Standards for Oncology Registry Entry

STandards for **O**ncology **R**egistry **E**ntry

STORE 2023

Effective for Cases Diagnosed

January 1, 2023

Posted 4/11/2024

Cancer PROGRAMS

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STandards for **O**ncology **R**egistry **E**ntry

Released 2023

(Incorporates all updates to Commission on Cancer, National Cancer Database Data standards since FORDS was revised in 2016, STORE 2018, STORE 2021, STORE 2022)

Effective for cases diagnosed January 1, 2023

Commission on Cancer

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Foreword

FROM "FORDS" TO "STORE"

The Facility Oncology Registry Data Standards, better known as FORDS, was developed in 2003 by the Commission on Cancer (CoC) of the American College of Surgeons (ACS) for its CoC accredited programs. Although updated periodically to ensure that appropriate codes were being assigned by registrars in reporting required tumors, there had not been any major overhaul of the manual since its inception. Prior updates of FORDS, while benefiting from the expertise of cancer registrars and others involved in the cancer surveillance community, had never included the recommendations of cancer clinicians working in the major oncologic specialties.

In 2014, Dr. David P. Winchester, Director of Cancer Programs at the ACS, asked me to lead a concerted effort to update and ensure that FORDS would have greater relevance to current oncologic practice and data collection. A multidisciplinary approach was begun to include leading registrars representing CoC hospitals, state registries and the SEER program of the National Cancer Institute. This effort was coordinated by the outstanding professional staff at the National Cancer Database (NCDB) of the CoC. In addition, many clinicians representing surgical oncology, medical oncology and radiation oncology were invited to join in this effort to assure that diagnostic and treatment codes were updated and reflected current practice. This coding structure is vital to hospital registry data that ultimately are entered into the NCDB and also determines the CoC quality measures which are currently being used in the Rapid Quality Reporting System (RQRS), Cancer Quality Improvement Program (CQIP) and the CP^3R Program which tracks quality within all of the CoC-accredited institutions.

The culmination of these efforts over the last four years has resulted in an entirely new and updated coding compendium: STORE--Standards for Oncology Registry Entry. This new name was selected to reflect our entirely new approach to this revision that includes both registry and surveillance leaders and clinicians who care for the cancer patient.

To all these dedicated individuals and our dedicated NCDB staff – especially Kathleen Thoburn whose hard work and commitment has brought the STORE manual to fruition – I offer my sincere gratitude for a job well done.

Frederick L. Greene, MD FACS

August 2018

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STORE 2023 Summary of Changes

New Data Items

STORE 2023 Page Number	NAACCR Number	Data Item Name
94	344	Tobacco Use Smoking Status
216	671	Rx Hosp -Surg 2023 Replacing Surgical Procedure of Primary Site at this Facility [670] for cases with diagnosis year 2023 For diagnosis years 2003 – 2022, leave this data item blank and complete data item Surgical Procedure of Primary Site at this Facility [NAACCR data item #670] utilizing the STORE manual based on the year of diagnosis. All 2023 site specific surgery codes begin with a letter A except for skin which start with a letter B to indicate a significate change in coding. For melanoma skin surgical codes ONLY: ○ The priority order for sources used to assign surgery codes: • Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure. • Do not code base on margin status documented in the pathology report.
218	1291	Rx Summ- Surg 2023 Replacing Surgical Procedure of Primary Site [1290] for cases with diagnosis year 2023 For diagnosis years 2003 – 2022, leave this data item blank and complete data item Surgical Procedure of Primary Site [NAACCR data item #1290] utilizing the STORE manual based on the year of diagnosis. All 2023 site specific surgery codes begin with a letter A except for skin which start with a letter B to indicate a significate change in coding. For melanoma skin surgical codes ONLY: ○ The priority order for sources used to assign surgery codes: • Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure. • Do not code base on margin status documented in the pathology report.

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Data items with Name Changes

NAACCR Number	Previous Name	Current Name
670	Surgical Procedure of Primary Site at this Facility	Rx Hosp Surg Prim Site 03-2022
1290	Surgical Procedure of Primary Site	Rx Summ- Surg Prim Site 03-2022

Data Items removed from STORE 2023.

STORE 2022 Page Number	NAACCR Number	Data Item Name
82	241	Date of Birth Flag
125	581	Date of First Contact Flag
141	1281	Rx Date–Dx/Stg Proc Flag
217	1201	Rx Date–Surgery Flag
219	1290	Surgical Procedure of Primary Site All instructions for #1290 have been changed to reflect the new surgical codes for diagnosis year 2023 RX Summ-Surg 2023 [1291]
221	670	Surgical Procedure of Primary Site at this Facility All instructions for #670 have been changed to reflect the new surgical codes for diagnosis year 2023 RX Hosp-Surg 2023 [671]
297	1221	Rx Date–Chemo Flag
306	1231	Rx Date–Hormone Flag
313	1241	Rx Date–BRM Flag

The table below lists changes to STORE v23 manual by the page number in STORE 2023.

NOTE:
All date data items allow blanks **EXCEPT** for the following:

1. Date of Birth
2. Date of Diagnosis
3. Date of last Contact or Death

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
43	2023 Source References	2023 Source References	The 2023 Source Reference Document is located on the NAACCR website available at https://www.naaccr.org/implementation-guidelines/
46	Overview of Coding Principles	Case Eligibility	Updated reportability on juvenile pilocytic astrocytoma 9421/1. Added: Effective January 1, 2023, low grade appendiceal mucinous neoplasms (LAMN) (8480) are reportable. LAMN is a distinctive histologic subtype of mucinous appendiceal neoplasm and can be in-situ or invasive. Please reference the AJCC Appendix Protocol Version 9 for further information.
46	Overview of Coding Principles	Case Eligibility	All Rads are still being discussed amongst standard setters. An update on coding the Date of Diagnosis will be released once decided. Registrars should follow current rules in STore to assign Date of diagnosis. CoC does not collect rads alone, a positive biopsy must confirm the diagnosis, the Date of Diagnosis is the date of the biopsy.
46	Overview of Coding Principles	Case Eligibility	Added: Lobular Carcinoma In Situ alone is not reportable to CoC. The decision not to collect LCIS was made to align STORE with the AJCC 8th Edition. Please see the AJCC 8th Edition for complete details. Please note: SEER and NPCR require reporting of LCIS. If LCIS is reportable for your state registry, follow your state registry requirements. Assign Class of Case according to the relationship between the patient and the reporting facility.
50	Overview of Coding Principles	Coding Dates	Removed sentences: If a date is entirely blank, an associated date flag is used to explain the missing date. Flags are not used for software-generated dates. The table for coding dates was updated. All reference associated with the date flags were removed, including flags, 10, 11 and 12.
60 61	Overview of Coding Principles	Relationships among Surgical Items	Added • (excluding code 1) to first paragraph • (excluding code 1) to bullet #2
63	Overview of Coding Principles	Radiation Therapy	Removed: A new phase begins when there is a change in the target volume of a body site, treatment fraction size, modality or treatment technique. Up to three phases of radiation treatment can now be documented. Added: “but modern radiotherapy allows phases to be delivered simultaneously so new terminology is needed. Each phase is meant to reflect a “delivered radiation prescription”. At the start of the radiation planning process, physicians write radiation prescriptions to treatment volumes and specify the dose per fraction (session), the number of fractions, the modality, and the planning technique. A phase simply represents the radiation prescription that has actually been delivered (as sometimes the intended prescription differs from the delivered prescription.

