THE KENTUCKY CANCER REGISTRY SPRING TRAINING 2020

THE YEAR OF ~~INSIGHT~~ INSIDE

Agenda

- STORE Addendum (Released 2/13/2020)
  - Review the updates to the STORE since its release
- NPCR Data Quality Evaluation Study
  - *The data items and abstracting rules that were most missed*
- This training is worth 2 CEUs
- Certificates will be sent out within 2 weeks

STORE ADDENDUM

February 13, 2020

Lymphovascular Invasion
NAACCR Data Item: 1182

STORE Page(s): 152, 153, 154, 155, 156

Date Published in NCDB News: 10/18/2018

Two minor template and formatting errors have been noted and will be updated in the next version of STORE. Please note that:

1) the allowable values for Lymphovascular Invasion, NAACCR Data Item # 1182, include 0-4, 8-9, as specified in the Coding Instructions table found on page 156.

2) Section 2.a. on page 153 should read "Use code 0 when the pathology report indicates that there is no lymphovascular invasion. This includes cases of purely in situ carcinoma, which biologically have no access to lymphatic or vascular channels below the basement membrane."

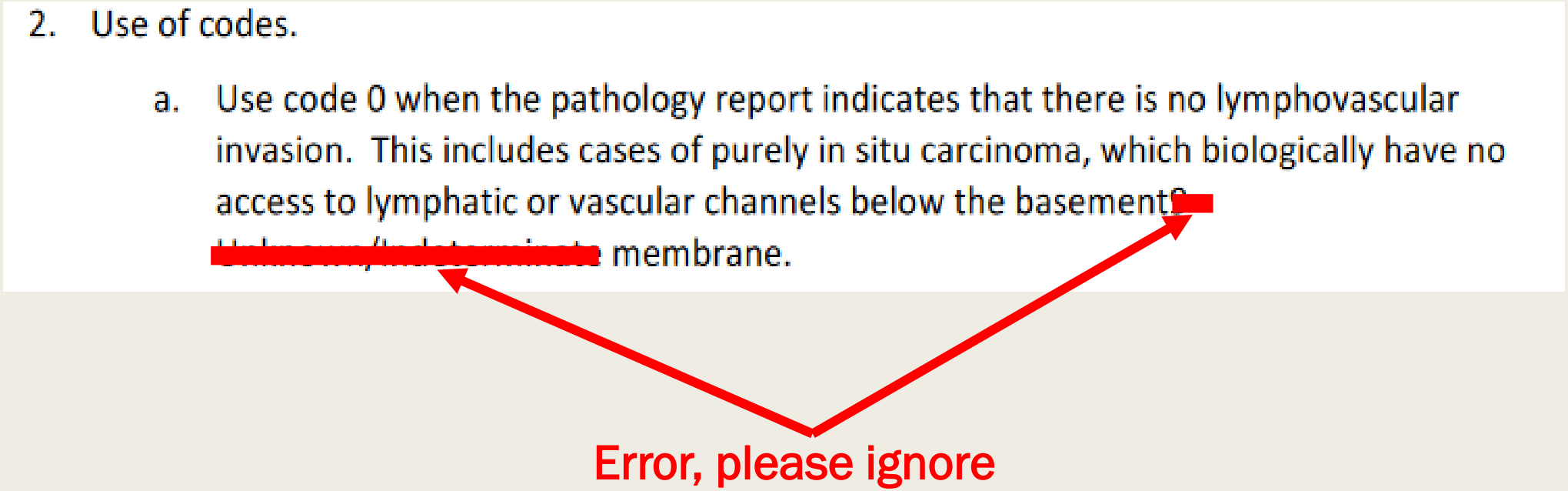
1) the allowable values for Lymphovascular Invasion, NAACCR Data Item # 1182, include 0-4, 8-9, as specified in the Coding Instructions table found on page 156.

Lymphovascular Invasion

Item #	Length	Column #	Allowable Values	Required Status	Date Revised
1182	1	1297-1297	0-1, 8-9	2010+	01/11, 01/18

Should be:
0-4, 8-9

2) Section 2.a. on page 153 should read "Use code 0 when the pathology report indicates that there is no lymphovascular invasion. This includes cases of purely in situ carcinoma, which biologically have no access to lymphatic or vascular channels below the basement membrane."



Lymphovascular Invasion
NAACCR Data Item: 1182

STORE Page: 152

Date Published in NCDB News: 2/28/2019

Added to Coding Instructions: 1f

1f. For cases treated with neoadjuvant therapy, refer to table below in order to code this field. However, if documentation in the medical record indicates information that conflicts with this table, code lymphovascular invasion with the documentation in the medical record. **Code the presence of LVI from the pathology report and/or medical information.**

i. *If LVI was present prior to neoadjuvant therapy (codes 1-4) but LVI was not present after neoadjuvant therapy (codes 0 or 9), code LVI to present (codes 1-4).*

ii. *If LVI was not present prior to neoadjuvant therapy (codes 0 or 9), but LVI was present after neoadjuvant therapy (codes 1-4), code LVI to present (codes 1-4).*

LVI on pathology report PRIOR to neoadjuvant therapy	LVI on pathology report AFTER neoadjuvant therapy	*Code LVI to:*
0 - Not present/Not identified	0 - Not present/Not identified	*0 - Not present/Not identified*
0 - Not present/Not identified	1 - Present/Identified	*1 - Present/Identified*
0 - Not present/Not identified	9 - Unknown/Indeterminate	*9 - Unknown/Indeterminate*
1 - Present/Identified	0 - Not present/Not identified	*1 - Present/Identified*
1 - Present/Identified	1 - Present/Identified	*1 - Present/Identified*
1 - Present/Identified	9 - Unknown/Indeterminate	*1 - Present/Identified*
9 - Unknown/Indeterminate	0 - Not present/Not identified	*9 - Unknown/Indeterminate*
9 - Unknown/Indeterminate	1 - Present/Identified	*1 - Present/Identified*
9 - Unknown/Indeterminate	9 - Unknown/Indeterminate	*9 - Unknown/Indeterminate*

Code	Label
0	Lymphovascular Invasion stated as Not Present
1	Lymphovascular Invasion Present/Identified
2	Lymphatic and small vessel invasion only (L)
3	Venous (large vessel) invasion only (V)
4	BOTH lymphatic and small vessel AND venous (large vessel) invasion
8	Not Applicable
9	Unknown/Indeterminate/not mentioned in path report

Phase I, II, and III Dose Per Fraction
NAACCR Data Item: 1501, 1511, 1521

STORE Page(s): 290, 309, 327

Date Published in NCDB News: 11/15/2018

For Phase I, II and III Dose per Fraction, NAACCR Data Items 1501, 1511 and 1521, **use code 99998 when brachytherapy was administered to the patient** (codes 07-12 for Phase I, Phase II or Phase III Treatment Modality, NAACCR Data Items 1506, 1516 or 1526).

So if you code any of these Brachytherapy Treatment Modalities:

07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, Interstitial, LDR
11	Brachytherapy, Interstitial, HDR
12	Brachytherapy, electronic

Code	Label
00000	No radiation treatment
00001-99997	Record the actual Phase II dose delivered in cGy
99998	Not applicable, radioisotopes administered to the patient or Brachytherapy administered
99999	Phase II (Boost) radiation therapy was administered but dose is unknown; It is unknown whether Phase II radiation therapy was administered. Death Certificate only.

You will code 99998 for Phase Dose Per Fraction

Phase I, II, and III Total Dose
NAACCR Data Item: 1507, 1517, 1527

STORE Page(s): 294, 313, 332

Date Published in NCDB News: 11/15/2018

For Phase I, II and III Total Dose, NAACCR Data Items 1507, 1517 and 1527, use code **999998 when brachytherapy was administered to the patient** (codes 07-12 for Phase I, Phase II or Phase III Treatment Modality, NAACCR Data Items 1506, 1516 or 1526).

So if you code any of these Brachytherapy Treatment Modalities:

07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, Interstitial, LDR
11	Brachytherapy, Interstitial, HDR
12	Brachytherapy, electronic

Code	Label
000000	No radiation treatment. Diagnosed at autopsy.
000001-999997	Record the actual total dose delivered in cGy
999998	Not applicable, radioisotopes administered to the patient or Brachytherapy administered
999999	Radiation therapy was administered, but the total dose is unknown; it is unknown whether radiation therapy was administered. Death Certificate only.

You will code 999998 for Phase Total Dose

Total Dose
NAACCR Data Item: 1533

STORE Page(s): 336

Date Published in NCDB News: 11/15/2018

For Total Dose, NAACCR Data Item # 1533, **use code 999998 when brachytherapy was administered** (codes 07-12 recorded in Phase I, Phase II or Phase III Radiation Treatment Modality, NAACCR Data Items 1506, 1516 or 1526). When brachytherapy and any other modality are administered code 999998.

So if you code any of these Brachytherapy Treatment Modalities:

07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, Interstitial, LDR
11	Brachytherapy, Interstitial, HDR
12	Brachytherapy, electronic

Code	Label
000000	No radiation treatment. Diagnosed at autopsy.
000001-999997	Record the actual total dose delivered in cGy
999998	Not applicable, radioisotopes administered to the patient or Brachytherapy administered
999999	Radiation therapy was administered, but the total dose is unknown; it is unknown whether radiation therapy was administered. Death Certificate only.

You will code 999998 for Total Dose

Phase I, II, and III Treatment Modality NAACCR Data Item: 1506, 1516, 1526

STORE Page(s): 285, 304, 323

Date Published in NCDB News: 11/15/2018

Added to Coding Instructions, Bullet 5

For Phase I, Phase II and Phase III Treatment Modality, NAACCR Data Items 1506, 1516 and 1526, use code **13 – Radioisotopes, NOS**, for radioembolization procedures i.e. intravascular Yttrium-90, **for cases diagnosed January 1, 2018 or later. For cases diagnosed prior to January 1, 2018, use code 07 – Brachytherapy, NOS.**

Phase I, II, and III Radiation Treatment Modality NAACCR Data Item: 1506, 1516, 1526

STORE Page(s): 285, 304, 323

CTR Radiation Coding Guide Page(s): 6

Date Published in NCDB News: 2/6/2020

An important updates to the coding of brachytherapy (item 6):

- If any phase of treatment to a volume has the Treatment Modality coded to anything between 07 and 16, the dose for that phase should be coded in cGy, when available.

- If coded to cGy and if there is only one phase in the entire course of radiation, then the phase dose can be used to record the course Total Dose.
- However, if there are multiple phases in a radiation course and any of the phases use a brachytherapy, radioisotopes or infusion therapy, then the Total Dose should be coded to 999998 (five 9s).

!! ***Effective with any cases diagnosed January 1, 2020, that received brachytherapy, we prefer the dosage be entered but will allow code 99998. The expectation is not a recoding of cases with diagnosis date prior to January 1, 2020.***

Date of First Course Treatment/Palliative Care NAACCR Data Item: 1270

STORE Page: 232

Date Published in NCDB News: 2/28/2019

STORE Data Item Clarification: Palliative Care

When a patient receives ***palliative care for pain management only*** with no other cancer-directed treatment, Date of First Course of Treatment, NAACCR Data Item #1270, would be the date in which a patient decides on palliative care for pain management only, as recommended by the physician.

