Retroperitoneum
 - D. C220 Liver

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POP QUIZ 1!!



- QUESTION: Which of these topography codes is <u>NOT</u> a common primary site for neuroblastoma?
 - A. C749 Adrenal Gland
 - B. C383 Mediastinum, NOS
 - C. C480 Retroperitoneum
 - D. C220 Liver CORRECT ANSWER

WILMS (NEPHROBLASTOMA)

- A form of kidney cancer that primarily develops in kids before the age of 10, typically presenting between ages 3 to 5 years
- It is the most common type of renal cancer and accounts for 6% of all childhood cancers
- It is more commonly found in girls
- It is the fourth most common pediatric cancer overall
- Often first noticed because of abdominal swelling or a mass in the kidney that can be palpated
- It usually presents asymptomatically, but can also present with abdominal pain, gross hematuria, urinary tract infections, varicocele, hypertension, fever, anemia or dyspnea (if there are lung mets)

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WILMS: Primary Site and Histology

- Primary site will ALMOST always be C649
 - There are occasional "extrarenal" Wilms cases
 - If NOT in the kidney AND confirmed to truly be extrarenal, an override or two will be necessary
- Histology will ALWAYS be 8960/3
 - Can be called Wilms, nephroblastoma or even "nephroma, nos"
 - Even if subtypes or words like "triphasic" are used, this is still the only histology code for Wilms

WILMS: Intuitive Abstracting

- Workup imaging will most likely include: CT CAP, MRI Abdomen, PET Scan if there is a suspicion for metastatic disease
 - The most common site for mets is the lungs
- Workup labs will most likely include: potentially, a biopsy prior to surgery, but occasionally you will see a resection with no prior biopsy
 - You will also see labs for 1P and 16Q deletions/LOH, and TP53 mutations
- Treatment: a resection and systemic chemo for sure
 - LN sampling is likely to be done since it is now a benchmark for risk of relapse (decreased risk when 7+ are sampled)
 - If there is distant mets, tumor spill, or extrarenal involvement, XRT is likely

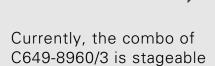
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WILMS: Staging Systems

National Wilms Tumor Study Group



<u>Stage</u> if you use the soft tissue chapter.

using **SEER Summary**

Stage	Criteria
Stage I	Confined to kidney Complete excision with renal capsule intact and negative resection margins Lymph nodes negative for Wilms tumor spread
Stage II	Regional extension beyond kidney capsule, but confined to flank May include: Tumor penetration through capsule but confined to Gerota's fascia Infiltration into renal vein Complete excision with negative resection margins Lymph nodes negative for Wilms tumor spread
Stage III	Residual tumor, but confined to abdomen May include: Regional lymph node involvement Peritoneal contamination: Biopsy Pre- or intraoperative tumor rupture Tumor growth through peritoneal surface Positive resection margins
Stage IV	Distant metastases: Lung, liver, bone, brain
Stage V	Involvement of bilateral kidneys at diagnosis
	Adapted from Davidoff (2012) [4].
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POP QUIZ 2!!

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- QUESTION: If a 4-year-old female was pathologically diagnosed with a Wilms tumor in the retroperitoneal soft tissue, would it require an extra look?
 - YES
 - NO

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POP QUIZ 2!!



- QUESTION: If a 4-year-old female was pathologically diagnosed with a Wilms tumor in the retroperitoneal soft tissue, would it require an extra look?
 - YES CORRECT ANSWER..
 - NO

Even though she is within the expected age group, any Wilms tumors outside of C649 must be confirmed through an extra look

HEPATOBLASTOMA

- It is the most common type of liver tumor in early childhood, but makes up only 1% of pediatric cancers
- Primarily affects children from infancy to five years old. Most cases appear within the first 18 months of life and are more common in premature low-birth weight babies
- · Affects white children more frequently than black children
- More common in boys up until age five, then the gender difference disappears
- There are a few genetic conditions that are associated with an increased risk – Beckwith-Wiedemann syndrome, familial adenomatous polyposis (FAP) and hemihypertrophy

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HEPATOBLASTOMA: Site and Histology