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<table>
<tr><th>STORE 2023 Page Number</th><th>Section or NAACCR Data Item Number</th><th>Data Item Name</th><th>Changes/Comments/Clarifications</th></tr>
<tr><td>86</td><td>240</td><td>Date of Birth</td><td>Removed:
If the date of birth cannot be determined at all, record the reason in the Date of Birth Flag [241]. The Date of Birth Flag [241] is used to explain why Date of Birth is not a known date. See Date of Birth Flag for an illustration of the relationships among these items.
Wording Added: Blank is not allowed.</td></tr>
<tr><td>88</td><td>160</td><td>Race 1</td><td>Labels were further clarified for codes 02, 03, 07, 13, 15, 21, 32, 98, and 99
<table>
<tr><th>Code</th><th>Diagnosis year 2022 and prior Label</th><th>Diagnosis 2023+ Label</th></tr>
<tr><td>02</td><td>Black</td><td>Black or African American</td></tr>
<tr><td>03</td><td>American Indian, Aleutian, or Alaska Native (includes all indigenous populations of the Western hemisphere)</td><td>American Indian or Alaska Native</td></tr>
<tr><td>07</td><td>Hawaiian</td><td>Native Hawaiian</td></tr>
<tr><td>13</td><td>Kampuchean (Cambodian)</td><td>Cambodian</td></tr>
<tr><td>15</td><td>Asian Indian or Pakistani, NOS</td><td>Asian Indian, NOS or Pakistani, NOS</td></tr>
<tr><td>21</td><td>Chamorro/Chamoru</td><td>Chamorro</td></tr>
<tr><td>32</td><td>New Guinean</td><td>Papua New Guinean</td></tr>
<tr><td>98</td><td>Other</td><td>Some other race</td></tr>
<tr><td>99</td><td>Unknown</td><td>Unknown by patient</td></tr>
</table></td></tr>
<tr><td>92</td><td>630</td><td>Primary Payer at Diagnosis</td><td>Removed:
Code 62: A 65 year old male patient is admitted for treatment and the patient admission page states the patient is covered by Medicare with additional insurance coverage from a PPO.</td></tr>
<tr><td>127</td><td>580</td><td>Date of First Contact</td><td>Removed:
The Date of First Contact Flag [581] is used to explain why Date of First Contact is not a known date. See Date of First Contact Flag for an illustration of the relationship.
Added to Allowable Values : Blank
Wording Added: Blank is Allowed</td></tr>
<tr><td>129</td><td>390</td><td>Date of Initial Diagnosis</td><td>Wording Added: Blanks are not allowed</td></tr>
</table>

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
138	490	Diagnostic Confirmation	Removed: Code 1 when the microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, or autopsy or bone marrow specimens from aspiration or biopsy. For leukemia only, code 1 when the diagnosis is based only on the complete blood count (CBC), white blood count (WBC) or peripheral blood smear. Do not use code 1 if the diagnosis was based on immunophenotyping or genetic testing using tissue, bone marrow, or blood.
141	1280	Date of Surgical Diagnostic and Staging Procedure	Removed: The RX Date DX/Stg Proc Flag [1281] is used to explain why Date of Surgical Diagnostic and Staging Procedure is not a known date. See RX Date DX/Stg Proc Flag for an illustration of the relationships among these items. Added to Allowable Values: Blank Wording Added: Blank is Allowed
151	3950	Macroscopic Evaluation of Mesorectum	Change Allowable Values from Alphanumeric, BLANK to 00, 10, 20, 30, 40, 99 or BLANK
153	832	Date of Sentinel Lymph Node Biopsy	Wording Added: Blank is Allowed
159	830	Regional Lymph Node Examined	Primary sites always coded 99. Use code 99 for a. Any case coded to primary site C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809 b. Lymphoma 00790 c. Lymphoma-CLL/SLL 00795 d. Plasma Cell Disorders (excluding 9734/3) 00822 e. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424) f. Ill-Defined/Other 99999 g. Cases with no information about positive regional lymph nodes

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
161	820	Regional Lymph Nodes Positive	Primary sites always coded 99. Use code 99 for a. Any case coded to primary site C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809 b. Lymphoma 00790 c. Lymphoma-CLL/SLL 00795 d. Plasma Cell Disorders (excluding 9734/3) 00822 e. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424) f. Ill-Defined/Other 99999 g. Cases with no information about positive regional lymph nodes
169	1112	Mets at Diagnosis-Bone	Removed Table under C and added Use code 8 when primary site is C42.0, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
171	1113	Mets at Diagnosis-Brain	Removed Table under C and added Use code 8 when primary site is C42.0, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
173	1114	Mets at Diagnosis-Distant Lymph Nodes	Removed Table under C and added Use code 8 when primary site is C420, C421, C423, C424, C770-C779 or histology is 9671, 9734, 9731 or 9761 for any primary site.
175	1115	Mets at Diagnosis-Liver	Removed Table under C and added Use code 8 when primary site is C42.0, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
177	1116	Mets at Diagnosis-Lung	Removed Table under C and added Use code 8 when primary site is C42.0, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
179	1117	Mets at Diagnosis-Other	Removed Table under C and added Use code 8 when primary site is C42.0, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
207 208	n/a	Site Specifics Data Items	Added: Item # 3956 p16 Anus No longer collected with date of diagnosis after January 1, 2023 o Estrogen Receptor Total Allred Score [3828] o Progesterone Receptor Total Allred Score [3916] Wording added: One new SSDI [3956] Two SSDIs no longer required [3828,3916]
210	1270	Date of First Course of Treatment	Wording Added: Blank is Allowed
214	1200	Date of First Surgical Procedure	Removed: The Rx Date–Surgery Flag [1201] is used to explain why Date of First Surgical Procedure is not a known date. See Rx Date–Surgery Flag for an illustration of the relationships among these items. Added to Allowable Values : Blank Wording Added: Blank is Allowed
215	3170	Date of Most Definitive Surgical Resection of the Primary Site	Added to Allowable Values : Blank Wording Added: Blank is Allowed
220 223 226 228	10104 10105 10106 10107	Rx Hosp-Surg Breast Rx Summ-Surg Breast Rx Hosp-Recon Breast Rx Summ-Recon Breast	Continue collecting data items for diagnosis year 2023+ *If these required data items are left blank for diagnosis year 2022 forward for a breast primary, edits will populate and must be corrected.*
234	1292	Scope of Regional LN Surgery	Bullet #1 added: (excluding code 1) Removed from Code 9: o Lymphoma (excluding CLL/SLL, Schema ID 00790) o Lymphoma (CLL/SLL, Schema ID 00795) o Plasmacytoma, bone (9731/3) Removed: Added to Code 9: C589 Plasma Cell Disorders (excluding histology 9734/3 Schema ID 00822 (9671, 9731, 9761)

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
240	672	Scope of Reginal LN Surgery at this Facility	Bullet #1 added: (excluding code 1) Removed from Code 9: o Lymphoma (excluding CLL/SLL, Schema ID 00790) o Lymphoma (CLL/SLL, Schema ID 00795) o Plasmacytoma, bone (9731/3) Added to Code 9: C589 Removed: Plasma Cell Disorders (excluding histology 9734/3 Schema ID 00822 (9671, 9731, 9761)
246	1294	Surgical Procedure/Other Site	Removed from Bullet #6 Second bullet point: When the involved contralateral breast is removed for a single primary breast cancer. Note: See also notes and codes in Appendix A, Breast surgery codes
248	674	Surgical Procedure/Other Site at this Facility	Removed from Bullet #6 Second bullet point: When the involved contralateral breast is removed for a single primary breast cancer. Note: See also notes and codes in Appendix A, Breast surgery codes
250	3180	Date of Surgical Discharge	Added to Allowable Values : Blank Wording Added: Blank is Allowed
256	1210	Date Radiation Started	Repetitive statement identified Bullet #1 and #3. Bullet #1 removed: Date radiation started will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the date radiation started may require assistance from the radiation oncologist for consistent coding.
259	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Removed the Bullet #2 Phase II III of radiation treatment also commonly includes draining lymph node regions that are associated with the primary tumor or tumor bed. The draining lymph nodes are recorded in the Phase II Radiation to Draining Lymph Nodes [1515,1525]. Removed from Bullet #3 If one or more discrete volumes are treated and one of those includes the primary site, record the Phase II III treatment to the primary site in this data item. Added to Bullet #3 Draining lymph nodes may also be concurrently targeted most commonly during the first phase. Added to Bullet #4 When the primary volume is a lymph node regions, draining lymph nodes are not targeted. Record code 88 in the Phase I-II-III Radiation to Draining Lymph Nodes [1505, 1515, 1525] when primary volume is a lymph node region.