“No therapy” is a treatment option that occurs ***if*** the patient refuses treatment, the family or guardian refuses treatment, the patient dies before treatment starts, or the physician recommends no treatment be given, or the physician recommends palliative care for pain management only.

Cancer Status, Date of Last Cancer (tumor) Status and Date of Last Cancer (tumor) Status Flag
NAACCR Data Item(s): 1770, 1772, 1773

STORE Page(s): 393, 391, 392

Date Published in NCDB News: 3/7/2019; re-posted on 8/15/19

- The rationale for the development of the new data items, Cancer Status [1770], Date of Last Cancer (tumor) Status [1772] and Date of Last Cancer (tumor) Status Flag [1773] is to track recurrence ***after*** the completion of first course of treatment.
- The use of the Date of Last Cancer (tumor) Status Flag [1773] should be infrequent, as there should always be a relevant date from the medical information which is used to assign the cancer status.
- Coding examples and rationale for the new STORE Data items, Cancer Status [1770], Date of Last Cancer (tumor) Status [1772], and Date of Last Cancer (tumor) Status Flag [1773], have been created to assist the registrar in the coding of these new data items.

1) **Never disease-free:**

Cancer Status [1770] = 2 (cancer)
Date of First Recurrence [1860] = BLANK, as per existing STORE instructions because it records date of recurrence after disease-free period which in this scenario there never was a disease-free period)
Recurrence Date 1st Flag [1861] = code 11 “patient never disease free” (STORE code 11 presently combines disease free after treatment and never disease free)
Date of Last Cancer (tumor) Status [1772] = record date of the last note stating the patient status (not disease free). *In cases when the only information is a diagnosis, use the date of diagnosis.*

2) Patient receiving treatment:

Cancer Status [1770] = 2 (cancer)
Date of First Recurrence [1860] = BLANK, as per existing STORE instructions because it records date of recurrence after disease-free period which in this scenario is unknown.
Recurrence Date 1st Flag [1861] = 10 (unknown if patient was never disease free or had first recurrence-patient receiving treatment)
Date of Last Cancer (tumor) Status [1772] = record date of last note stating patient has disease and undergoing treatment.

3) Disease-free:

Cancer Status [1770] = 1 (no cancer)
Date of First Recurrence [1860] = BLANK (as per existing STORE instructions because it records date of recurrence after disease-free period)
Recurrence Date 1st Flag [1861] = code 11 to “patient disease free” (STORE code 11 presently combines disease free after treatment and never disease free)
Date of Last Cancer (tumor) Status [1772] = record date of last note stating patient is disease-free.

4) Not disease-free after a period of being disease-free:

Cancer Status [1770] = 2 (cancer) changed from 1 (patient initially disease free)
Date of First Recurrence [1860] = valid date entered for first recurrence date, or if no date see Recurrence Date 1st Flag [1861]
Recurrence Date 1st Flag [1861] = 12 (a proper value is applicable but not known)
Date of Last Cancer (tumor) Status [1772] = record date of last note stating patient has disease.

Phase I, II, and III Radiation Primary Treatment Volume

NAACCR Data Item(s): 1504, 1514, 1524

STORE Page(s) 277, 296, 315

CTR Radiation Coding Guide Page(s): 10

Date Published in NCDB News: 4/4/2019

STORE Data Item Clarification: I-131 for Thyroid

As referenced in page 10 of the *CTR Guide to Coding Radiation Therapy Treatment in the STORE* (Version 1.0), technically, I-131 is effective wherever there are thyroid cancer cells in the body, so there is no specific anatomic treatment volume involved. Therefore, it is recommended coding radioisotope treatments as 98 (Other). The next version of STORE will reflect this change.

STORE is effective for cases diagnosed January 1, 2018. Use this manual for current cases. In most instances, it also should be used for historic cases being abstracted currently; exceptions are noted in the text.

Moving forward, please abstract cases following the rule from the STORE Data Item Clarification: I-131 for Thyroid for applicable cases. This includes cases diagnosed prior to 2018.

NCDB is not stating that thyroid cases diagnosed prior to 2018 should be pulled for review and re-coded to 98 (Other) if they had I-131

Phase I, II, and III Radiation Primary Treatment Volume
NAACCR Data Item(s): 1504, 1514, 1524

STORE Page(s): 277, 296, 315

Date Published in NCDB News: 5/9/2019

NCDB: The Corner STORE – Clarification for the use of code 86 for Radiation Primary Treatment Volume
NAACCR Data Item 1504, 1514, 1524 Radiation Primary Treatment Volume:

Code 86 Pelvis (NOS, non-visceral):
The treatment volume is directed at a primary tumor of the pelvis, but the primary sub-site is not a pelvic organ or is not known or indicated. For example, this code should be used for sarcomas arising from the pelvis. Determination of the exact treatment volume may require assistance from the radiation oncologist for consistent coding.

Examples:

Scenario 1:

- The patient has a total Prostatectomy with seminal vesical removal
- Radiation treatment is stated to be directed to the prostate bed
- Code to volume 86 unless physician documentation states differently

Scenario 2:

- Patient undergoes TAH-BSO for cervical cancer
- Received post-op radiation to the pelvis.
- Code to volume 86 unless physician documentation states differently

Tumor Size Summary
NAACCR Data Item: 756

STORE Page(s): 174, 175, 176

Date Published in NCDB News: 7/9/2019

NCDB Clarification - Coding NAACCR Data Item 756 Tumor Size Summary When No Size is Given

Question: When a patient has surgery and no size is reported on the path report, how is the tumor size coded?

Answer: Record the most accurate measurement of a solid primary tumor, based on the rules in STORE.

- Tumor size code 999 is coded when size is unknown or not applicable. The sites/morphologies where tumor size is not applicable are listed on page 176, STORE.
- When a patient has neoadjuvant therapy followed by surgery, ***do not*** record the size from the pathologic specimen. Code the largest size of the tumor ***prior*** to neoadjuvant treatment. If it is unknown, code the size as 999.
- If no surgical resection, then largest measurement of the tumor from the imaging, physical exam, or other diagnostic procedures in this order of priority prior to any form of treatment (See Coding Rules), page 174, STORE. The next version of the STORE will be updated with the following information for Tumor Size Summary [756], **Coding Rules #4 - Information on size from imaging/radiographic techniques can be used to code the tumor size when there is no more specific size information from pathology or operative report. It should be taken as a lower priority, but over a physical exam.**

Modification: Last paragraph updated 02.13.2020

Sentinel Lymph Nodes
NAACCR Data Item(s): 834, 835

STORE Page(s): 161 – 164

Date Published in NCDB News: 2/13/2020

Only Sentinel Lymph Node Biopsy Performed

As referenced in the STORE, page 3, Because sentinel lymph node biopsies have been generally under-reported and the timing and results of sentinel lymph node biopsy procedures are used in multiple CoC Quality of Care Measures, the CoC developed six new data items for collection of more specific information on sentinel and regional nodes.

Date of Regional Lymph Node Dissection [682]

Date Regional Lymph Node Dissection Flag [683]

Date of Sentinel Lymph Node Biopsy (for breast and melanoma only) [832]

Date of Sentinel Lymph Node Biopsy Flag (for breast and melanoma only) [833]

Sentinel Lymph Nodes Examined (for breast and melanoma only) [834]

Sentinel Lymph Nodes Positive (for breast and melanoma only) [835]

In instances when *only* a sentinel lymph node biopsy is performed (no other regional lymph nodes examined and no regional lymph node dissection), the following data items are completed:

Sentinel Lymph Nodes Examined [834]
Sentinel Lymph Nodes Positive [835]
Date of Sentinel Lymph Node Biopsy [832]
Regional Lymph Nodes Examined [830] *
Regional Lymph Nodes Positive [820] *
Date Regional Lymph Node Dissection [682] (*blank*)
Date Regional Lymph Node Dissection Flag [683] (*11; no regional lymph node dissection performed*)
Scope of Regional Lymph Node Surgery [1292] (*code 2; cannot be codes 3 to 5*)

*When *only* a sentinel lymph node biopsy is performed, and there are no other regional lymph nodes examined, the number of Regional Lymph Nodes Examined [830] is equal to the number of Sentinel Lymph Nodes Examined [834] and the number of Regional Lymph Nodes Positive [820] is equal to the number of Sentinel Lymph Nodes Positive [835].

Case Scenario: A patient *only* has a sentinel lymph node biopsy on 1/1/2019 for breast cancer that reveals 0/2 sentinel lymph nodes positive.
The relevant data items are completed as follows:

Sentinel Lymph Nodes Examined [834]:	02
Sentinel Lymph Nodes Positive [835]:	00
Date of Sentinel Lymph Node Biopsy [832]:	20190101
Date of Sentinel Lymph Node Biopsy Flag [833]:	blank
Regional Lymph Nodes Examined [830]:	02
Regional Lymph Nodes Positive [820]:	00
Date Regional Lymph Node Dissection [682]:	blank
Date Regional Lymph Node Dissection Flag [683]:	11
Scope of Regional Lymph Node Surgery [1292]:	2

CTR Guide to Coding Radiation Therapy Treatment in the STORE 2.0

Released February 2020

The Commission on Cancer Radiation Oncology Working Group is pleased to announce the distribution of the *CTR Guide to Coding Radiation Therapy Treatment in the STORE* version 2.0 to aid registrars in the coding of the 31 Radiation Data items defined in STORE. This document may also be found in the Resources section of the National Cancer Database web page.

CTR Guide to Coding Radiation Therapy

CTR Radiation Coding Guide Page(s): 24 – 25

2018 Radiation Data Items Update

Additional abbreviation-Appendix C-Radiation Therapy Useful Abbreviations

When entering the phases information for the new radiation data items the abbreviation for **Posterior Axillary Boost is PAB**.

NOTE: This addendum was originally published in the NCDB News on 5/2/2019 for version 1.0 however, the abbreviation was not added or updated with version 2.0.

Phase I, II, and III Treatment Modality NAACCR Data Item: 1506, 1516, 1526

STORE Page(s): 285, 304, 323

CTR Radiation Coding Guide Page(s): 22

Date Published in NCDB News: 7/3/2019

NCDB Clarification to CTR Radiation Coding Guide - Coding SAVI equipment for Brachytherapy

Clarification for Coding SAVI equipment for Brachytherapy; In the CTR Radiation Coding Guide (page 22), the Modality code for SAVI, is coded (11), Brachytherapy, Interstitial, HDR, which is incorrect.

The correct modality code is (09), Brachytherapy, Intracavitary, HDR. The code will change from 11 to 09. This change will be reflected in the updated v2.0 release.

With the release of version 2.0, the error has been corrected.