- Primary site will ALWAYS be Liver C220
- Histology will ALWAYS be Hepatoblastoma -8970/3
 - Subtypes do not change the histology

HEPATOBLASTOMA: Intuitive Abstracting

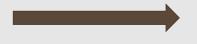
- Workup imaging will most likely include: CT CAP, MRI Abdomen, PET Scan for metastatic disease if suspected
 - The most common site of metastatic disease is the lungs
- Workup labs will most likely include: biopsy of the liver, AFP labs
- Treatment: chemo can be given before OR after resection, depending on the size and focality of tumor
 - Surgery will most likely be a partial resection or a liver transplant
 - If there are lung mets at diagnosis, thoracotomies with wedge resections will be done PRIOR to any potential liver transplants! And only one lobe at a time if there are bilateral
 - Radiation is possible, but most likely will be done to lung mets prior to surgery, not to the liver

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HEPATOBLASTOMA: Staging Systems

COG Staging **System**



Currently, the combo of C220-8970/3 is stageable using **SEER Summary** Stage if you use the soft tissue chapter.

Stage I: There is no spread of tumor that can be found outside of the liver. The tumor has been removed through surgery at diagnosis. A pathologist looks at the removed tissue under a microscope to find out if the margins are clear of cancer cells. There are no cancer cells on the edges, or margins, of the removed tissue.

Stage II: There is no spread of tumor that can be found outside of the liver. The tumor has been removed through surgery at diagnosis, but the margins of the removed tissue contain cancer cells.

Stage III: The tumor cannot be removed with surgery at diagnosis because it is too big, it has grown into or presses on vital tissues in the liver, or it has spread to the lymph nodes that drain from the liver. In stage III disease, the tumor cannot be found in other parts of the body. It is only found in the liver and sometimes the lymph nodes close to the liver.

Stage IV: The tumor has spread through the bloodstream to other parts of the body. It often spreads to the lungs.

POP QUIZ 3!!

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- QUESTION: Which of these surgical procedures would you most likely look for if there was evidence of lung mets in a patient with hepatoblastoma?
 - A. Partial lobectomy
 - B. Thoracotomy with wedge resection
 - C. Thoracoscopy with biopsy
 - D. Radioablation of lung mets

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POP QUIZ 3!!



- QUESTION: Which of these surgical procedures would you most likely look for if there was evidence of lung mets in a patient with hepatoblastoma?
 - A. Partial lobectomy of the lung
 - B. Thoracotomy with wedge resection CORRECT
 - C. Thoracoscopy with biopsy
 - D. Radioablation of lung mets



BRAIN TUMORS - Pilocytic Astrocytomas

- Usually occur in children and are now considered to be the most benign type of astrocytoma
 - When they appear in the optic nerve (C72.3), they are called "optic pathway gliomas" or "OPGs". These are typically found in children with neurofibromatosis.
- Data item relationships to watch are DX YEAR, BEHAVIOR, PRIMARY SITE.
 - Morphology code is always 9421, but the behavior code changes based on site and dx year.

2017 and Older
Site = C72/C71
Behavior = 3

2018 -2022
Site = C72.3
Behavior = 1
Site = C71/C72 (NOT C72.3)
Behavior = 3

2023+ Site = C72/C71 Behavior = 1

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BRAIN TUMORS: DIPG

- DIPG stands for diffuse intrinsic pontine glioma
- It is the most common brainstem tumor in children and 90% of patients die within 2 years of diagnosis
- It is a *clinical diagnosis*. You will see the term DIPG in radiology reports and clinical notes. You will NOT see it in a path report because is has many different morphologies.
- Primary site is ALWAYS in the pons which is in the brainstem (C71.7)
- It is NOT always biopsied. If it is, it will be a stereotactic biopsy, which is coded as 20 and counts as surgical treatment
 - If it is biopsied, there WILL be obvious residual disease, meaning SURGICAL MARGINS will be a 3 for macroscopic residual tumor.
 - It can have multiple histologic types, but the INTEGRATED DIAGNOSIS is what you will code as the histology. Most commonly, it is called a "diffuse midline glioma, H3K27m+" (code 9385/3)