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
260	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 02 Thoracic lymph node regions and removed mantle or mini mantle for lymphoma
261	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 03 Neck and thoracic lymph node regions and removed mantle or mini mantle for lymphoma
261	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 04 Breast/ Chest wall lymph node regions: Radiation is directed primarily to one or some combination of axillary, supraclavicular, and/or internal mammary lymph node regions WITHOUT concurrent treatment of the breast or chest wall.
261	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 05 Abdominal lymph nodes: Treatment is directed to one or some combination of the lymph nodes of the abdomen, including retro-crural, peri-gastric, peri-hepatic, portocaval and para-aortic node regions.
261	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 06 Pelvic lymph nodes: Treatment is directed to one or some combination of the lymph nodes of the pelvis
261	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 21 Oral Cavity: Treatment is directed at all or a portion of the oral cavity, which may include the lips, gingiva, alveolus, buccal mucosa, retromolar trigone, hard palate, floor of mouth and/or oral tongue.
263	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 64 Prostate -whole: Treatment is directed at all of the prostate with/without all or part of the seminal vesicles. Use this code even if seminal vesicles are not explicitly targeted.
263	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 86 Pelvis (NOS, non-visceral): For example, this code should be used for sarcomas arising from non-visceral soft tissues of the pelvis.
264	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 91 Soft Tissue: This category should be used to code primary or metastatic soft tissue malignancies when localizing to a region of the body (e.g. pelvis) is not possible or when the case does not fitting fit other categories.
264	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Clarification added to code 98 Other: For example, code 98 when the radioisotope I-131 is used in the treatment of thyroid cancer.
267	1506 1516 1526	Phase I-II-III Radiation Treatment Modality	Removed for Bullet #1 For the first course of treatment.
270	1502 1512 1522	Phase I-II-III External Beam Radiation Planning Technique	Removed Bullet #6: When code 98 is recorded, document the planning technique in the appropriate text data item.

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
276	1503 1513 1523	Phase I-II-III Number of Fractions	Removed Example: Code 025 A patient with breast carcinoma had treatment sessions in which treatment was delivered to the chest wall and encompassing the ipsilateral supraclavicular region for a total of three fraction portals. Twenty-five treatment sessions were given. Record 25 fractions as 025.
277	1507 1517 1527	Phase I-II-III Total Dose	Rationale Removed word : prescribed and added wording of: maximum delivered
282	1533	Radiation Course Total Dose	Added wording to bullet #3 major type (External Beam, Brachytherapy, or Radioisotopes
284	1380	Radiation/Surgery Sequence	Clarified Example #5
286	3220	Date Radiation Ended	Removed Bullet #2 (duplicate instruction): The date when treatment ended will typically be found in the radiation oncologist's summary letter for the first course of treatment.
292	1220	Date Chemotherapy Started	Removed: The RX Date–Chemo Flag [1221] is used to explain why Date Chemotherapy Started is not a known date. See RX Date–Chemo Flag for an illustration of the relationships among these items.
299	1230	Date Hormone Therapy Started	Removed: The RX Date–Hormone Flag [1231] is used to explain why Date Hormone Therapy Started is not a known date. See RX Date–Hormone Flag for an illustration of the relationships among these items.
305	1240	Date Immunotherapy Started	The RX Date–BRM Flag [1241] is used to explain why Date Immunotherapy Started is not a known date. See RX Date–BRM Flag for an illustration of the relationships among these items.
324	1860	Date of First Recurrence	Added to Allowable Values : Blank Wording Added: Blank is Allowed
328	1772	Date of Last Cancer (tumor) Status	Wording Added: Blank is Allowed
330	1750	Date of Last Contact or Death	Wording Added: Blanks not Allowed

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STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
344	Appendix A	Current Site-Specific Surgery Codes for 2023+	Codes changed from two-digit numeric code to alphanumeric beginning with letter followed by four digits All 2023 site specific surgery codes begin with a letter A except for skin which start with a letter B to indicates a significate change in coding. For diagnosis years 2003 – 2022, Surgical Procedure of Primary Site at this Facility [NAACCR data item #670] and Surgical Procedure of Primary Site [NAACCR data item #1290] should be coded utilizing the STORE manual based on the year of diagnosis. **NOTE TO VENDORS/RESEARCHERS:** RX Hosp--Surg Prim Site [670] was changed to RX Hosp—Surg Prim Site 03-2022 [670] RX Summ--Surg Prim Site [1290] was changed to RX Summ--Surg Prim Site 03-2022 [1290]
408	Appendix M	CTR Guide to Coding Melanoma Skin	Added as a reference for registrars
423	Appendix R	CTR Guide to Coding Radiation Therapy Treatment in the STORE	Added as a reference for registrars
Multiple	All	Column #	With v21 and the change to XML (for the NAACCR layout), the column number is no longer required therefore the Column # has been removed from the data item tables.

Changes 9/8/2022

STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
207	n/a	Site Specifics Data Items	Added SSDI data items: [3960] Histologic Subtype -appendix [3961] Clinical Margin Width - melanoma
257	1550	Location of Radiation Treatment	Added wording for clarification to 3rd bullet: “and usually includes draining lymph nodes”
261	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Wording added to code 05: If field or target is described as hockey stick, dog leg, and inverted Y then use code 07.

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Changes 12/15/2022

STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
169 171 173 175 177 179	1112 1113 1114 1115 1116 1117	Mets at Diagnosis-Bone Mets at Diagnosis-Brain Mets at Diagnosis-Distant LNs Mets at Diagnosis-Liver Mets at Diagnosis-Lung Mets at Diagnosis-Other	Added: Use code 0 when: • Tumor is a borderline or benign brain or CNS tumor • Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2) Removed: ○ Use code 8 (Not applicable) for benign/borderline brain and CNS tumors
260 261 262 263	1504 1514 1524	Phase I-II-III Radiation Primary Treatment Volume	Added for clarity : Code 13: Use code 13 when primary tumor volume is brain stem. Code 29 Head and neck (NOS): Use code 29 when the Primary Tumor Volume is Paraganglioma of the jugular foramen in the middle ear. Code 71 Uterus or Cervix: Added parametrium. Code 93 Whole Body Radiaton: Added For example as with total body irradiation (TBI).
47	Overview of Coding Principles	Case Eligibility	Under Analytic Cases: Removed Joint Commission accreditation and replaced with Federal Employer Tax ID (FEIN)

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Change 12/19/2023

STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
48	Overview of Coding Principles	Case Eligibility	Updated Analytic Cases: Added: Any program listed in your FEIN is included within your accreditation and therefore reportable to NCDB.
51	Overview of Coding Principles	Cancer Identification	Added clin to Grade Post Therapy **Clin** (yc) [1068]
372	Appendix A	Breast Surgical Codes	Corrected note under A410: If the contralateral breast reveals a second primary, each breast is abstracted separately. The surgical procedure is coded **A**41**0** for the first primary.