Version 1.0

Product	Modality	Applicable Planning Technique(s)
ViewRay MRIdian MR-linac	02	10
Elekta MR-Linac	02	10
Elekta VersaHD	02	03,04,05, 06, 09
Varian TrueBeam	02	03,04,05, 06, 09
Varian Halcyon	02	03,04,05, 06, 09
GammaKnife	02	08
GammaPod	02	06
Cyberknife	02	07
Tomotherapy	02	05, 06, 09
VMAT, RapidArc, Hyperarc	02	05, 06
Zeiss, Xoft, Esteya	02	02
LIAC, NOVAC	04	03, 04
MammoSite, SAVI, Contura	11	88
Accuboost (NIBB)	07	88

Wrong

Version 2.0 February 2020

Product	Modality	Applicable Planning Technique(s)
Varian TrueBeam, Halcyon or Ethos	02	03,04,05, 06, 09
ViewRay MRIdian MR-linac	02	10
Elekta Unity MR-Linac	02	10
Elekta VersaHD, Infinity, Synergy	02	03,04,05, 06, 09
GammaKnife	02	08
GammaPod	02	06
Cyberknife	02	07
Tomotherapy	02	05, 06, 09
VMAT, RapidArc, Hyperarc	02	05, 06
Zeiss, Xoft, Esteya	02	02
LIAC, NOVAC	04	03, 04
MammoSite, SAVI, Contura	09	88
Accuboost (NIBB)	07	88

Correct

Questions?

NPCR DATA QUALITY EVALUATION STUDY

DQE Validation Study on KCR

- Population-based cancer registries are an essential part of the national cancer surveillance system
- Complete and accurate data are necessary to estimate cancer incidence and trends over time
- NPCR routinely conducts Data Quality Evaluation studies on all central cancer registries that are funded by the NPCR.

DQE Validation Study on KCR

- In 2020, NPCR conducted a Validation study on a sample of records from the Kentucky Cancer Registry.
- The study focused on five cancer sites: colorectal, lung, breast, prostate and corpus uteri.
- A total of 365 cases diagnosed in 2017 were selected for review.

DQE Validation Study on KCR

- The reviewers performed a text to code re-abstraction of each case.
- They documented any discrepancies in their codes with the original codes submitted by KCR.
- All of the discrepancies were then sent to KCR for reconciliation.
- KCR had the opportunity to either agree with the reviewer's recode; or disagree and provide justification for the original code.

DQE Validation Study on KCR

- KCR performed the reconciliation review and returned their comments in mid-March.
- A final report, documenting KCR's percent accuracy by cancer site and by data item are expected in early May.

NPCR AUDIT

The dings and the dangs

Supporting Text

Supporting Text

Every Pt has a story. Text tells “the story” in readable language that supports the coding.

Text should provide accurate and concise summary of the patient’s cancer.

The Importance of Text:

- Support accuracy and validity of coding
- Support unusual site/histology combos
- Explains unusual abstract entries
- Documents ambiguous terminology
- Documents additional info or questions
- Eliminates the need to pull charts or review EMR again
- Reconcile codes and consolidate abstracts from different facilities
- QA/QC audits*****

Critical Data Items

- Age with DOB
- Sex
- Race
- Sequence number
- Stage
- Date of diagnosis
- Laterality
- Primary Site
- Histology
- Behavior
- Grade
- Dates and types of all treatment

Physical Exam

- Begin with Age, Race, & Sex
- Insert information relating to previous primary cancer sequences here (date & type)
- Include symptoms leading to current hospital in or out patient admission for diagnosis &/or treatment
- Include diagnosis date/ procedure/ facility if this took place prior to current visit
- Remember to include reason for current visit!
- End each text section with your initials & date entered

Workup, Tests & Procedures

- **X-ray reports:** Date, Scan, Facility where performed, & pertinent findings; insert initials & date entered at end of the text field.
- **Scopes:** Date, Type of Scope, Facility where performed, & pertinent findings; initials & date.
- **Lab Tests:** Date, Test name, Facility where performed, & pertinent results (include normal range); initials & date.
- **Operative Reports:** Date, Name of procedure, Facility where performed, & pertinent findings (may include important site, size or staging information); initials & date.

Pathology

- **Pathology:** Date, report #, facility, and final diagnosis; include results such as size, location, histology, grade, extension information, lymph node results;
- **Comments or Addendum** results are equally important to record; initial & date
- **Site:** topography; initials & date
- **Histology:** primary tumor type; initials & date

Note: (You are not required to repeat this info in an additional text field, if it is already documented once.)

More on Pathology

- It is helpful to list Path reports in date order. Oldest Paths at top of Path section
- Include all pertinent information from Path report including behavior and grade.
- Path reports can be copied and pasted from E Path in the Path text field.
- Epath can also be attached to your abstract which helps Central and when your abstract is used for Research. (but you still need to include text).

Treatment Plan

Use this text field to document what the physician plans for the treatment of the patients cancer.

Example : Per Dr. Smith's 1/1/2019 note : after Pt's surgery, plan to have six cycles of Chemo (name drug if known), at name of facility-if other than reporting facility, followed by Radiation Therapy (name of facility-if other than reporting facility). Plan for CT every 6 weeks to verify treatment progress.

Treatment Notes

Treatment information to be included here:

- Type of treatment given
- Dates each treatment was started
- Date each treatment was ended
- Treatment volume
- Treatment modality
- Any comments about how the patient handled the treatment; if treatment was suspended and why.

General Remarks

- Diagnosis date & source should be included here, if not covered earlier in text.
- Treatment information may be included here (type, date started; radiation also requires date ended, treatment volume, and treatment modality) if not covered thoroughly in Treatment Notes text field.
- Following physicians/ specialties included here
- Follow-up information is typically added here each year; initials & date

Cover your codes by backing them up in text!

GOAL:
You should be able code your case by looking at your text without referring back to the chart!

QA/CA Audits:
Re-abstracting audits are performed using the text provided in the abstract. If the text does not support the code, then the code is marked wrong. Even when you go back and add the text the error is still counted against you because of failure to document adequately.

AJCC Staging

Clinical Stage

- How can we determine a clinical TNM stage?
  - *Use all information from any of the following obtained **BEFORE** treatment:*
    - Physical examination
    - Imaging
    - Endoscopy and Biopsy
    - Surgical exploration without resection
    - Resection of a single node/sentinel node(s); without resection of primary tumor
    - Lab test or biological markers
    - Any other relevant examinations
    - Any other relevant information ***before*** neoadjuvant treatment or surgical resection
- Clinical classification composed of: cT, cN, and cM or pM

Pathological Stage

- How can we determine a pathological TNM stage?
  - **Use all of the clinical staging information *in addition* to information obtained in:**
    - Operative findings (surgeon's statement of findings)
    - Pathology report
    - Pathologic staging usually requires removal of the primary tumor and regional LNs
- Pathological AJCC Staging: Uses info from clinical timeframe and pathologic/surgical resections. Read the site chapters to see what surgical procedure is needed to qualify case for pathologic staging. If there is a resection after neo-adjuvant therapy then pT, pN, pM are left blank and Pathological Stage Group is 99 and you will record yp Staging in Post-Therapy Staging fields.
- If the case does not qualify for pathological staging: Clinical case only then pathological T,N,M are left blank and Pathological Stage Group is 99.

T, N, and M

AJCC Manual, 8th Edition : Principles of Cancer Staging, Pages 3-30

Store Manual 2018, Version 1.0 : Pages 192-228

X –VS- Blank

Use Blank: Information exists but the registrar does not have access to it. Registrar has part of a patient file but not all of it. (example: a patient is presented at your facility for a biopsy of the prostate. No information of PSA or DRE are in the file you have). Incidental finding at surgery.

Use X: Should have, Could have and Would have but didn't.
Should have done the test/procedure because it is a standard.
Could have done the test/procedure because they had the opportunity.
Would have done the test but something unforeseen occurred (blockage and could not gain access.)

NOTE: cMX does not exsist!

cM vs pM

AJCC Manual, 8th Edition : Clinical M Classification (cM and pM), Page 17
AJCC Manual, 8th Edition : Pathological M Categorization (cM and pM), Page 22

Any of the M categories (cM0, cM1 or pM1) may be used with clinical *or* pathological stage grouping.

M Classification:

cM0: If there is no clinical evidence or signs of distant metastasis. Evaluation method can include history, physical examination and imaging. Though imaging can be used it is not required to assigning cM0. No mention of distant metastasis can denote cM0.

cM1: If there *is* clinical evidence of distant metastases on physical examination, imaging or invasive procedure (exploratory surgery or endoscopy), but there is no microscopic evidence (pathology report) to diagnose metastasis pathologically.

pM1: If there is microscopic evidence of distant metastatic disease. Microscopic evidence includes: Cytology from FNA, core biopsy, incisional biopsy, excisional biopsy, resection. This can be obtained during the clinical or pathological time frame.

- If pM1 is established during the clinical time frame, this will make the case eligible for pathological staging, regardless of whether the tumor is resected.

- If pM1 is established during the pathological time frame, DO NOT go back and change the clinical M to pM. Once resection is done the clinical time frame stops and any information obtained during resection cannot be retrograded.

Grade

General Grade Coding Instructions for Solid Tumors

Grade manual: Page 24

1. Code the grade from the primary tumor only.
   - Do NOT code grade based on metastatic tumor or recurrence.
   - In the rare instance that tumor tissue extends contiguously to an adjacent site and tissue from the primary site is not available, code grade from the contiguous site.
   - If primary site is unknown, code grade to 9.

2. If there is more than one grade available for an individual grade data item (i.e. within the same time frame)
   - Priority goes to the recommended AJCC grade listed in the applicable AJCC chapter. If none of the specified grades are from the recommended AJCC grade system, record the highest grade per applicable alternate grade categories for that site.
   - If there is no recommended AJCC grade for a particular site, code the highest grade per the applicable grade categories for that site.

3. In situ and/or combined in situ/invasive components:
    - If a grade is given for an in situ tumor, code it. Do NOT code grade for dysplasia such as high-grade dysplasia.
    - If there are both in situ and invasive components, code only the grade for the invasive portion even if its grade is unknown.

4. Systemic treatment and radiation can alter a tumor's grade. Therefore, it is important to code clinical grade based on information prior to neoadjuvant therapy even if grade is unknown during the clinical timeframe.

5. Clinical and Pathological grades cannot be left blank.

6. It is important to use your manuals. Some schemas can use different grade tables based on histology (i.e., Corpus Uteri).

00542	Corpus Adenosarcoma	54	Corpus Uteri-Sarcoma	Corpus Sarcoma (including Adenosarcoma)	Grade 14
00530	Corpus Carcinoma and Carcinosarcoma	53	Corpus Uteri-Carcinoma and Carcinosarcoma	Corpus Carcinoma and Carcinosarcoma	Grade 13
00541	Corpus Sarcoma	54	Corpus Uteri-Sarcoma	Corpus Sarcoma (including Adenosarcoma)	Grade 13

Grade 13
Uses FIGO Grade

Code	Grade Description
1	G1 FIGO Grade 1 G1: Well differentiated
2	G2 FIGO Grade 2 G2: Moderately differentiated
3	G3 FIGO Grade 3 G3: Poorly differentiated or undifferentiated
9	Grade cannot be assessed (GX); Unknown

Grade 14
No FIGO Grade
Uses 1, 2, 3, L, H and S

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated or undifferentiated
L	Low grade
H	High grade
S	Sarcomatous overgrowth
9	Grade cannot be assessed (GX); Unknown

Tumor Size Summary

Tumor Size Summary

STORE Manual, 8th Edition : Page 174

- Size measured on the surgical resection specimen, when surgery is administered as the first definitive treatment, (no neoadjuvant treatment administered).
- If neoadjuvant therapy followed by surgery, do not record the size from the pathologic specimen. Code the largest size of tumor ***prior*** to neoadjuvant treatment.
- If no surgical resection, then largest measurement of the tumor from physical exam, imaging, or other diagnostic procedures prior to any other form of treatment.
- All measurements should be in millimeters (mm). Make sure to follow rounding rules.