BRAIN TUMORS: Intuitive Abstracting

- Metastatic disease
 - Will be LEPTOMENINGEAL and/or SPINAL (drop mets)
 - This means only CT/MRI of brain/spine/orbit, possibly PET/CT, but likely not
 - Treatment will likely include radiation proton OR photon
- Steroids/Decadron
 - Steroids will likely be given post biopsy or surgery, but it is NOT coded as treatment.
 - It is a standard treatment after brain surgery to reduce cerebral edema
- Surgical Codes
 - Removal of the TUMOR = codes 21 (STR in brain) or 30 (GTR in brain) or 22 (STR/GTR in spinal cord)
 - Removal of the LOBE = codes 40 (STR that doesn't fit in another code) or 55 (GTR/lobectomy)

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POP QUIZ 4!!



- QUESTION: If a patient has a stereotactic biopsy of the brainstem and no further surgeries, what will you code for surgical margins?
 - A. 1 = Residual Tumor, NOS
 - B. 2 = Microscopic Residual Tumor
 - C. 3 = Macroscopic Residual Tumor
 - D. 8 = No Primary Site Surgery

POP QUIZ!!

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- QUESTION: If a patient has a stereotactic biopsy of the brainstem and no further surgeries, what will you code for surgical margins?
 - A. 1 = Residual Tumor, NOS
 - B. 2 = Microscopic Residual Tumor
 - C. 3 = Macroscopic Residual Tumor = CORRECT ANSWER
 - D. 8 = No Primary Site Surgery

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BONE TUMORS: Skip Mets vs Distant Mets

- "Skip mets" are discontinuous tumors within the primary site (meaning that particular bone) that are anatomically separate from the primary tumor.
 - They will affect EOD Primary Tumor and any AJCC T codes ONLY
- Distant mets will be outside of the primary bone site
 - They will affect EOD Mets and any AJCC M code

HOLD UP!!!!

ANY met, skip OR distant, will automatically be coded as SS 7 EXCEPT for C41.2 (spine) AND C41.4 (pelvis). Only distant mets get a 7 for those.

POP QUIZ 5!!

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- QUESTION: If a new patient w/o a history of cancer has two new tumors, a big one in the superior right femur and a smaller one in the inferior right femur, is the smaller one a distant met or a skip met?
 - A. Distant Met
 - B. Skip Met

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POP QUIZ 5!!



- QUESTION: If a new patient w/o a history of cancer has two new tumors, a big one in the superior right femur and a smaller one in the inferior right femur, is the smaller one a distant met or a skip met?
 - A. Distant Met
 - B. Skip Met CORRECT ANSWER

RADIATION: First Course VS Subsequent

- Data Items affected by radiation treatment:
 - · Radiation/Surgery Sequence
 - · Radiation Location
 - · Reason No Radiation
 - · Radiation Discontinued Early
 - · Start and End Dates
 - · Total Dose Summary
 - · Number of Phases to this Volume
 - Phase and all associated sub-details like fractions, dose per fraction, modality, etc.

Make sure you don't change ANY of the fields pertaining to FIRST COURSE treatment if you are entering subsequent XRT in the abstract.

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POP QUIZ 6!!



- QUESTION: If a previous patient with a new recurrence comes to your facility for chemo and is noted to have had XRT elsewhere right after his recurrence, but before coming to your facility, which radiation code will be affected on the treatment page?
 - A. Radiation/Surgery Sequence
 - B. Radiation Location
 - C. Number of Phases to this Volume
 - D. None of the Above

POP QUIZ6!!

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- QUESTION: If a previous patient with a new recurrence comes to your facility for chemo and is noted to have had XRT elsewhere right after his recurrence, but before coming to your facility, which radiation code will be affected on the treatment page?
 - A. Radiation/Surgery Sequence
 - B. Radiation Location
 - C. Number of Phases to this Volume
 - D. None of the Above CORRECT ANSWER!