Changes 1/23/2024

STORE 2023 Page Number	Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
421	Appendix M	Case example #8	Correction to the coding for the SSDI Clinical Margin [3961] to XX.9
422	Appendix M	Summary of Coding Rules	Removed: • If multiple procedures are performed, record the largest peripheral (radial) margin Added: this margin is documented by the surgeon in the CoC operative note as a single measurement: • If the margin documentation is missing, the SSDI Clinical Margin should be coded as XX.9, do not use other measurements • Do not use any clinical margin measurements (e.g., 3.1 cm x 5.2 cm) for this data item • If multiple WLE procedures are performed, record the documented margin from the op note with the largest margin

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Changes 4/11/2024

Section or NAACCR Data Item Number	Data Item Name	Changes/Comments/Clarifications
Appendix M	Case Studies for Coding Melanoma	Removed from STORE 2023

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2023 Source References

The 2023 Source Reference Document is located on the NAACCR website available at https://www.naaccr.org/implementation-guidelines/

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Section One: Case Eligibility and Overview of Coding Principles

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Case Eligibility

The American College of Surgeons Commission on Cancer (CoC) requires registries in accredited programs to accession, abstract, and conduct follow-up activities for required tumors diagnosed and/or initially treated at the abstracting facility. The tumors must meet the criteria for analytic cases (*Class of Case* 00-22), and pathologically and clinically diagnosed inpatients and outpatients must be included.

Tumors Required by the CoC to be Accessioned, Abstracted, Followed and Submitted to the National Cancer Database (NCDB)

Malignancies with an ICD-O-3 behavior code of 2 or 3 are required for all sites.

EXCEPTION 1: Pilocytic astrocytoma/juvenile pilocytic astrocytoma:
For cases diagnosed prior to 1/1/2023, these neoplasms are reportable in North American as malignant 9421/3 for all CNS sites with the exception of the optic nerve:

- WHO Classification Tumors of the Central Nervous System and IARC designate pilocytic astrocytoma as a synonym for optic glioma
- When the primary site is optic nerve and the diagnosis is either optic glioma or pilocytic astrocytoma, the behavior is non-malignant and coded 9421/1
- Beginning with cases diagnosed 1/1/2023 forward, pilocytic astrocytoma/juvenile pilocytic astrocytoma are to be reported as 9421/1 for all CNS sites.

EXCEPTION 2: Effective in 2015, code 8240/1 for Carcinoid tumor, NOS, of appendix (C18.1) becomes obsolete. Carcinoid tumors of the appendix (C18.1) must be coded to 8240/3, effective with 2015. This is *required* and must be coded with a behavior 3. Prior appendix primaries coded 8240/1 are converted to 8240/3 by the implementation conversions for 2015.

EXCEPTION 3: Malignant primary skin cancers (C44._) with histology codes 8000–8110 *are not required* by the CoC. Skin primaries with those histologies diagnosed prior to January 1, 2003, were required to be accessioned and followed if the AJCC stage group at diagnosis was II, III, or IV. Those cases should remain in the registry data and continue to be followed.

EXCEPTION 4: Carcinoma in situ of the cervix (CIS), intraepithelial neoplasia grade III (8077/2) of the cervix (CIN III), prostate (PIN III), vulva (VIN III), vagina (VAIN III), anus (AIN III), larynx (LIN III), and squamous intraepithelial neoplasia excluding cervix (SIN III) *are not required* by CoC. SIN III is a specific instance of intraepithelial neoplasia, grade III which is listed in ICD-O-3 as /2.

EXCEPTION 5: Effective diagnosis January 1, 2022 these codes and histologies *are not required* by the CoC: 8210/2 Adenomatous polyp, high grade dysplasia (C160 – C166, C168-C169, C170-C173, C178-C179); 8211/2 Tubular adenoma, high grade; 8261/2 Villous adenoma, high grade; 8263/2 Tubulovillous adenoma, high grade; 8483/2 Adenocarcinoma in situ, HPV-associated (C530-C531, C538-C539); 8484/2 Adenocarcinoma in situ, HPV-independent, NOS C530-C531, C538-C539); 8509/1 Uterine tumor resembling ovarian sex cord tumor; 8976/1, Osteoblastoma; 9261/1 Osteofibrous dysplasia-like adamantinoma (See Appendix B) .

Nonmalignant primary intracranial and central nervous system tumors diagnosed on or after January 1, 2004, with an ICD-O-3* behavior code of 0 or 1 are required for the following sites: meninges (C70._), brain (C71._), spinal cord, cranial nerves, and other parts of central nervous system (C72._), pituitary gland (C75.1), craniopharyngeal duct (C75.2) and pineal gland (C75.3).

All gastro-intestinal stromal tumors (GIST) and thymomas with a Behavior Code of 3 are reportable effective January 1, 2021, Gastro-intestinal stromal tumors (GIST) and thymomas that are non-

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malignant must be abstracted and assigned a Behavior Code of 3 if they are noted to have multiple foci, metastasis or positive lymph nodes.

Effective **January 1, 2023**, low grade appendiceal mucinous neoplasms (LAMN) (8480) are reportable. LAMN is a distinctive histologic subtype of mucinous appendiceal neoplasm and can be in-situ or invasive. Please reference the AJCC Appendix Protocol Version 9 for further information.

PI Rads, BI Rads, LI Rads alone are not reportable for CoC. PI Rads, BI Rads, LI Rads confirmed with biopsy or physician statement are reportable to CoC. Date of diagnosis is the date of the positive biopsy.

Lobular Carcinoma In Situ alone is not reportable to CoC. The decision not to collect LCIS was made to align STORE with the AJCC 8th Edition. Please see the AJCC 8th Edition for complete details.
Please note: SEER and NPCR require reporting of LCIS. If LCIS is reportable for your state registry, follow your state registry requirements. Assign Class of Case according to the relationship between the patient and the reporting facility.

Reportable-by-Agreement Cases

Registries may be requested to collect information about tumors that are not required to be abstracted by the CoC for accredited programs. Ordinarily, such requests will come from the facility's cancer committee or the central registry. The CoC does not require that reportable-by-agreement cases be accessioned, abstracted, followed, or submitted, but the requestor may identify the extent of information needed.

Examples of Reportable-by-Agreement Cases:

- The cancer committee requests abstracting and follow-up of Class of Case 30 cases.
- The state central registry requests abstracting and reporting of pathology-only cases.

Ambiguous Terms at Diagnosis

As part of the registry casefinding activities, all diagnostic reports should be reviewed to confirm whether a case is required. If the terminology is ambiguous, use the following guidelines to determine whether a particular case should be included. Words or phrases that appear to be synonyms of these terms do not constitute a diagnosis. For example, "likely" alone does not constitute a diagnosis.
Words in parenthesis are optional.

Ambiguous Terms that Constitute a Diagnosis	
Apparent(ly)	Presumed
Appears	Probable
Comparable with	Suspect(ed)
Compatible with	Suspicious (for)
Consistent with	Tumor* (beginning with 2004 diagnoses and only for C70.0–C72.9, C75.1–75.3)
Favors	Typical of
Malignant appearing	
Most likely	
Neoplasm* (beginning with 2004 diagnoses and only for C70.0–C72.9, C75.1–75.3)	

*Additional terms for nonmalignant primary intracranial and central nervous system tumors only

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EXCEPTION: If cytology is identified only with an ambiguous term, do not interpret it as a diagnosis of cancer.

- Abstract the case only if a positive biopsy or a physician's clinical impression of cancer supports the cytology findings.