Treatments

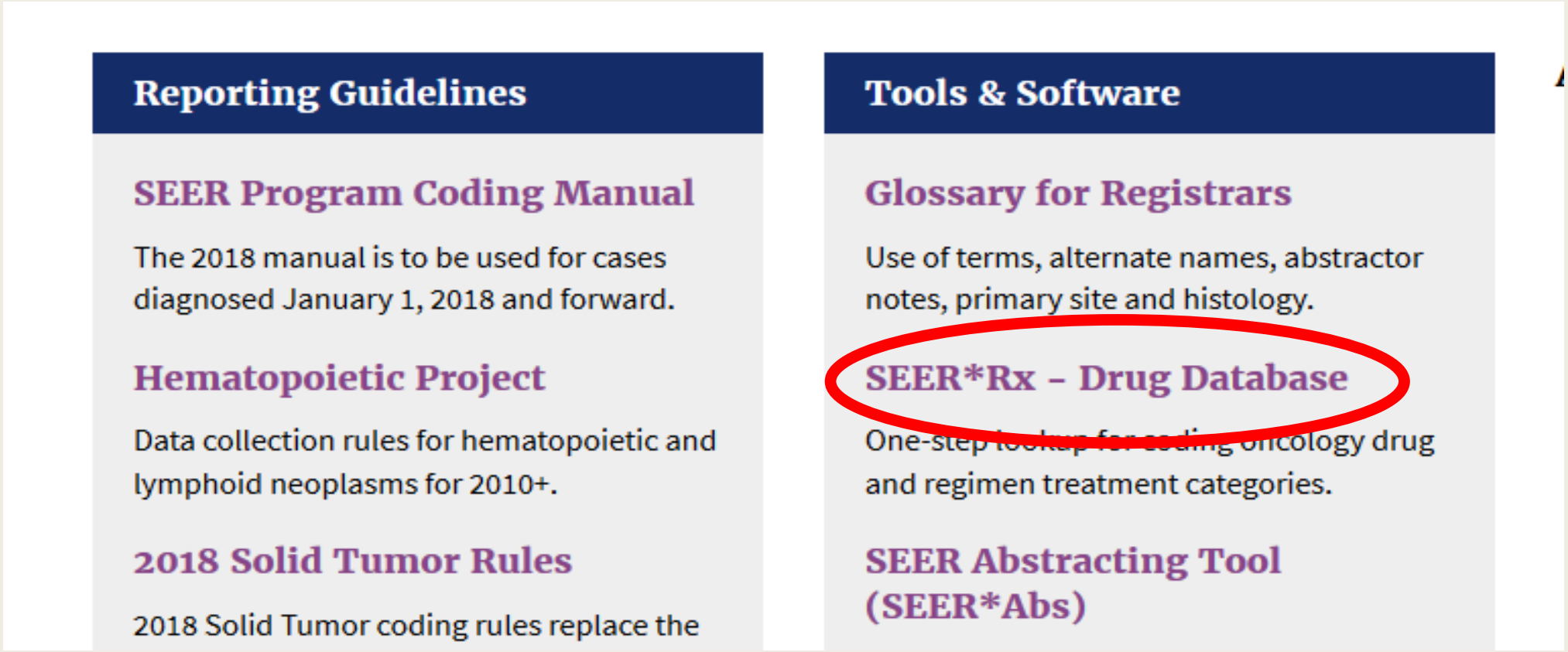
Treatments

- Systemic Therapy Drugs
- Radiation
- Neoadjuvant Treatment

Systemic Therapy

Systemic Therapy Drugs

- https://seer.cancer.gov/seertools/seerrx/



Reporting Guidelines

SEER Program Coding Manual

The 2018 manual is to be used for cases diagnosed January 1, 2018 and forward.

Hematopoietic Project

Data collection rules for hematopoietic and lymphoid neoplasms for 2010+.

2018 Solid Tumor Rules

2018 Solid Tumor coding rules replace the

Tools & Software

Glossary for Registrars

Use of terms, alternate names, abstractor notes, primary site and histology.

SEER*Rx – Drug Database

One-step lookup for coding oncology drug and regimen treatment categories.

SEER Abstracting Tool (SEER*Abs)

SEER*Rx - Interactive Drug Database −
Summary of Changes
Data Documentation & Variable Recodes
SEER Abstracting Tool (SEER*Abs) +
SEER Application Programming Interface (API)
File*Pro
SEER Data Management System (SEER*DMS) +

SEER*Rx was developed as a one-step lookup for coding oncology drug and regimen treatment categories in cancer registries. The information in this database is effective for cancer diagnoses made on January 1, 2005 and after. Review and recoding of drugs from previous years is not required or recommended.

Support Resources

- Questions? Ask a SEER Registrar.
- Join the SEER Registrar News listserv to receive announcements of upcoming changes.

How to Access SEER*Rx

The **SEER*Rx - Interactive Antineoplastic Drugs Database** is provided in a web-based format:

- Updates are automatic: users do not have to install anything to access the latest revisions.
- Allows access from any computer or device with an Internet connection.
- Eliminates problems for users who do not have permission to install software on their work computers.

i Please note: The stand-alone version of SEER*Rx is no longer provided. The web-based tool provides the most up-to-date information.

SEER*Rx Interactive Antineoplastic Drugs Database

Search Database | Downloads

Search

Drugs (1926) | **Regimen (514)**

Show 25 Entries

▲ Name	Category	Primary Site	Code?
1,25-Dihydroxyvitamin D3	Differentiation inducing agent		No
1-Methyl-D-tryptophan	Chemotherapy	Melanoma, Other types, NOS	Yes
1018-ISS	Chemotherapy	Lymphoma	Yes

SEER*Rx Interactive Antineoplastic Drugs Database

Search Database | Downloads

Xeloda | Search

Drugs (2) | Regimen (7)

Show 25 Entries

Relevance	Name	Category	Primary Site	Code?
▬▬	*Xeloda*	Chemotherapy		Yes
▬	Capecitabine	Chemotherapy	Breast cancer, colorectal cancer	Yes

1

Search Database

Name

Xeloda

Alternate Names

Xelox
Capecitabine

Abbreviations

CAPE

Category

Chemotherapy

Subcategory

None

NSC Number

None

Primary Site

None

Histology

None

Remarks

Xeloda is a drug composed of doxifluridine and 5-FU. IT is often used as part of a regimen but if given alone, code to chemotherapy, single agent (1).

Coding

This drug should be coded

Lets Look at Lupron

Name

Leuprolide Acetate

Alternate Names

Abbott-43818
Carcinil
Eligard
Leuprolide
Leuprorelin
Lupron
Lupron Depot
Lupron TAP
TAP-144
Viadur

Abbreviations

None

Category

Hormones and hormonal mechanisms

Subcategory

Gonadotropin-releasing hormone agonist

NSC Number

377526

Primary Site

Prostate cancer
See remarks for other site information
Breast
Ovary

Histology

None

Remarks

December 2016 Update: *Lupron* as ovarian suppressor in pre-menopausal breast cancer has been approved by the FDA per NCI. Beginning with cases diagnosed 1/1/2017 forward, code as hormone therapy.

Lupron is a gonadotropin-releasing hormone analogue. FDA approved its use on prostate cancer and should be coded as hormone therapy.

FOR BREAST CASES DIAGNOSED 1/1/2017 FORWARD: Code as hormone treatment

FOR BREAST CASES DIAGNOSED PRIOR TO 1/1/2017:

The effectiveness of *Lupron* on patients with breast cancer was being studied in one clinical trial. This trial was looking at extended endocrine therapy for pre-menopausal women with breast cancer. This trial is looking at the drug combination of letrozole and leuprolide for women who have taken Tamoxifen for at least 4-5 years. This drug combination is used in the treatment for metastatic breast cancer and is sometimes used for treatment of early stage breast cancer. However, as of early December 2016 it has not been accepted as a standard of care treatment and had not yet received FDA approval for treatment of breast cancer. While it may not have received FDA approval, it can be used "off label" for other conditions. *Lupron* should be coded as "Other Therapy" until such time that it receives FDA approval.

Coding

Please see remarks for additional information

Radiation

Update for the CTR Guide to Coding Radiation Therapy Treatment in the STORE
https://www.facs.org/-/media/files/quality-programs/cancer/ncdb/case_studies_coding_radiation_treatment.ashx

Introduction (Pages: 4-7)

Summary of Coding Principles

Case Studies (Pages 8-20)

Thirteen (13) case studies

Appendix A (Pages 21-22): STORE Radiation Data Field Items

Summary Fields
Phase Fields

Appendix B: (Page 23): Coding Modality for the Heavy Equipment

Appendix C: (Page 24): Radiation Therapy Useful Abbreviations

Case Studies

Case Studies 8

1 No Radiation Therapy 8

2 Single Target Volume – Single Phase 9

3 Thyroid Cancer Treated with Radioiodine 10

4 Prostate Cancer, Boost First, Elsewhere 11

5 Breast and Regional Nodes with Breast Boost 12

6 Prostate Cancer with Concurrent Prostate and SV Boost 13

7 Multiple Metastatic Sites Treated Concurrently 14

8 How Many Phases? 15

9 How many phases with prophylactic cranial irradiation (PCI)? 16

10 Total Body Irradiation for Transplant 17

11 Head and Neck Treatment- Simultaneous Integrated Boost (SIB) 18

#12 On-line Adaptive Therapy with an MR-Linac 19

#13 Gyn-Brachytherapy + External Beam Radiotherapy (EBRT) 20

11 Head and Neck Treatment-Simultaneous Integrated Boost (SIB)

Clinical

61-year old man with stage IVa, T3N2cM0, HPV-negative squamous cell carcinoma of the tonsil completed his course of radiation therapy (delivered with concurrent weekly cisplatin and, on study, with concurrent nelfinavir for hypoxia modification).