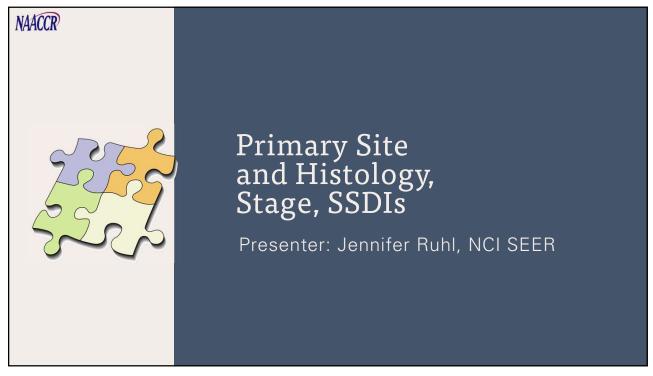
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Recap and Conclusion

- Confirm your primary sites and histologies and understand what it means when they are paired.
- Use your intuition. Know what to look for during a workup and for treatment.
- Deductive reasoning is helpful with the smaller data items (i.e.. Marital status and age.)
- Pay special attention to the codes you change when entering subsequent treatment.
- Every data item is important enough to GET IT RIGHT!









Basic Reminder #1

- Remember: It is critical that you assign the correct primary site and histology
- This combination, along with a Schema Discriminator when applicable, defines the following:
 - Schema ID, AJCC ID, EOD Schema, Summary Stage chapter, SSDIs, Grade and Surgery codes
- If your primary site and histology are incorrect, then everything else is going to be wrong (staging, SSDIs, Grade, Treatment, Surgery, etc.)
- Use the Solid Tumor Rules to determine primary site and histology

2/2/2023

Basic Reminder #2

- True in-situ cases cannot have positive lymph node mets
 - Example: Invasive component not found in lumpectomy specimen
 Invasive component found in lymph nodes though
- This is not an in-situ neoplasm (behavior /2)
- This is an invasive neoplasm (behavior /3) based on the positive lymph nodes
 - Reminder: Most cases the behavior is based on the primary tumor; however, there are situations where behavior is determined by lymph nodes or mets

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Primary Site and Histology

- Not every combination of primary site and histology is valid
 - Some of these combinations are biologically impossible
- Understanding the most common primary site/histology combinations will help you abstract better
 - This does take time and experience
- Keep in mind, that rare tumors do occur, and you do want to capture those primary site/histology combinations correctly

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Primary Site and Histology

- After entering primary site and histology
- STOP
- Review primary site and histology
- Verify you have entered them correctly
- You want to make sure you have entered the correct primary site and histology
 - We all make typos, so you need to verify that you have entered these correctly

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Primary Site and Histology

- The Solid Tumor Rules will list the most common histology types, based on review of the WHO Blue Books
 - Review the Solid Tumor Rules to learn what the most common combinations are
- As a reminder: Not every possible combination of primary site/histology is covered in the Solid Tumor Rules

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Primary Site and Histology

- As a reminder, the location of a biopsy does not necessarily mean that is the primary site
 - Sometimes the most accessible site is biopsied
 - This commonly happens with Lymphomas
 - For a majority of cases, the location biopsied is the primary site
- Ask SEER registrar receives multiple questions about this very issue, mostly when they encounter an edit

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Primary Site and Histology

- On previous webinar, we focused on primary site and the most common histologies
- Now that's focus on the histologies and the most common primary sites
- Understanding what part of the body histologies occur can help you determine if something looks "off," and further investigation into looking for a primary site is warranted

Example: Hematopoietic histology

- The path report from the skin states consistent w/ NK T cell lymphoma. Bone
 marrow biopsy shows a NK T cell lymphoma. The imaging states infiltrative
 lesion soft tissues RT leg, inguinal, thoracic LN, lingula, RT tonsil, uvula....
 The DR is calling this a cutaneous T cell lymphoma, NK/T cell origin
- This is **not** a skin lymphoma, even though the physician has stated it is
 - This is a lymphoma that has metastasized to the skin, resulting in the "cutaneous T cell lymphoma" diagnosis by the physician
- Per the Heme DB: common sites of involvement for this histology are *upper* aerodigestive tract (nasal cavity, nasopharynx, paranasal sinuses, palate) with the nasal cavity (C300) being the prototypic site of involvement

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Primary Site and Histology

- Adenocarcinoma (8140/3)
 - Most common histology (greater than 25% of cases)
 - There are also many different types of adenocarcinomas with their own ICD-O-3 histology code
 - Most common sites include
 - Prostate (over 95% of prostate cases)
 - Lung
 - Colon and Rectum
 - Pancreas
 - Other GI sites
 - Note: Adenocarcinoma can occur in other primary sites, these are the most common only