Examples of Diagnostic Terms:

- The inpatient discharge summary documents a chest x-ray *consistent with carcinoma* of the right upper lobe. The patient refused further work-up or treatment. *Consistent with carcinoma* is indicative of cancer.

- The pathology report states *suspicious for malignancy*. *Suspicious for malignancy* is indicative of cancer.

Ambiguous Terms That *Do Not* Constitute a Diagnosis *without additional information*	
Cannot be ruled out	Questionable
Equivocal	Rule out
Possible	Suggests
Potentially malignant	Worrisome

Examples of Nondiagnostic Terms:

- The inpatient discharge summary documents a chest x-ray *consistent with neoplasm* of the right upper lobe. The patient refused further work-up or treatment. *Consistent with neoplasm* is not indicative of cancer. While "consistent with" can indicate involvement, "neoplasm" without specification of malignancy is not diagnostic except for non-malignant primary intracranial and central nervous system tumors.

- Final diagnosis is reported as *possible carcinoma* of the breast. *Possible* is not a diagnostic term for cancer.

Genetic findings in the absence of pathologic or clinical evidence of reportable disease are indicative of risk only and do not constitute a diagnosis.

Ambiguous Terminology Lists: References of Last Resort

This section clarifies the use of Ambiguous Terminology as listed in STORE 2018 for case reportability in Commission on Cancer (CoC)-accredited programs. When abstracting, registrars are to use the "Ambiguous Terms at Diagnosis" list with respect to case reportability, however, the list needs to be used correctly.

The first and foremost resource for the registrar for questionable cases is the physician who diagnosed and/or staged the tumor. The ideal way to approach abstracting situations when the medical record is not clear is to follow up with the physician. If the physician is not available, the medical record, and any other pertinent reports (e.g., pathology, etc.) should be read closely for the required information. The purpose of the Ambiguous Terminology list is so that in the case where wording in the patient record is ambiguous with respect to reportability or tumor spread and no further information is available from any resource, registrars will make consistent decisions. When there is a clear statement of malignancy or tumor spread (i.e., the registrar can determine malignancy or tumor spread from the resources available), they should not refer to the Ambiguous Terminology lists. Registrars should only rely on these lists when the situation is not clear and the case cannot be discussed with the appropriate physician/pathologist.

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The CoC recognizes that not every registrar has access to the physician who diagnosed and/or staged the tumor, as a result, the Ambiguous Terminology list delineated above must be used in CoC-accredited programs as "references of last resort."

Class of Case

All accessioned cases are assigned a *Class of Case* [610] based on the nature of involvement of the facility in the care of the patient.

Analytic Cases

Cases diagnosed and/or administered any of the first course of treatment at the accessioning facility are analytic (*Class of Case* 00-22). A network clinic or outpatient center belonging to the facility is part of the facility. The CoC is aligned with the Federal Employer Tax ID (FEIN) for your hospital/facility. Any services or facility covered under your Federal Employer Tax ID (FEIN) would then be covered under your CoC accreditation and you would be responsible for reporting the associated data that is reportable as defined in the STORE. Any program listed in your FEIN is included within your accreditation and therefore reportable to NCDB.

Analytic cases *Class of Case* 10-22 are included in treatment and survival analysis.
Analytic cases *Class of Case* 00 are not required to be staged or followed, regardless of the year of diagnosis. *Class of Case* 00 is reserved for patients who are originally diagnosed by the reporting facility and receive all of their treatment elsewhere or a decision not to treat is made elsewhere. If the patient receives no treatment, either because the patient refuses recommended treatment or a decision is made not to treat, the *Class of Case* is 14. If there is no information about whether or where the patient was treated, the *Class of Case* is *10*.

Nonanalytic Cases

Nonanalytic cases (*Class of Case* 30-99) are not usually included in routine treatment or survival statistics. The CoC does not require registries in accredited programs to accession, abstract, or follow these cases, but the program or central registry may require them.

Modifications to Class of Case in 2010

Class of Case was redefined for use beginning in 2010. The codes in this manual allow differentiation between analytic and nonanalytic cases and make additional distinctions. For analytic cases, the codes distinguish cases diagnosed in a staff physician's office from those diagnosed initially by the facility and patients fully treated at the facility from those partially treated by the reporting facility. Nonanalytic cases are distinguished by whether the patient received care at the facility or did not personally appear there. Patients who received care from the facility are distinguished by the reasons a case may not be analytic: type of cancer that is not required by CoC to be abstracted, consultation, in-transit care, and care for recurrent or persistent disease. Patients who did not receive care from the reporting facility are distinguished by care given in one or more staff physician offices, care given through an agency whose cancer cases are abstracted by the reporting facility but are not part of it, pathology only cases, and death certificate only cases. Treatment in staff physician offices is now coded "treated elsewhere" because the hospital has no more responsibility over this treatment than it would if the patient were treated in another hospital.

Date of First Contact

The *Date of First Contact* [580] is the date of the facility's first inpatient or outpatient contact with the patient for diagnosis or treatment of the cancer. For analytic cases, the *Date of First Contact* is the date the patient qualifies as an analytic case *Class of Case* 00-22. Usually, the *Date of First Contact* is the date of admission for diagnosis or for treatment. If the patient was admitted for noncancer-related reasons, the *Date of First Contact* is the date the cancer was first suspected during the hospitalization. If the

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patient's diagnosis or treatment is as an outpatient of the facility, the *Date of First Contact* is the date the patient first appeared at the facility for that purpose.

If the patient was initially diagnosed at the facility and went elsewhere for treatment (*Class of Case* 00), but then returned for treatment that was initially expected to occur elsewhere, the *Class of Case* is

updated to 13 or 14 but the *Date of First Contact* is not changed because it still represents the date the patient became analytic. If the *Class of Case* changes from nonanalytic (for example, consult only, *Class of Case* 30) to analytic (for example, part of first course treatment administered at the facility, *Class of Case* 21), the *Date of First Contact* is updated to the date the case became analytic (the date the patient was admitted for treatment).

When a pathology specimen is collected off site and submitted to the facility to be read (and the specimen is positive for cancer), the case is not required by the Commission on Cancer to be abstracted unless the patient receives first course treatment from the facility.

- If the patient subsequently receives first course treatment at the facility, the case is analytic and must be abstracted and followed. The *Date of First Contact* is the date the patient reported to the facility for the treatment; and the *Class of Case* [610] is 11 or 12 if the diagnosing physician is a staff physician at the reporting facility or 20 or 21 for any other physician. A staff physician is one who is employed by the facility, is under contract with it, or has routine admitting privileges there.

When a staff physician performs a biopsy off site, and the specimen is not submitted to the facility to be read, the case is not required to be abstracted unless the patient receives some first course care at the facility.

- If the patient subsequently receives first course treatment at the facility, the case is analytic and must be abstracted and followed. The *Date of First Contact* is the date the patient reported to the facility for the treatment and the *Class of Case* is 11 or 12.

For nonanalytic cases, the *Date of First Contact* is the date the patient's nonanalytic status begins with respect to the cancer. For example, for a patient diagnosed and treated entirely in a staff physician's office (*Class of Case* 40), the date the physician initially diagnosed the cancer is the *Date of First Contact*. For autopsy only cases, the *Date of First Contact* is the date of death.

If the state or regional registry requires pathology-only cases to be abstracted and reported, the *Date of First Contact* is the date the specimen was collected, and the *Class of Case* is 43. If a patient whose tumor was originally abstracted as a *Class of Case* 43 receives first course treatment subsequently as an inpatient or outpatient at the facility, update both *Class of Case* and *Date of First Contact* to reflect the patient's first in-person contact with the facility.