Treatment

- Dates of treatment: 9/10/2018 to 10/29/2018.
- Proton pencil beam scanning
- Areas treated: Primary site + bilateral neck.
- Over the course of 35 treatments, areas of gross disease received 7000 cGy, high risk elective neck regions received 6300 cGy, low-risk elective neck including the supraclavicular regions received 5600 cGy.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	0 No radiation and/or sur
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	01 All RT at this Facility
	4	Date Started/Flag	9/10/2018
	5	Date Finished/Flag	10/29/2018
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Total Dose	007000
Phase 1	9	Volume	22 Oropharynx
	10	Rad to Nodes	01 Neck lymph node regions
	11	Modality	03 External beam, protons
	12	Technique	04 Conformal
	13	Number of Fractions	035
	14	Dose per Fraction	00200
	15	Total Phase 1 Dose	007000
Phase e 2	16	Volume	01 Neck lymph node regions
	17	Rad to Nodes	88 N/A, nodes are primary vol
	18	Modality	03 External beam, protons
	19	Technique	04 Conformal
	20	Number of Fractions	035
	21	Dose per Fraction	00180
	22	Total Phase 2 Dose	006300
Phase 3	23	Volume	03 Neck and thoracic LN reg
	24	Rad to Nodes	88 N/A, nodes are primary vol
	25	Modality	03 External beam, protons
	26	Technique	04 Conformal
	27	Number of Fractions	035
	28	Dose per Fraction	00160
	29	Total Phase 3 Dose	005600

Coding Logic

- #6: This course of RT is an example of a simultaneous integrated boost, with issues similar to Case #7. Three regions of the neck (gross disease, high risk neck nodes, low risk neck nodes) were treated simultaneously using different daily fractions of radiation. In the past, these three regions were treated using sequential radiation phases (the first radiation plan treated gross disease, high- and low-risk neck regions to 5000 cGy in 25 fractions; then, the second plan treated gross disease and high-risk neck regions to 6000 cGy in 30 fractions; finally, the third plan treated gross disease to 7000cGy in 35 fractions). The sequential approach requires three separate radiation plans to be made by the physics team, which is a lot of work! More and more, simultaneous integrated boost (or dose painting) treatments are being used because this approach allows only one radiation plan to be developed which greatly reduces the planning burden on physics teams.
- #10: Note that we coded "01 neck lymph node regions" in this phase. We know from his nodal staging (N2c) that he had gross disease in his neck nodes and the treatment summary that areas of gross disease received 7000cGy in 35 fractions.
- #17 and #24: In phase 2 and 3, neck nodal regions were the primary treatment volume so there is no secondary nodal treatment volume. Radiation to Nodes code 88 is reserved for this situation.
- #24: Because the summary states that the low-risk neck volume includes the supraclavicular regions, this is coded as 03 Neck and thoracic lymph node regions.

Appendix A
STORE Radiation Data Field Items

Summary Fields

- Location of Radiation Treatment
- Radiation/Surgery Sequence
- Reason for No Radiation
- Radiation Treatment Discontinued Early

Phase Fields

- Phase N Volume
- Phase N Radiation to Draining Lymph Nodes
- Phase N Radiation Modality
- Phase N Planning Technique

Appendix A – STORE Radiation Data Field Items

Summary Fields

Code	Location of Radiation Treatment
0	No radiation treatment
1	All radiation treatment at this facility
2	Regional treatment at this facility, boost elsewhere
3	Boost radiation at this facility, regional elsewhere
4	All radiation treatment elsewhere
8	Other
9	Unknown

Code	Radiation/Surgery Sequence
0	No radiation therapy and/or surgical procedures
2	Radiation therapy before surgery
3	Radiation therapy after surgery
4	Radiation therapy both before and after surgery
5	Intraoperative radiation therapy
6	Intraoperative radiation therapy with other therapy administered before or after surgery
7	Surgery both before and after radiation
9	Sequence unknown

Code	Reason for No Radiation
0	Radiation therapy was administered.
1	Radiation therapy was not administered because it was not part of the planned first course treatment. Diagnosed at autopsy.
2	Radiation therapy was not recommended/administered because it was contraindicated due to other patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned radiation etc.).
5	Radiation therapy was not administered because the patient died prior to planned or recommended therapy.
6	Radiation therapy was not administered; it was recommended by the patient's physician, but was not administered as part of first course treatment. No reason was noted in patient record.
7	Radiation therapy was not administered; it was recommended by the patient's physician, but this treatment was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in patient record.
8	Radiation therapy was recommended, but it is unknown whether it was administered.
9	It is unknown if radiation therapy was recommended or administered. Death certificate cases only.

Code	Radiation Treatment Discontinued Early

Phase Fields

Phase N Volume	
Value	Description
00	No radiation treatment
01	Neck lymph node regions
02	Thoracic lymph node regions
03	Neck and thoracic lymph node regions
04	Breast/chestwall lymph node regions
05	Abdominal lymph nodes
06	Pelvic lymph nodes
07	Abdominal and pelvic lymph nodes
09	Lymph node primary, NOS
10	Eye/orbit/optic nerve
11	Pituitary
12	Brain
13	Brain (limited)
14	Spinal cord
20	Nasopharynx
21	Oral cavity
22	Oropharynx
23	Larynx (glottis) or hypopharynx
24	Sinuses/nasal tract
25	Parotid or other salivary glands
26	Thyroid
29	Head and neck (NOS)
30	Lung or bronchus
31	Mesothelium
32	Thymus
39	Chest/lung (NOS)
40	Breast - whole
41	Breast - partial
42	Chest wall
50	Esophagus
51	Stomach
52	Small bowel
53	Colon
54	Rectum
55	Anus
56	Liver
57	Biliary tree or gallbladder
58	Pancreas or hepatopancreatic ampulla
59	Abdomen (NOS)
60	Bladder - whole
61	Bladder - partial
62	Kidney
63	Ureter
64	Prostate - whole
65	Prostate - partial
66	Urethra
67	Penis
68	Testicle or scrotum
70	Ovaries or fallopian tubes

Phase N Radiation to Draining Lymph Nodes	
Value	Description
00	No radiation treatment to draining lymph nodes
01	Neck lymph node regions
02	Thoracic lymph node regions
03	Neck and thoracic lymph node regions
04	Breast/chestwall lymph node regions
05	Abdominal lymph nodes
06	Pelvic lymph nodes
07	Abdominal and pelvic lymph nodes
08	Lymph node region, NOS
88	Not applicable; Radiation Primary Treatment Volume is lymph nodes
99	Unknown if any radiation to draining lymph nodes

Phase N Radiation Modality	
Value	Description
00	No radiation treatment
01	External beam, NOS
02	External beam, photons
03	External beam, protons
04	External beam, electrons
05	External beam, neutrons
06	External beam, carbon ions
07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, interstitial, LDR
11	Brachytherapy, interstitial, HDR
12	Brachytherapy, electronic
13	Radioisotopes, NOS
14	Radioisotopes, Radium-232
15	Radioisotopes, Strontium,-89
16	Radioisotopes, Strontium-90
99	Radiation treatment modality unknown; Unknown if administered

Phase N Planning Technique	
Value	Description
00	No radiation treatment

Appendix B
Coding Modality for the Heavy Equipment

Purpose: Associating the Radiation Modality and Radiation Planning Techniques can be confusing when all you have is the name of the piece of “heavy equipment” used to deliver the treatment. They present the following table to help you find the correct codes.

Product	Modality	Applicable Planning Technique(s)
Varian TrueBeam, Halcyon or Ethos	02	03,04,05, 06, 09
ViewRay MRIdian MR-linac	02	10
Elekta Unity MR-Linac	02	10
Elekta VersaHD, Infinity, Synergy	02	03,04,05, 06, 09
GammaKnife	02	08
GammaPod	02	06
Cyberknife	02	07
Tomotherapy	02	05, 06, 09
VMAT, RapidArc, Hyperarc	02	05, 06
Zeiss, Xoft, Esteya	02	02
LIAC, NOVAC	04	03, 04
MammoSite, SAVI, Contura	09	88
Accuboost (NIBB)	07	88

Code	Label	Definition
00	No radiation treatment	Radiation therapy was not administered to the patient. Diagnosed at autopsy.
01	External beam, NOS	The treatment is known to be by external beam, but there is insufficient information to determine the specific planning technique.
02	Low energy x-ray/photon therapy	External beam therapy administered using equipment with a maximum energy of less than one (1) million volts (MV). Energies are typically expressed in units of kilovolts (kV). These types of treatments are sometimes referred to as electronic brachytherapy or orthovoltage or superficial therapy. Clinical notes may refer to the brand names of low energy x-ray delivery devices, e.g. Axxent®, INTRABEAM®, or Esteya®.
03	2-D therapy	An external beam planning technique using 2-D imaging, such as plain film x-rays or fluoroscopic images, to define the location and size of the treatment beams. Should be clearly described as 2-D therapy. This planning modality is typically used only for palliative treatments.
04	Conformal or 3-D conformal therapy	An external beam planning technique using multiple, fixed beams shaped to conform to a defined target volume. Should be clearly described as conformal or 3-D therapy in patient record.
05	Intensity modulated therapy	An external beam planning technique where the shape or energy of beams is optimized using software algorithms. Any external beam modality can be modulated but these generally refer to photon or proton beams. Intensity modulated therapy can be described as intensity modulated radiation therapy (IMRT), intensity modulated x-ray or proton therapy (IMXT/IMPT), volumetric arc therapy (VMAT) and other ways. If a treatment is described as IMRT with online re-optimization/re-planning, then it should be categorized as online re-optimization or re-planning.
06	Stereotactic radiotherapy or radiosurgery, NOS	Treatment planning using stereotactic radiotherapy/radiosurgery techniques, but the treatment is not described as Cyberknife® or Gamma Knife®. These approaches are sometimes described as SBRT (stereotactic body radiation), SABR (stereotactic ablative radiation), SRS (stereotactic radiosurgery), or SRT (stereotactic radiotherapy). If the treatment is described as robotic radiotherapy (e.g. Cyberknife®) or Gamma Knife®, use stereotactic radiotherapy subcodes below. If a

Appendix C
Radiation Therapy Useful Abbreviations

Appendix C – Radiation Therapy Useful Abbreviations

Abbreviation	Term	Abbreviation	Term
AP	Anterior-Posterior	**LAO**	Left Anterior Oblique
BED	Biological Equivalent Dose	**LET**	Linear Energy Transfer
BID	Twice a day	**LL**	Left Lateral
BT	Brachytherapy	**LPO**	Left Posterior Oblique
CAX	Central Axis	**M-IMRT**	Multifield IMRT
cGy	Centigray, 1/100th of a Gy	**MP**	Midplane
CIRT	Carbon Ion Radiation Therapy	**MU**	Monitor Unit
CTV	Clinical Tumor Volume	**OAR**	Organs at Risk
CW	Chest wall	**OBI**	On-Board Imaging
DART	Dynamic Adaptive Radiation Therapy	**ODI**	Optical Distance Indicator
Dmax	Depth of Maximum Dose	**OTT**	Overall Treatment Time
DMLC	Dynamic Multileaf Collimator	**PA**	Posterior-Anterior
DRR	Digitally Reconstructed Radiograph	**PRRT**	Peptide Receptor Radionuclide Therapy
DVH	Dose-Volume Histogram	**PSA**	Patient Support Assembly (treatment couch)

Treatment Sequence

Systemic/Surgery Sequence
NAACCR: 1639

STORE Manual: Pages (373-374)

If none of the following surgical procedures were performed: Surgical Procedure of Primary Site [1290], Scope of Regional Lymph Node Surgery [1292], Surgical Procedure/Other Site [1294], then this item should be coded 0.

If the patient received both systemic therapy and any one or a combination of the following surgical procedures: Surgical Procedure of the Primary Site [1290], Scope of Regional Lymph Node Surgery [1292], or Surgical Procedure/Other Site [1294], then code this item 2-9, as appropriate.