Primary Site and Histology

- Ductal Adenocarcinoma (8500/3)
 - Second most common histology (~ 12% of cases)
 - There are also many different types of ductal adenocarcinoma with their own ICD-O-3 histology code
 - Most common sites include
 - Breast
 - Pancreas
 - Salivary glands (known as salivary duct carcinoma)

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Primary Site and Histology

- Squamous cell carcinoma (8070/3)
 - Third most common histology (~6% of cases)
 - There are also many different types of squamous cell carcinomas with their own ICD-O-3 histology code
 - Most common sites include
 - Lung
 - Head and Neck
 - Esophagus
 - Vulva
 - Vagina
 - Penis
 - Anus

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Primary Site and Histology

- Neoplasm, malignant (8000/3)
 - Fourth most common histology (~3% of cases)
 - This is primarily used for when there is no tissue diagnosis, yet there is a diagnosis of a neoplasm (diagnosed by imaging, clinical exam)
 - Most common sites include
 - Lung
 - Unknown primary site
 - Prostate
 - Brain

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Primary Site and Histology

- Malignant Melanoma (8720/3)
 - Fifth most common histology (~3% of cases)
 - There are also many different types of melanoma with their own ICD-O-3 histology code
 - Most common sites include
 - Skin
 - Head and Neck
 - Eve
 - Melanoma primaries can occur in other parts of the body, but they are very rare

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Primary Site and Histology

- Site-Type Edit
- Purpose of edit is to "question" uncommon primary site/histology combinations
 - If you get this edit, don't automatically override it, but review and make sure your primary site/histology are entered correctly
 - Many of the combinations that get the site/type edit are valid primary site/histology combinations, it's just that they are rare
 - If it's unclear, send a question to Ask SEER Registrar (Solid Tumor Rules)

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Summary Stage

- Summary Stage is required by both NPCR and SEER
 - Which means everyone must fill out Summary Stage for all cases
- Many data items are related to Summary Stage and understanding those relationships will ensure accurate coding

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Summary Stage

- Summary Stage is a very generic staging system, which was developed to be consistent over time to evaluate trends in the data
- Summary Stage is used by surveillance (SEER and NPCR) and is population based
- This is different than AJCC
 - AJCC is a clinical based staging system which is modified based on clinical findings and outcome measures
 - This is why T, N, M definitions change over time, or new chapters are developed
 - AJCC is not set up to look at trends over time

Summary Stage

- Summary Stage initially set up to align with AJCC 1st edition and has been updated since based on subsequent AJCC editions
- This means that there is a data relationship between AJCC and Summary Stage
- AJCC is the "source" for staging information
 - AJCC is not affected by Summary Stage, but Summary Stage is affected by AJCC
 - Different chapters released by AJCC require modifications to Summary Stage to collect the specific information from AJCC
 - This usually results in new Summary Stage chapters, or current ones updated to include the current terminology
 - EOD was developed as a tool to "derive" the T, N, M and Summary Stage for SEER registries

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Summary Stage

- There are some instances where tumor extension (T) or regional lymph nodes (N) may be recorded as distant in Summary Stage
- This happens because at one time the tumor extension or regional lymph nodes were M1 in a previous AJCC edition
 - Example: In AJCC 6th edition, ipsilateral supraclavicular lymph nodes became a N3c. Previous editions of AJCC had them as a M1
 - All supraclavicular lymph nodes are recorded in Summary Stage 7 (distant) for breast primaries
- Summary Stage maintains the original derivation and does not change when AJCC moves something out of M to T or N
 - There are some exceptions, but they are very few

Summary Stage-Some basic guidelines

- When assigning AJCC and Summary Stage, need to understand there is not a one-to-one match, especially when it comes to T
 - Here are some general guidelines that may help you more quickly determine the correct Summary Stage based on T (derivations based on negative nodes/mets)
 - · Tis: in situ
 - T1: usually localized; however, some can also be regional
 - T2: localized or regional
 - T3: generally regional, although there are some localized and distant
 - T4: generally regional or distant
- Review Summary Stage definitions to determine if you have a localized, regional or distant case