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Overview of Coding Principles

Unique Patient Identifier Codes

Accession Number [550] and *Sequence Number* [560] uniquely identify the patient and the tumor. Each cancer patient in a registry is assigned a unique accession number, and each primary diagnosed for that patient is assigned a sequence number. The accession number *never* changes.

- Accession numbers are never reassigned, even if a patient is removed from the registry.

- Once cases are submitted to RCRS or the NCDB, accession numbers are not to be changed for any reason. Even if there is a clerical error, or if cases are found in an out-of-order fashion when casefinding (i.e., find an old case after abstraction of a newer one), the accession number serves as a permanent identifier for a patient at your facility. NCDB does not accommodate any requests for accession number changes for cases already submitted.

- The sequence number is the sequence of all tumors over the lifetime of a patient and is counted throughout the patient's lifetime.

- Only tumors that would have been reportable at the time of diagnosis for CoC or by agreement with a central registry or the program's cancer committee are required to be counted when assigning sequence numbers. A registry may contain a single abstract for a patient with a sequence number of 02, because the first tumor was not cared for by the program or was not otherwise required to be accessioned. Because of differences in requirements, it is possible for two registries with dissimilar eligibility requirements (for example, a facility registry and a state central registry) to assign different sequence numbers to the same tumor, even though the sequence number codes and instructions applied are the same.

National Provider Identifier

The National Provider Identifier (NPI) is a unique identification number for health care providers that was implemented in 2007 and 2008 by the Centers for Medicare and Medicaid Services (CMS) as part of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). For billing purposes, large practices and large group providers were required to use NPI codes by May 2007; small health plans were required to use NPI codes by May 2008. Individual item descriptions in Section Two of this manual should be consulted for specific coding instructions.

The NPI data items are:

NPI–Archive FIN [3105]
NPI-Institution Referred From [2415]
NPI–Institution Referred To [2425]
NPI–Physician #3 [2495]
NPI–Physician #4 [2505]
NPI–Primary Surgeon [2485]
NPI–Reporting Facility [545

Coding Dates

Beginning in 2010, the way dates are transmitted between facility registries and central registries or the National Cancer Database (NCDB) was changed to improve the interoperability or communication of cancer registry data with other electronic record systems. Registry software may display dates in the traditional manner or in the interoperable format. Traditional dates are displayed in MMDDCCYY form, with 99 representing unknown day or month portions, and 99999999 representing a completely unknown

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date. In the traditional form, some dates also permit 88888888 or 00000000 for special meaning. Interoperable dates are displayed in CCYYMMDD form, with the unknown portions of the date filled with blank spaces. The following table illustrates the relationship among these items for *Date of Most Definitive Surgical Resection of the Primary Site*, where *each lower case 'b' represents a blank space*.

Description	***Traditional Date* of Most Definitive Surgical Resection of the Primary Site**	***Interoperable Date* of Most Definitive Surgical Resection of the Primary Site**
	Date entered in MMDDCCYY sequence; unknown portions represented by 99 or 9999	Date entered in CCYYMMDD sequence, leaving unknown portions blank (spaces) indicated as 'b'; omit the date if the date is completely unknown or not applicable.
Full date known	MMDDCCYY (example: 02182007)	CCYYMMDD (example: 20070218)
Month and year known	MM99CCYY (example: 02992007)	CCYYMMbb (example: 200702bb)
Year only known	9999CCYY (example: 99992007)	CCYYbbbb (example: 2007bbbb)

Cancer Identification

The following instructions apply to *Primary Site* [400], *Laterality* [410], *Histology* [522], *Behavior Code* [523] and *Grade Clinical* [3843], *Grade Pathological* [3844], Grade Post Therapy Clin (yc) [1068] and *Grade Post Therapy* Path (yp) [3845].

Primary Site

The instructions for coding primary site are found in the "Topography" section of the ICD-O-3 "Coding Guidelines for Topography and Morphology" (ICD-O-3 pp. 23–26). The following guidelines should be followed for consistent analysis of primary sites for particular histologies.

Occult Cervical Lymph Node

Beginning with cases diagnosed 1/1/2018 and later, for a head and neck primary lymph node involvement with no head and neck tumor found or specified by a physician (i.e., Occult Head and Neck Lymph Node), the primary site will be coded:

- C76.0 if the neck node has not been tested or is negative for both HPV and EBV. The AJCC Cervical Lymph Nodes and Unknown Primary Tumor of the Head and Neck will be used.
- C10.9 if the neck node is p16 positive indicating human papillomavirus (HPV). The AJCC HPV-Mediated (p16+) Oropharyngeal Cancer will be used.
- C11.9 if the neck node is EBER positive, or both EBER and p16 positive, indicating Epstein Barr Virus (EBV). The AJCC Nasopharynx will be used.

Please refer to the SSDI Manual schema discriminators for further information and follow the instructions provided within the SSDI Schema Discriminator to assign the final primary site.

Cutaneous Carcinoma of the Head and Neck

Beginning with cases diagnosed 1/1/2018 and later, for skin cancers overlapping sites in the head and

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neck ONLY, assign the primary site code for the site where the bulk of the tumor is or where the epicenter is. These cases will be staged with AJCC Cutaneous Carcinoma of the Head and Neck. Do not use code C44.8 Overlapping lesion of skin. Cases coded to C44.8 will represent skin lesions overlapping between head and neck sites AND/OR skin in other parts of the body. These cases will not be staged with AJCC 8th Edition.

Hematopoietic and Lymphoid Cancers

Beginning with cases diagnosed in 2010, the Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual is to be used for coding primary site and histology of hematopoietic and lymphoid tumors (M-9590-9993) and to determine whether multiple conditions represent one or more tumors to be abstracted. *Appendix A* in FORDS 2016 has the former table for use for tumors diagnosed prior to January 1, 2010, for determining unique or same hematopoietic tumors.

Kaposi Sarcoma

- Code Kaposi sarcoma to the site in which it arises.

- Code to Skin, NOS (C44.9) if Kaposi sarcoma arises simultaneously in the skin and another site or the primary site is not identified.

Melanoma

- Code to Skin, NOS (C44.9) if a patient is diagnosed with metastatic melanoma and the primary site is not identified.

Specific Tissues with Ill-Defined Sites

- If any of the following histologies appears only with an ill-defined site description (e.g., “abdominal” or “arm”), code it to the tissue in which such tumors arise rather than the ill-defined region (C76._) of the body, which contains multiple tissues. Use the alphabetic index in **ICD-O-3** to assign the most specific site if only a general location is specified in the record.

Histology	Description	Code to This Site
8720–8790	Melanoma	C44._, Skin
8800–8811, 8813–8830, 8840–8921, 9040–9044	Sarcoma except periosteal fibrosarcoma and dermatofibrosarcoma	C49._, Connective, Subcutaneous and Other Soft Tissues
8990–8991	Mesenchymoma	C49._, Connective, Subcutaneous and Other Soft Tissues
9120–9170	Blood vessel tumors, lymphatic vessel tumors	C49._, Connective, Subcutaneous and Other Soft Tissues
9580–9582	Granular cell tumor and alveolar soft part sarcoma	C49._, Connective, Subcutaneous and Other Soft Tissues
9240–9252	Mesenchymal chondrosarcoma and giant cell tumors	C40._, C41._ for Bone and Cartilage C49._, Connective, Subcutaneous and Other Soft Tissues
8940–8941	Mixed tumor, salivary gland type	C07._ for Parotid Gland C08._ for Other and Unspecified Major Salivary Glands

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Laterality

Laterality [410] must be recorded for the following paired organs as 1-5 or 9. Organs that are not paired, unless they are recorded "right" or "left" laterality, are coded 0. When the primary site is unknown (C80.9), code 0. Midline origins are coded 5. "Midline" in this context refers to the point where the "right" and "left" sides of paired organs come into direct contact and a tumor forms at that point. Most paired sites cannot develop midline tumors. For example, skin of the trunk can have a midline tumor, but the breasts cannot.