Breaking Down the Codes:

Neoadjuvant Code: 2, 4 and sometime 6*
*6 if other systemic treatment is given ***before*** surgery.

2	Systemic therapy before surgery	Systemic therapy was given before surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed.
4	Systemic therapy both before and after surgery	At least two courses of systemic therapy were given before and at least two more after a surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed.
6	Intraoperative systemic therapy with other systemic therapy administered before or after surgery	Intraoperative systemic therapy was given during surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) with other systemic therapy administered before or after surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed.

Intraoperative codes: 5 and 6

Intraoperative systemic therapy is used for patients with certain abdominal and gastrointestinal cancers and occurs during surgery to debulk a tumor, This procedure is done to target the cancer cells may be left behind in the abdomen during surgery.

- Hyperthermic intraperitoneal chemotherapy (HIPEC) (aka: “hot chemo bath” or “shake and bake”).

NOTE: (Not to be confused with Standard Intraperitoneal Chemotherapy (IP), where a port is place before or during surgery and the chemotherapy agent is administered at the bed side while in a hospital or treatment facility ***after*** surgery.) (This is coded 3)

Neoadjuvant Therapy and the Prostate

The NCI Dictionary of Cancer Terms:

Neoadjuvant Therapy: Treatment given as a first step ***to shrink*** a tumor ***before*** the ***main*** treatment, which is usually surgery. Examples of neoadjuvant therapy include chemotherapy, radiation therapy and hormone therapy.

Per the NAACCR Prostate Webinar – January 2020:

Androgen Deprivation Therapy (ADT) is sometimes given as neoadjuvant treatment and usually lasts 4-6 months. However, ADT can also be given shortly before surgery to see how the tumor reacts to the agent. In cases such as this, this would not be considered neoadjuvant treatment, because the drug was not administered to treat the tumor but to see how the tumor would react.
(This webinar is available on the KCR website under “Training”)

Ambiguous Terminology

Ambiguous Terminology

STORE: Pages 15-17
SEER Manual: 10-13
Solid Tumor Manual: Page 12

- Do not accession a case when the original source document used a non-reportable ambiguous term and subsequent documents refer to history of cancer.
- Do not accession a case based ONLY on suspicious cytology.
- Used to determine reportability, not histology.

Ambiguous Terms for Reportability

Apparent(ly)
Appears
Comparable with
Compatible with
Consistent with
Favor(s)
Malignant appearing
Most likely
Presumed
Probable
Suspect(ed)
Suspicious (for)
Typical (of)

- Do not substitute synonyms such as “supposed” for presumed or “equal” for comparable. Do not substitute “likely” for “most likely.”
- There may be ambiguous terms preceded by a modifier, such as “mildly” suspicious. In general, ignore modifiers or other adjectives and accept the reportable ambiguous term .

Ambiguous Terms for Reportability

Apparent(ly)
Appears
Comparable with
Compatible with
Consistent with
Favor(s)
Malignant appearing
Most likely
Presumed
Probable
Suspect(ed)
Suspicious (for)
Typical (of)

Topography and Histology

Topography and Histology Tips

Use the Solid Tumor Manual to help code the correct site and histology.

Each section has tables to help direct your decision.

Lung Equivalent Terms and Definitions
C340-C343, C348, C349
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Terminology	Laterality	Site Term and Code
Bronchus intermedius **Carina** **Hilus of lung** **Perihilar**	Bilateral	Mainstem bronchus **C340** *Note*: **Bronchus intermedius** is the portion of the **right mainstem bronchus** between the upper lobar bronchus and the origin of the middle and lower lobar bronchi
Lingula of lung	Left	Upper lobe **C341**
Apex **Apex of lung** **Lung apex** **Pancoast tumor** **Superior lobar bronchus** **Upper lobe bronchi**	Bilateral	Upper lobe **C341**
Middle lobe **Middle lobe bronchi**	Right	Middle lobe **C342**
Base of lung **Lower lobar bronchus** **Lower lobe** **Lower lobe bronchi** **Lower lobe segmental bronchi**	Bilateral	Lower lobe **C343**
Overlapping lesion of lung	Bilateral	Overlapping lesion of lung **C348** *Note*: **One** lesion/tumor which **overlaps two or more** lobes

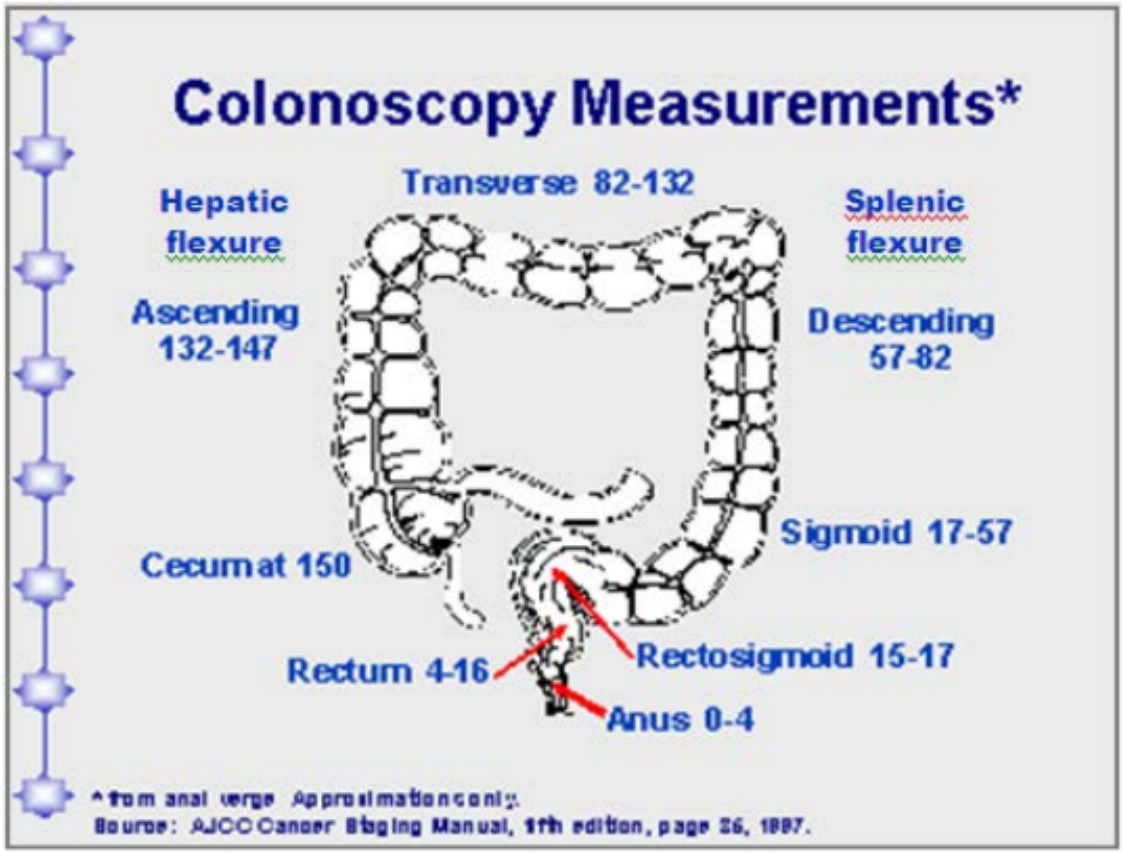
Breast Equivalent Terms and Definitions
C500-C506, C508-C509
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Terms and Descriptive Language	Site Term and Code
Inferior inner Inferior medial Lower inner quadrant (LIQ) Lower medial	Lower inner quadrant of breast **C503**
Superior lateral Superior outer Upper lateral Upper outer quadrant (UOQ)	Upper outer quadrant of breast **C504**
Inferior lateral Inferior outer Lower lateral Lower outer quadrant (LOQ)	Lower outer quadrant of breast **C505**
Axillary tail of breast Tail of breast NOS Tail of Spence	Axillary tail of breast **C506**
12:00 o'clock 3:00 o'clock 6:00 o'clock 9:00 o'clock Inferior breast NOS Inner breast NOS Lateral breast NOS Lower breast NOS Medial breast NOS Midline breast NOS Outer breast NOS Overlapping lesion of breast Superior breast NOS Upper breast NOS	Overlapping lesion of breast **C508** ***Note:*** This is a **single tumor** which **overlaps quadrants/subsite.**

Colon, Rectosigmoid, and Rectum Equivalent Terms and Definitions
C180-C189, C199, C209
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Illustrations

Colonoscopy measurements which may be used to determine primary site when no site is designated



Histology: Priority Order for Using Documentation

For each site, priorities include tissue/histology, cytology, radiography/scans, and physician diagnoses, and biomarkers.

You must use the priority order that precedes the histology rules for each site.

- Priority order will differ by site. Tissue pathology (and/or biomarkers, if applicable) always takes precedence.
- The specific types of radiography/scans also differ by site.

Lung Equivalent Terms and Definitions
C340-C343, C348, C349
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Specific or NOS Histology Term and Code	Synonym of Specific or NOS	Subtype/variant of NOS and Code
Adenocarcinoma 8140 **Note 1:** Mucinous adenocarcinoma for lung only is coded as follows: • **8253/3*** when o Behavior unknown/not documented (use staging form to determine behavior when available) o Invasive • **8257/3*** when o Microinvasive o Minimally invasive • **8253/2*** when o Preinvasive o In situ **Note 2:** Non-mucinous adenocarcinoma for lung only is coded as follows: • **8256/3*** when o Microinvasive o Minimally invasive • **8250/2*** when o Preinvasive o In situ	Adenocarcinoma NOS Adenocarcinoma in situ **8140/2** Adenocarcinoma invasive **8140/3** Adenocarcinoma, non-mucinous, NOS	Acinar adenocarcinoma/adenocarcinoma, acinar predominant **(for lung only) 8551*** Adenoid cystic/adenocystic carcinoma **8200** Colloid adenocarcinoma **8480** Fetal adenocarcinoma **8333** Lepidic adenocarcinoma/adenocarcinoma, lepidic predominant **8250/3*** Mucinous carcinoma/adenocarcinoma **(for lung only)** in situ **8253/2*** invasive **8253/3*** minimally invasive **8257/3*** microinvasive **8257/3*** preinvasive **8253/2*** Micropapillary adenocarcinoma/adenocarcinoma, micropapillary predominant **8265** Mixed invasive mucinous and non-mucinous adenocarcinoma **8254*** Non-mucinous adenocarcinoma **(for lung only)** in situ **8250/2*** microinvasive **8256/3*** minimally invasive **8256/3*** preinvasive **8250/2***

Colon, Rectosigmoid, and Rectum Equivalent Terms and Definitions
C180-C189, C199, C209
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Table 1: Specific Histologies, NOS, and Subtypes/Variants

Use Table 1 as directed by the **Histology Rules** to assign the more common histology codes for malignancies found in the colon, rectosigmoid and rectum.

Note 1: Rare histologies may not be listed in the table. When a histology term is not found, reference ICD-O and all updates.
Note 2: Submit a question to Ask a SEER Registrar when the histology code is not found in Table 1, ICD-O or all updates.
Note 3: Behavior codes are listed when the term has only one possible behavior (either a /2 or /3). For histologies which may be either /2 or /3, a behavior code is not listed. Code behavior from pathology.