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Summary Stage

- If you have a NO/NX, Summary Stage cannot be a 3, 4
- If you have a N1/N2/N3, then your Summary Stage will be either 3, 4 or 7 (cannot be 0, 1, 2)
 - SS 3 will be a localized tumor with regional lymph nodes
 - SS 4 will be a regional tumor with regional lymph nodes
 - SS 7 will be for those lymph nodes that Summary Stage designates a D
 - Example: ipsilateral supraclavicular lymph nodes for Breast

Summary Stage

- If you have no information on nodal involvement, don't automatically default to an unknown Summary Stage
 - Summary Stage treats unknown lymph node involvement the same as "none."
 - Examples:
 - T2, NX, M0: Summary Stage would be based on the T2
 - EOD Primary Tumor known, EOD Regional nodes unknown (code 999) and EOD mets-none: Summary Stage based on EOD PT

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Summary Stage

- As a reminder, use AJCC definitions of lymph nodes to determine if you have a regional lymph node or a distant lymph node
 - This will affect your regional nodes positive, regional nodes examined, Mets at Dx-Distant Lymph nodes data items as well
 - Do not use Summary Stage to determine if you have a regional or distant lymph node for AJCC
 - You may get the wrong N and M
 - Most of the regional nodes will be listed in Summary Stage 3; however, some of them could be distant for Summary Stage (see code 7)
 - If a node is collected in the N category for AJCC, you will find that node listed in EOD Regional Nodes (could be a RN derivation or a D derivation)

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Summary Stage

- As a reminder:
- If Regional Nodes positive = 01-90, 95, 97
 - Indicates Positive Nodes
 - Summary Stage cannot be 0, 1, 2
 - Summary Stage will be 3, 4 or 7
- Before changing your Summary Stage, double check your regional nodes positive and verify that's coded correctly

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Summary Stage

- If you have positive nodes but the tumor extension is not known, or there is no evidence of primary tumor, default to Summary Stage 3
 - Example from TNM:
 - TX, N1, M0: Summary Stage 3
 - T0, N2, M0: Summary Stage 3
 - Examples from EOD
 - EOD Primary Tumor: unknown (code 999), EOD Regional Nodes indicates positive nodes, EOD Mets indicates no mets: Summary Stage 3
 - EOD Primary Tumor: no evidence of primary tumor (code 800), EOD Regional Nodes indicates positive nodes, EOD Mets indicates no mets: Summary Stage 3

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Summary Stage

- If you are doing AJCC staging:
 - For M values
 - As a reminder, with a M0 your case can still be Summary Stage 7 (distant)
 - If you have a M1, Summary Stage will always be 7

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Summary Stage

- Mets at Dx fields
 - If your case is a M0
 - Then all Mets at Dx fields must be coded to 0
 - If your case is a M1
 - Then at least one of the Mets at Dx fields must be coded to 1 (or 2 for Mets at Dx-Other)
- As a reminder, per AJCC rules, assume a M0 unless there is clear documentation that mets are present
 - These rules also apply to the Mets at Dx Fields, Summary Stage and EOD

02

AJCC, Summary Stage and SSDIs

- Some schemas have SSDIs that will affect both AJCC N and Summary stage
 - GYN schemas have several SSDIs that indicate specific lymph node involvement
 - If AJCC indicates positive nodes, then make sure the SSDIs and Summary Stage are coded appropriately
 - If AJCC indicates negative nodes, then make sure the SSDIs and Summary Stage are coded appropriately
 - If AJCC indicates unknown nodes, then make sure the SSDIs indicate unknown involvement
 - Summary Stage counts unknown lymph node involvement as NONE
- Make sure your data items are telling the same story

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Summary Stage and EOD

- For the SEER registries that are doing EOD
 - New edit implemented in 2021 comparing Derived Summary Stage 2018 (from EOD fields) and the Summary Stage 2018 (manually assigned)
- Edit ensures that the "Derived Summary Stage" (based on the EOD fields) matches the manually assigned Summary Stage
- This edit cannot be overridden
- Don't assume your EOD fields are wrong or assume that the Summary Stage is wrong, need to review the entire case to determine where the disagreement is