Paired Organ Sites	
ICD-O-3	**Site**
C07.9	Parotid gland
C08.0	Submandibular gland
C08.1	Sublingual gland
C09.0	Tonsillar fossa
C09.1	Tonsillar pillar
C09.8	Overlapping lesion of tonsil
C09.9	Tonsil, NOS
C30.0	Nasal cavity (excluding nasal cartilage and nasal septum)
C30.1	Middle ear
C31.0	Maxillary sinus
C31.2	Frontal sinus
C34.0	Main bronchus (excluding carina)
C34.1–C34.9	Lung
C38.4	Pleura
C40.0	Long bones of upper limb and scapula
C40.1	Short bones of upper limb
C40.2	Long bones of lower limb
C40.3	Short bones of lower limb
C41.3	Rib and clavicle (excluding sternum)
C41.4	Pelvic bones (excluding sacrum, coccyx, and symphysis pubis)
C44.1	Skin of eyelid
C44.2	Skin of external ear
C44.3	Skin of other and unspecified parts of face
C44.4	Skin of Scalp and Neck
C44.5	Skin of trunk
C44.6	Skin of upper limb and shoulder
C44.7	Skin of lower limb and hip
C47.1	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C47.2	Peripheral nerves and autonomic nervous system of lower limb and hip

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Paired Organ Sites	
ICD-O-3	**Site**
C49.1	Connective, subcutaneous, and other soft tissues of upper limb and shoulder
C49.2	Connective, subcutaneous, and other soft tissues of lower limb and hip
C50.0–C50.9	Breast
C56.9	Ovary
C57.0	Fallopian tube
C62.0–C62.9	Testis
C63.0	Epididymis
C63.1	Spermatic cord
C64.9	Kidney, NOS
C65.9	Renal pelvis
C66.9	Ureter
C69.0–C69.9	Eye and lacrimal gland
C70.0	Cerebral meninges, NOS (excluding diagnoses prior to 2004)
C71.0	Cerebrum (excluding diagnoses prior to 2004)
C71.1	Frontal lobe (excluding diagnoses prior to 2004)
C71.2	Temporal lobe (excluding diagnoses prior to 2004)
C71.3	Parietal lobe (excluding diagnoses prior to 2004)
C71.4	Occipital lobe (excluding diagnoses prior to 2004)
C72.2	Olfactory nerve (excluding diagnoses prior to 2004)
C72.3	Optic nerve (excluding diagnoses prior to 2004)
C72.4	Acoustic nerve (excluding diagnoses prior to 2004)
C72.5	Cranial nerve, NOS (excluding diagnoses prior to 2004)
C74.0–C74.9	Adrenal gland
C75.4	Carotid body

Revising the Original Diagnosis

Data are gathered from multiple sources using the most recent and complete information available. Over time, the patient's records may contain new information such as tests, scans, and consults. Change the primary site, laterality, histology, grade and stage as the information becomes more complete. If the primary site or histology is changed, it may also be necessary to revise site-specific staging and treatment codes. There is no time limit for making revisions that give better information about the original diagnosis or stage. However, if staging information is updated, it is important to adhere to the staging timeframe and criteria for the respective staging system applicable at the time of the original diagnosis. Most cases that require revision are unknown primaries.

Example 1

The institution clinically diagnoses a patient with carcinomatosis. The registry enters the case as an unknown primary (C80.9), carcinoma, NOS (8010/3), stage of disease unknown. Nine months later, a paracentesis shows serous cystadenocarcinoma. The physician says that the patient has an ovarian primary. Change the primary site to ovary (C56.9), histology to serous cystadenocarcinoma (8441/3), and diagnostic confirmation to positive cytologic study, no positive histology (code 2). If enough information

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is available that meets the AJCC time frame requirements for staging, change the stage from not applicable (88) to the appropriate staging classification, TNM categories, and stage group, or to unknown. If first course surgery was performed, the surgery codes should be reviewed. For cases diagnosed 2004-2015, update the Collaborative Stage input items and rerun the derivation program.

Example 2
A physician decides that a previously clinically diagnosed malignancy is a benign lesion. The patient is referred from a nursing home to the facility. The chest x-ray shows a cavitary lesion in the right lung. The family requests that the patient undergo no additional workup or treatment. Discharge diagnosis is "probable carcinoma of right lung." The registry abstracts a lung primary (C34.9). Two years later a chest x-ray shows an unchanged lesion. The physician documents "lung cancer ruled out." Delete the case from the database. Adjust the sequence number(s) of any other primaries the patient may have. If the deleted case is the patient's only primary, do not reuse the accession number.

Patient Address and Residency Rules

The patient's address at diagnosis is the patient's place of residence at the time of original diagnosis. It does not change if the patient moves. If the patient has more than one primary tumor, the address at diagnosis may be different for each primary.
The current address initially is the patient's residence at the time the patient was first seen at the accessioning facility for this primary. The current address is updated if the patient moves. If the patient has more than one primary tumor, the current address should be the same for each primary.
Normally a residence is the home named by the patient. Legal status and citizenship are not factors in residency decisions. Rules of residency are identical to or comparable with the rules of the Census Bureau whenever possible. The registry can resolve residency questions by using the Census Bureau's definition, "the place where he or she lives and sleeps most of the time or the place the person considers to be his or her usual home." State Vital Statistics rules may differ from Census rules. Do not record residence from the death certificate. Review each case carefully.

Rules for Persons with Ambiguous Residences

Persons with More than One Residence (summer and winter homes): Use the address the patient specifies if a usual residence is not apparent.

Persons with No Usual Residence (transients, homeless): Use the address of the place the patient was staying when the cancer was diagnosed. This location may be a shelter or the diagnosing facility.
Persons Away at School: College students are residents of the school area. Boarding school students below the college level are residents of their parents' homes.
Persons in Institutions: The Census Bureau states, "Persons under formally authorized, supervised care or custody" are residents of the institution.

This classification includes the following:

- *Incarcerated persons*
- Persons in nursing, convalescent, and rest homes
- Persons in homes, schools, hospitals, or wards for the physically disabled, mentally retarded, or mentally ill.
- *Long-term residents of other hospitals*, such as Veterans Affairs (VA) hospitals.

Persons in the Armed Forces and on Maritime Ships: Members of the armed forces are residents of the installation area. Use the stated address for military personnel and their families. Military personnel may use the installation address or the surrounding community's address. The Census Bureau has detailed residency rules for Navy personnel, Coast Guard, and maritime ships. Refer to Census Bureau publications

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for the detailed rules.

Coding Country and State

Beginning in 2013, "country" fields accompany "state" fields in addresses. The following state and country address data items are found in FORDS/STORE:

State at Diagnosis (not changed)
Addr at Diagnosis--Country (associated with State at Diagnosis)
State—Current (not changed)
Address Current – Country (associated with State—Current)
Place of Birth (discontinued, replaced by Birthplace—State and Birthplace—Country)
Birthplace—State (coded similarly to the other two "state" fields) Birthplace—Country (associated with Birthplace—State)

Appendix C has a list of all country codes and corresponding state codes. State codes for all U.S. states and possessions and all Canadian provinces are included in Appendix C. State codes for the United States and its possessions are those used by the United States Postal Service. Canadian province or territory codes are from Canada Post sources. Country codes are based on the International Standards Organization (IS) 3166-1 Country Three Character Codes. State and country codes also include some custom codes, which are included in Appendix C.

The list in Appendix C is divided into three parts.