Column 1 contains specific and NOS histology terms.
- **Specific** histology terms **do not** have **subtypes/variants**
- **NOS** histology terms **do** have **subtypes/variants**

Column 2 contains **synonyms** for the specific or NOS term. Synonyms have the **same** histology **code** as the specific or NOS term.
Column 3 contains **subtypes/variants** of the **NOS** histology. Subtypes/variants **do not** have the **same** histology code as the NOS term.

Specific and NOS Term and Code	Synonyms for Specific or NOS Term	Subtypes/Variants
Adenocarcinoma 8140 ***Note 1*: See Histology Rules** for instructions on coding adenocarcinoma **subtypes/variants** arising in a polyp ***Note 2*:** When the term **intestinal adenocarcinoma** is used to describe a colon primary, it simply means the **appearance** is	Adenocarcinoma, NOS Adenocarcinoma/carcinoma in a polyp NOS (now coded to 8140) Adenocarcinoma/carcinoma in adenomatous polyp (now coded to 8140) Adenocarcinoma/carcinoma in polypoid adenoma (now coded to 8140) Adenocarcinoma/carcinoma in serrated adenoma (now coded to 8140) Adenocarcinoma and mucinous carcinoma, mucinous documented as less than 50% of tumor OR percentage of mucinous	Adenoid cystic carcinoma **8200** Cribriform comedo-type carcinoma/ adenocarcinoma, cribriform comedo-type **8201*** Diffuse adenocarcinoma/carcinoma **8145** Linitis plastica **8142/3** Medullary adenocarcinoma/carcinoma **8510** Micropapillary carcinoma **8265*** Mucinous/colloid adenocarcinoma/carcinoma **8480** Mucoepidermoid carcinoma **8430** Serrated adenocarcinoma **8213***

Breast Equivalent Terms and Definitions
C500-C506, C508-C509
(Excludes lymphoma and leukemia M9590 – M9992 and Kaposi sarcoma M9140)

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
Acinic cell carcinoma 8550	Acinar adenocarcinoma Acinar carcinoma	
Adenoid cystic carcinoma (ACC) 8200	ACC Adenocystic basal cell carcinoma Carcinoma adenoides cysticum Cylindromatous carcinoma	
Adenomyoepithelioma with carcinoma 8983	AME Malignant AME	
Apocrine carcinoma 8401 *Note:* This is a diagnosis that is **EXACTLY** apocrine **carcinoma**, **not** a carcinoma **NST** with apocrine **features**, **differentiation**, **or type.**		
Carcinoma NST 8500 *Note*: Cribriform carcinoma may consist of up to 50% tubular formations. The term cribriform/tubular carcinoma is coded as cribriform carcinoma.	Carcinoma of no special type (ductal/NST) Carcinoma/carcinoma NST with choriocarcinomatous features Carcinoma/carcinoma NST with cribriform features Carcinoma/carcinoma NST with melanotic features Carcinoma/carcinoma NST with signet ring cell differentiation DCIS **8500/2** Duct/ductal carcinoma Duct/ductal carcinoma in situ **8500/2** Duct/ductal carcinoma NOS	Carcinoma with osteoclastic-like stromal giant cells **8035** Cribriform carcinoma **8201/3** Pleomorphic carcinoma **8022/3**

Use the Solid Tumor Manual!

Surgery Codes

Surgery Codes
Corpus Uteri

STORE Manual: Pages 473 – 474

IMPORTANT:

Though surgeries list specific organs that are removed as part of the procedure. Do ***NOT*** code these organs again in “Surgical Procedure of Other Sites”; these organs were removed in continuity with the uterus as part of the procedure.

30 Subtotal hysterectomy/supracervical hysterectomy/fundectomy WITH or WITHOUT removal of tube(s) and ovary(ies).

31 WITHOUT tube(s) and ovary(ies)

32 WITH tube(s) and ovary(ies)

Subtotal: Removes corpus uteri or fundus of uterus, while leaving the cervix in place

40 Total hysterectomy (simple, pan-) WITHOUT removal of tube(s) and ovary(ies)

Removes both the corpus and cervix uteri. It may also include a portion of the vaginal cuff.

50 Total hysterectomy (simple, pan-) WITH removal of tube(s) and/or ovary(ies)

Removes both the corpus and cervix uteri. It may also include a portion of the vaginal cuff.

Also called TAH-BSO, Total Abdominal Hysterectomy: Removes both the corpus uteri and cervix uteri and it may also include a portion of the vaginal cuff. No lymph nodes are removed with these procedures.

60	Modified radical or extended hysterectomy; radical hysterectomy; extended radical hysterectomy
61	Modified radical hysterectomy
62	Extended hysterectomy
63	Radical hysterectomy; Wertheim procedure
64	Extended radical hysterectomy

Modified radical or extended hysterectomy; radical hysterectomy; extended radical hysterectomy: Removes both the corpus uteri and cervix uteri and it may also includes a 2-3cm portion of vagina (more than just the vaginal cuff). Some lymph nodes are removed with these procedures.

Lymph Node Surgeries and Procedures

Scope of Regional Lymph Node Surgery

STORE Manual: Pages 281-287

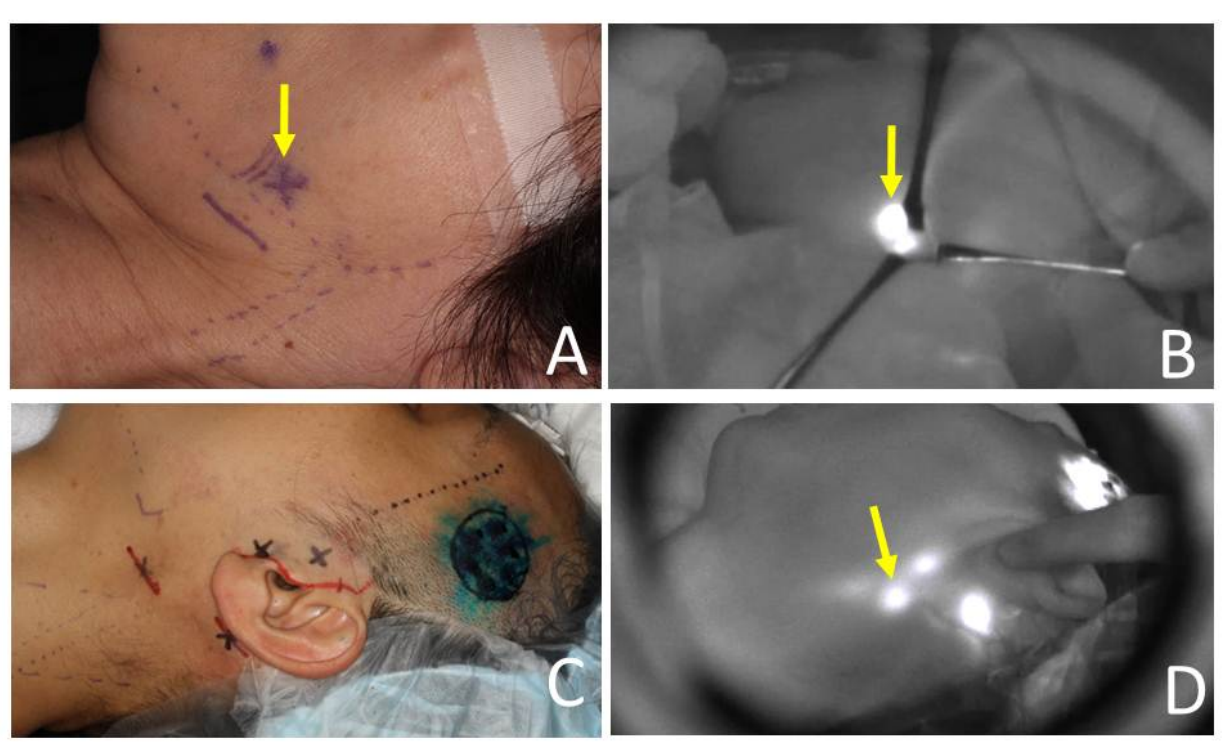
- Record surgical procedures which aspirate, biopsy or remove regional lymph nodes in an effort to diagnose or stage disease.
- Do not code distant lymph nodes removed during surgery to the primary site for this data item
- Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy or a more extensive dissection of the regional lymph nodes or both.
- The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence.

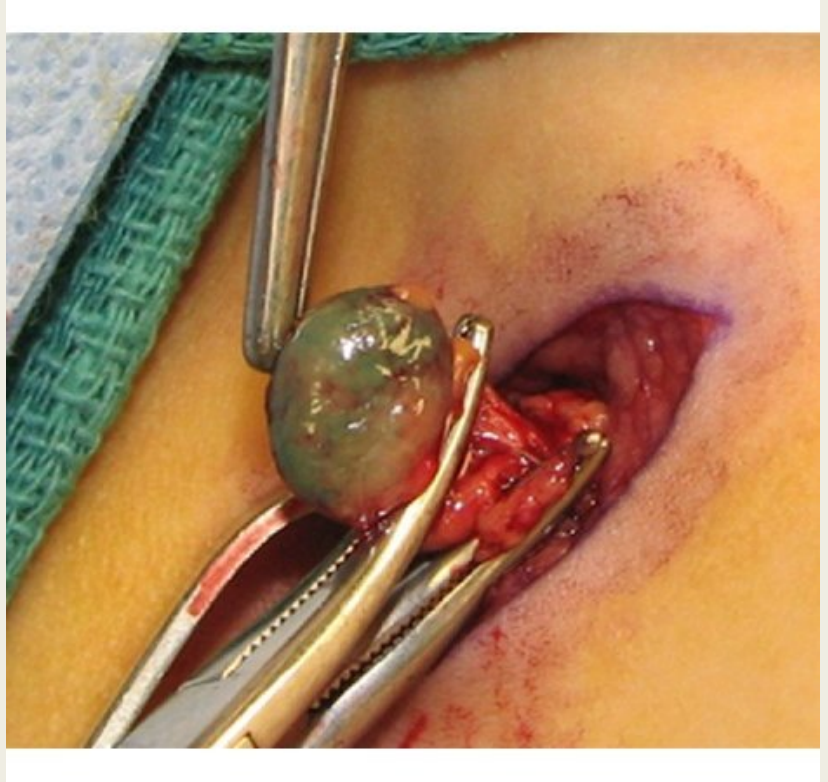
Sentinel Lymph Node Biopsy

Codes 2, 6 and 7

- For sentinel biopsies, review the operative report to confirm if it describes procedure using injection of a dye, radio label or a combination to identify a lymph node.
- The operative report states that a sentinel lymph node biopsy was performed.
- When a sentinel biopsy is performed addition non-sentinel nodes can be taken during the same procedure, These additional lymph nodes will be palpably abnormal and selectively removed and will not be referred to regional lymph node dissection.
- To code regional lymph node biopsy along with sentinel lymph node biopsy it must be stated in the operative report that a regional lymph node procedure was done along with the sentinel biopsy or at a separate surgical procedure.