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Shortcuts for Summary Stage (Using SEER*RSA-EOD)

SS2018T	SS2018N	SS2018M	Summary Stage
IS	NONE, U, NA	NONE, U, NA	0
IS, L, RE, U	D	<any value=""></any>	7
IS, L, RE, U	NONE, RN, U, NA	D	7
IS, L, U	RN	NONE, U, NA	3
L	NONE, U, NA	NONE, U, NA	1
RE	NONE, U, NA	NONE, U, NA	2
RE	RN	NONE, U, NA	4
D	<any value=""></any>	<any value=""></any>	7
U	NONE, U, NA	NONE, U, NA	9

This table shows how the derivations are done for Summary Stage based on EOD

Summary Stage is divided into the three components

- SS2018T
- SS2018N
- SS2018M

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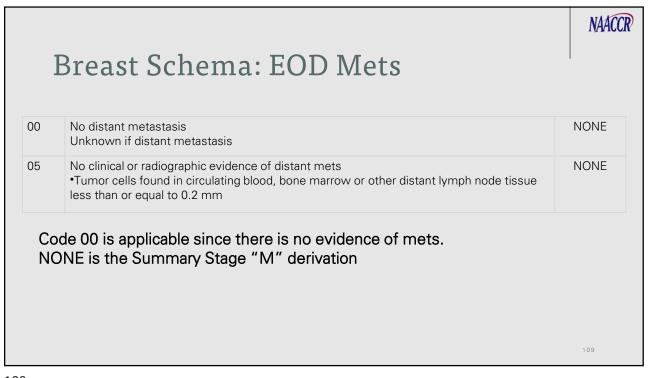
Case Scenario

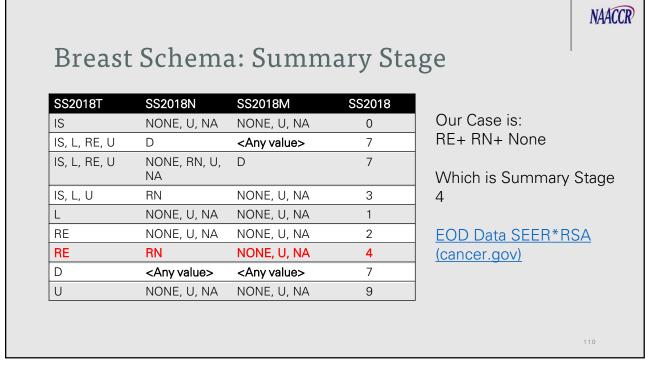
- Breast cancer
- Tumor Size: 3.8 cm mass
- Skin of breast involved
- 2/3 SLN's positive
- Axillary dissection done, which showed 3/14 LNs positive
- · No evidence of metastatic disease

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E	Breast Schema: EOD Primary Tumor		NAACCR
100	Any size tumor Confined to breast tissue and fat including nipple and/or areola Localized, NOS EXCLUDES: skin invasion of breast, nipple and areola (see code 200)	L	
200	Any size tumor Attachment or fixation to pectoral muscle(s) or underlying tumor Deep fixation Invasion of •Pectoral fascia or muscle(s) •Subcutaneous tissue Local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension Skin infiltration of primary breast including skin of nipple and/or areola	RE	
	Code 200 is applicable since there is Skin Invasion. RE is the Summary Stage "T" derivation		107

200	PATHOLOGICAL assessment only Positive axillary (level I and II) lymph node(s), ipsilateral WITH more than micrometastasis (At least one metastasis greater than 2 mm, or size of metastasis not stated) WITHOUT internal mammary lymph node(s) or not stated	RN
250	PATHOLOGICAL assessment only Internal mammary node(s), ipsilateral, positive on sentinel node biopsy but not clinically apparent (No positive imaging or clinical exam) WITHOUT axillary lymph node(s), ipsilateral	RN





Case Scenario

- Esophageal cancer
- Extension to the subserosal tissue
- Multiple lymph nodes involved, including mediastinal
- No evidence of metastatic disease