Sentinel Lymph Node Procedure





Regional Lymph Node Surgery

Codes 1, 3, 4, and 5

- The operative report states that is was a regional lymph node excisional biopsy or dissection and not a sentinel biopsy procedure.
- Review the operative report to confirm that it does not describe a procedure using injection of a dye, radio label or a combination to identify a lymph node.
- Review operative report to see if the procedure is an excisional biopsy or aspiration (Code 1) verses dissection (codes 3, 4, 5)
- Use the operative report to assess the number of lymph nodes removed. The pathology report can be used to complement the operative report but the operative report takes precedence.

Lymph Nodes Examined

STORE Manual: Pages 167-169

Regional lymph nodes ***only***.

Distant lymph node information ***should not*** be coded in this field.

This field is based on pathologic information only.

This field is to be recorded regardless of whether the patient received neoadjuvant treatment.

Cumulative nodes removed and examined. Record the total number of regional lymph nodes removed and examined by the pathologist.

The number of regional lymph nodes examined is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment, ***with the exception of aspiration or core biopsies.***

Do not count a positive aspiration or core biopsy of a lymph node in the ***same*** lymph node chain removed at surgery as an additional node in Regional Nodes Examined.

> **Exception to this rule:** If the positive aspiration or core biopsy ***is from a node in a different node region***, include the node in the count of Regional Nodes Examined.

Lymph Nodes Examined

Code	Label
00	No nodes were examined • When the assessment of lymph nodes is clinical • When no lymph nodes are removed and examined • When a "dissection" of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination • If Regional Nodes Examined is coded 00, Regional Nodes Positive is coded as 98
01-89	1-89 nodes were examined (code the exact number of regional lymph nodes examined)
90	90 or more nodes were examined
95	No regonal nodes were removed, but aspirtation of regional nodes were performed • When the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue)
96	Regional lymph node removal was documented as a sampling, and the number of nodes is unknown/not stated • A lymph node "sampling" is removal of a limited number of lymph nodes • Other terms for removal of a limited number of nodes include lymph node biopsy, berry picking, sentinel lymph node procedure, sentinel node biopsy, selective dissection • Use code 96 when a *limited* number of nodes are removed but the number is unknown
97	Regional lymph node removal was documented as a dissecton, and the number of nodes is unknown /not stated • A lymph node "dissection" is removal of *most or all* of the nodes in the lymph node chain(s) that drain the area around the primary tumor • Other terms include lymphadenectomy, radical node dissection, lymph node stripping • Use code 97 when *more than* a limited number of lymph nodes are removed and the number is unknown • **Note:** If both a lymph node sampling and a lymph node dissection are performed and the total number of lymph nodes examined is unknown, use code 97
98	Regional lymph nodes were surgically removed, but the number of lymph nodes is unknown/not stated and not documented as a sampling or dissection; nodes were examined, but the number is unknown
99	It is unknown whether nodes were positive; not applicable; not stated in patient record

Lymph Nodes Positive

STORE Manual: Pages 170-172

Regional lymph nodes ***only***.

Distant lymph node information ***should not*** be coded in this field.

This field is based on pathologic information only.

This field is to be recorded regardless of whether the patient received neoadjuvant treatment.

Cumulative nodes positive. Record the total number of regional lymph nodes removed and found to be positive by pathologic examination.

The number of regional lymph nodes positive is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment, ***with the exception of aspiration or core biopsies.***

Do not count a positive aspiration or core biopsy of a lymph node in the same lymph node chain removed at surgery as an additional node in Regional Nodes Positive.

> **Exception to this rule:** If the positive aspiration or core biopsy ***is from a node in a different node region***, include the node in the count of Regional Nodes positive.

Lymph Nodes Positive

Code	Label
00	All nodes examined were negative
01-89	1-89 nodes were positive (code the exact number of regional lymph nodes positive)
90	90 or more nodes are positive
95	Positive aspiration of lymph node(s) was performed • When the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue) • When a positive lymph node is aspirated and there are no surgically resected lymph nodes • When a positive lymph node is aspirated and surgically resected lymph nodes are negative
97	Positive nodes are documented, but the number is unspecified • Use code 97 for any combination of positive aspirated, biopsied, sampled or dissected lymph nodes if the number of involved nodes cannot be determined on the basis of cytology or histology • Code 97 includes positive lymph nodes diagnosed by either cytology or histology • **Note:** If the aspirated node is the only one that is microscopically positive, use code 95
98	No nodes were examined • When the assessment of lymph nodes is clinical only • When no lymph nodes are removed and examined • When a “dissection” of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination • If Regional Nodes Positive is coded as 98, Regional Nodes Examined is usually coded 00
99	It is unknown whether nodes were positive; not applicable; not stated in patient record

Lab Values

Lab Values

SSDI Manual: Pages 19-24

Timing for Recording Laboratory Tests

Unless instructions for a specific laboratory test state otherwise, record only tests results obtained

- before any cancer-directed treatment is given (neoadjuvant therapy or surgical), AND
- no earlier than approximately three months before diagnosis AND
- if multiple lab tests are available, record the highest value

NOTE: If the only test or tests performed do not meet these criteria, code "test not done" or "unknown if test performed."

PSA (Prostatic Specific Antigen) Lab Value

SSDI Manual: Pages 270-272

Coding Guidelines:

- Record the ***last*** pre-diagnosis PSA lab value ***prior*** to diagnostic biopsy of prostate and initiation of treatment.
- Physician statement of prostatic specific antigen (PSA) pre-diagnosis can be used to code this data item when no other information is available.
- If there is documentation by a clinician within the medical record of an adjusted PSA value pre-diagnosis, record the adjusted value.
  - The fact that an adjusted PSA value is being recorded should be documented in the Dx Proc – Lab Tests text field.

Examples:

- 1/5/2018: PSA 5.8
  1/29/2018: PSA 5.2
  2/22/2018: Biopsy positive for adenocarcinoma
  - Code: 5.2
  - PSA lab value closest and prior to the diagnostic biopsy

- 12/19/2017: PSA 44.3
  3/11/2018: PSA 42.8
  5/1/2018: DRE positive for bilateral palpable nodularity
  5/5/2018: Lupron initiated without needle core biopsy
  - Code: 42.8
  - PSA lab value closest to the initiation of treatment

- Patient present at your facility for a biopsy. PSA value not documented in medical record. Physician statement “PSA abnormal”.
  - XXX.7 (test ordered, results not in chart)
  - Physician statement of PSA pre-diagnosis can be used to code this data item when no other information is available.

Rounding Rules

SSDIs follow the standard definitions for rounding. These general rules can be followed for most SSDIs where lab values or percentages are recorded. Most all SSDIs that have lab values, percentages or measurements are set up to record in the 10ths (one digit after the decimal point). If a lab value, percentage or measurement is recorded in 100ths (two digits after the decimal point), then the last digit must be rounded.

The general rounding rules are:

- If digit is 0-4, round down
- If digit is 5-9, round up

Examples:

- Breslow's measurement 4.32 mm
  - Since the last digit is 2, round down and record 4.3
- CEA lab value 18.35
  - Since the last digit is 5, round up and record 18.4

Exceptions to the Rule:

Currently (2018+), the only SSDIs that have exceptions to the general rounding rules are:

- HER2 ISH Single Probe Copy Number
- HER2 ISH Dual Probe Copy Number
- HER2 ISH Dual Probe Ratio

Example:

- HER2 ISH Dual Probe Copy Number 6.78
  - Per note 8 in the SSDI Manual: If the test results are presented to the hundredth decimal, ignore the hundredth decimal. **Do NOT round**. Record 6.7
  - This also applies to HER2 ISH Single Probe Copy Number and HER2 ISH Dual Probe Ratio

ER (and PR) percent positive do not have decimal points in the data items, so anything with a decimal point will have to be rounded.

Example:

- 78.6. Since the last digit is 6, round up and record 079 (79%)
  - **Note:** For ER and PR percent positive, if a value is documented as 99.5% to 99.9%, round up to 100% (code 100)

Recording Lab Values when “less than” or “greater than” are used

Record the lab value as one less than stated when a value is reported as “less than X,” and as one more than stated when a value is reported as “more than X.” One less or one more may refer to a whole number (1), or a decimal (0.1), depending on the code structure of the field.

SSDIs with decimals in their code structures:

Example: PSA stated as < (Less than) 5. Record 4.9

Example: PSA states as > (greater than) 5. Record 5.1

SSDIs without decimals in their code structure:

Example: ER Percent Positive stated as < (less than) 60%. Record 059 (59%)

Example: PR Percent Positive stated as > (greater than) 75%. Record 076 (76%)

ALLRED Score

SSDI Manual: Page 174

Proportion score + Intensity score = Allred score

- Registrars may calculate Allred score if Proportion score and Intensity score are available.
  - If either Proportion score or Intensity score are missing, then registrar cannot calculate Allred score.
- If intensity is given as a range (2-3+), go with the higher value.
- Weak, Intermediate, Moderate, Strong, may be used to assign the score.

Proportion Score	Positive Cells, %
0	0
1	<1
2	1 to 10
3	11 to 33
4	34 to 66
5	≥67

Intensity	Intensity Score
None	0
Weak	1
Intermediate/Moderate	2
Strong	3

Examples:

Specimen from core biopsy: ER 3% Strong Positive

Proportion Score: 2

Intensity Score: 3

Allred Score of 5 (2+3=5)

Proportion Score	Positive Cells, %
0	0
1	<1
2	1 to 10
3	11 to 33
4	34 to 66
5	≥67

Specimen from lumpectomy: ER 20% Weak Positive

Proportion Score 3

Intensity Score 1

Allred Score of 4 (3+1=4)

Intensity	Intensity Score
None	0
Weak	1
Intermediate/Moderate	2
Strong	3

Questions?

NAACCR Webinar Series

Available at the KCR Website

https://www.kcr.uky.edu/

- Technical Resources
- Training

2014-2020 NAACCR Webinars

*Note: You will need the **WebEx Player** to view these files.*

If you are having problems accessing the webinars, please contact Joel Wheeler at 859-218-2108.

April 16, 2020 - Melanoma

March 25, 2020 - Boot Camp March 2020

February 24, 2020 - SSDIs 2020

January 21, 2020 - Prostate

December 19, 2019 - Bladder

October 11, 2019 - Breast

September 16, 2019 - Coding Pitfalls

July 8, 2019 - Ovary

May 13, 2019 - Neuroendocrine Tumors

March 15, 2019 - Boot Camp

February 20, 2019 - Colon

December 12, 2018 - Breast

October 15, 2018 - Lung

August 21, 2018 - Managing Change with Tracking Tools

May 14, 2018 - Directly Coded Stage

March 12, 2018 - Boot Camp

What can we expect for 2021?

Some of the changes include:

- Updated Grade Manual
- New SSDIs Added
  - EGRF Mutational Analysis (Lung)
  - ALK Rearrangement by Molecular Methods (Lung)
  - CA 19-9 Pre Tx-Lab Value (Pancreas)
  - Ki-67 (Neuroendocrine Tumors)
  - HER2 Overall Summary (Esophagus and Stomach)
  - NRAS Mutation Analysis (Colon and Rectum)
  - BRAF Mutation Analysis (Colon and Rectum)

THANK YOU!

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