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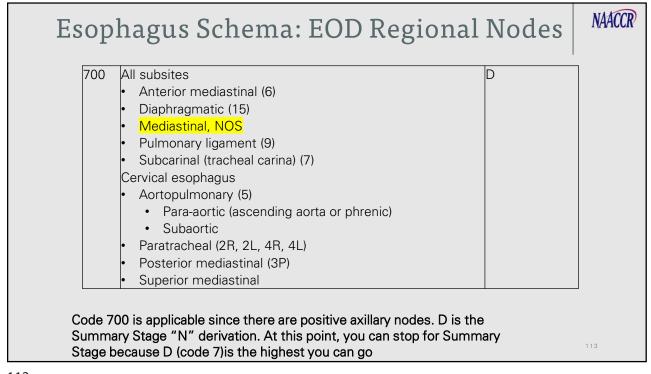
Esophagus Schema: EOD Primary Tumor

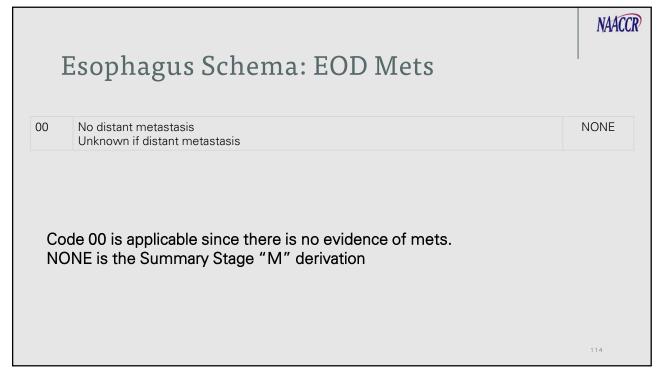
NAACCR

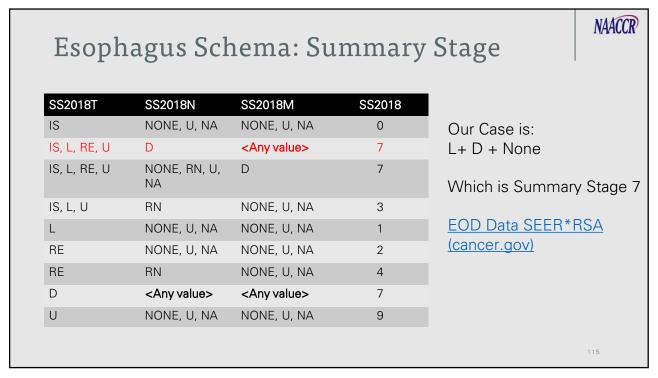
	200	Confined to esophagus, NOS Localized, NOS	L
	250	Muscularis propria	L
	300	Extension through wall, NOS Invasion through muscularis propria or muscularis, NOS Perimuscular tissue invaded Subserosal tissue/(sub)serosal fat invaded	L

Code 300 is applicable since we have extension into the subserosal tissue. L is the Summary Stage "T" derivation

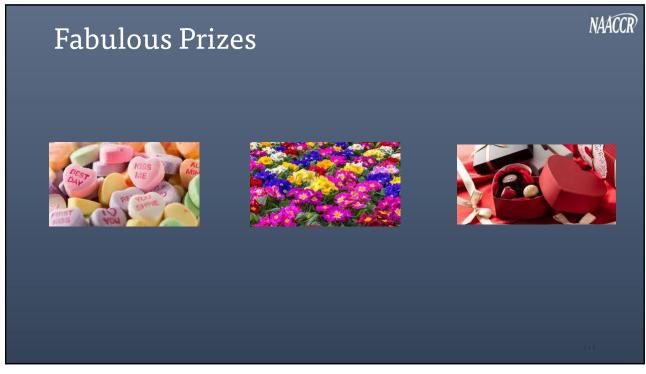
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CE Certificate Quiz/Survey

CE Phrase

Neuroblastoma

Link

• https://survey.alchemer.com/s3/7032798/Data-Item-Relationships-2023

Coming UP...

Boot Camp 2023

- Guest Host: Nancy Etzold, CTR; Elaine Bomberger-Schmotzer, CTR
- 3/02/2023

Prostate 2023

- Guest Host: Gillain Howell, CTR; Amy Bramburg, CTR
- 4/06/2023

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