- The first part is the preferred codes to use when sufficient detail is known to identify the U.S. state, Canadian province, or other country to assign precise codes.
- The second part consists of codes for more general regions for use when a precise code cannot be assigned (for example, "Near East"). If there is no indication at all of location in the patient record, the country is coded ZZU and the state will be ZZ.
- The third section is a list of obsolete codes that may have been assigned when the registry data were upgraded from former codes. This information is provided to assist registries in interpreting their historic data, but the obsolete codes must not be assigned for current abstracting.

In Utero Diagnosis and Treatment

Beginning in 2009, diagnosis and treatment dates for a fetus prior to birth are to be assigned the actual date of the event. In the past, those dates were set by rule to the date the baby was born. The exact date may be used for cases diagnosed prior to 2009.

Comorbidities and Complications/Secondary Diagnoses

The CoC requires that the registry record include up to 10 comorbid conditions, factors influencing the health status of the patient, and treatment complications, to be copied from the patient record. All are

secondary diagnoses. Prior to 2018, the information was recorded in the International Classification of Diseases, Ninth or Tenth Revision, Clinical Modification (ICD-9-CM or ICD-10-CM) code form, typically on the patient's discharge abstract or face sheet of the medical/billing record. Most hospitals in the United States were expected to implement use of ICD-10-CM in 2015. Separate data item series were used to record the two series. ICD-10-CM codes can have up to 7 characters, whereas ICD-9-CM codes only have 5 characters or fewer. Both the specific codes and the rules for recording them differ. The underlying meanings of the codes are similar. That is, the concepts originally described as "comorbidities and complications" are also known as "secondary diagnoses"; in this instance, the separate names are given to distinguish the separate registry data items.

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Beginning with cases diagnosed in 2018, the following data items are no longer required:
The items describing patient comorbid conditions and complications ICD-9-CM codes are:

Comorbidities and Complications #1 [3110]
Comorbidities and Complications #2 [3120]
Comorbidities and Complications #3 [3130]
Comorbidities and Complications #4 [3140]
Comorbidities and Complications #5 [3150]
Comorbidities and Complications #6 [3160]
Comorbidities and Complications #7 [3161]
Comorbidities and Complications #8 [3162]
Comorbidities and Complications #9 [3163]
Comorbidities and Complications #10 [3164]

Beginning with cases diagnosed in 2018, only the following data items are required:
The items describing patient comorbid secondary diagnoses ICD-10-CM codes are:

Secondary Diagnosis #1 [3780]
Secondary Diagnosis #2 [3782]
Secondary Diagnosis #3 [3784]
Secondary Diagnosis #4 [3786]
Secondary Diagnosis #5 [3788]
Secondary Diagnosis #6 [3790]
Secondary Diagnosis #7 [3792]
Secondary Diagnosis #8 [3794]
Secondary Diagnosis #9 [3796]
Secondary Diagnosis #10 [3798]

Three general categories of information are collected: comorbidities, complications, and factors influencing the health status of patients.

Comorbidities are preexisting medical conditions or conditions that were present at the time the patient was diagnosed with this cancer (for example, chronic conditions such as COPD, diabetes, and hypertension).

Complications are conditions that occur during the hospital stay, while the patient is being treated for the cancer (for example, postoperative urinary tract infection or pneumonia). Complications may also occur following the completion of therapy and be a cause for readmission to the hospital. Complications are identified by codes which classify environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects. Only complication codes that describe adverse effects occurring during medical care are collected in this data item. They include misadventures to patients during surgical and medical care, and drugs and medicinal and biologic substances causing adverse effects in therapeutic use.

Factors influencing the health status of patients are circumstances or problems that are not themselves a current illness or injury (for example, women receiving postmenopausal hormone replacement therapy, or a history of malignant neoplasm). Only specific codes which describe health characteristics are collected in this data item. They include prophylactic measures, personal health history, pregnancy, contraception, artificial opening and other postsurgical states, and prophylactic organ removal.

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Stage of Disease at Initial Diagnosis

AJCC Prognostic Staging

AJCC Prognostic Stage is determined at key time points in a patient's care based on criteria including the clinical examination, imaging, operative procedures, and pathologic assessment of the anatomic extent of disease – plus additional prognostic factors as required – and is used to make appropriate treatment decisions, determine prognosis, and measure end results. Use the rules in the current *AJCC Cancer Staging Manual* to assign AJCC T, N, M, required prognostic factor(s), and Stage Group values.

The following general rules apply to AJCC staging of all sites.

- Clinical staging includes any information obtained about the extent of cancer before initiation of definitive treatment (surgery, systemic or radiation therapy, active surveillance, or palliative care) or within four months after the date of diagnosis, whichever is shorter, as long as the cancer has not clearly progressed during that time frame. This stage classification is designated as cTNM.
- Pathological staging includes any information obtained about the extent of cancer through completion of definitive surgery as part of first course treatment or identified within 4 months after the date of diagnosis, whichever is longer, as long as there is no systemic or radiation therapy initiated or the cancer has not clearly progressed during that time frame. This stage classification is designated as pTNM.
- Post therapy clinical staging (post-neoadjuvant therapy staging) includes any information obtained about the extent of cancer after completion of neoadjuvant therapy and before the planned surgery, and the time frame should be such that the post neoadjuvant therapy staging occurs within a time frame that accommodates disease specific circumstances. This stage classification is designated as ycTNM. Registrars are only required to complete yc staging when the planned surgery following neoadjuvant therapy has been cancelled.
- Post therapy pathological staging (post-neoadjuvant therapy staging) includes any information obtained about the extent of cancer after completion of neoadjuvant therapy followed by surgery, and the time frame should be such that the post neoadjuvant surgery and staging occur within a time frame that accommodates disease specific circumstances. This stage classification is designated as ypTNM.
- If a patient has multiple primaries, stage each primary independently.
- If the stage group cannot be determined from the recorded categories, then record it as unknown.
- When a patient with multiple primaries develops metastases, a biopsy may distinguish the source of distant disease. Stage both primaries as having metastatic disease if the physician is unable to conclude which primary has metastasized. If, at a later time, the physician identifies which primary has metastasized, update the stage(s) as appropriate.
- If pediatric staging is used and AJCC staging is not applied, code 88 for clinical and pathological T, N, and M as well as stage group. If either clinical, pathological or post therapy staging was applied for a pediatric tumor, enter the appropriate codes and do not code 88.
- If a site/histology combination is not defined in the AJCC Manual code 88 for clinical, pathological and post therapy T, N, and M as well as stage group.
- For in situ tumors that are considered as "impossible diagnoses" in the AJCC manual code 88 for clinical and pathological T, N, and M as well as stage group.
- For additional information on AJCC's general staging rules, download Chapter 1: Principles of Cancer Staging from www.cancerstaging.org.

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First Course of Treatment

The first course of treatment includes all methods of treatment recorded in the treatment plan and administered to the patient before disease progression or recurrence. "Active surveillance" is a form of planned treatment for some patients; its use is coded in the *RX Summ–Treatment Status* [1285]. "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, the physician recommends no treatment be given or the physician recommends palliative care for pain management only. If the patient refuses all treatment, code "patient refused" (code 7 or 87) for all treatment modalities. Maintenance treatment given as part of the first course of planned care (for example, for leukemia) is first course treatment, and cases receiving that treatment are analytic.

Treatment Plan

A treatment plan describes the type(s) of therapies intended to modify, control, remove, or destroy proliferating cancer cells. The documentation confirming a treatment plan may be found in several different sources; for example, medical or clinic records, consultation reports, and outpatient records.

- All therapies specified in the physician(s) treatment plan are a part of the first course of treatment if they are actually administered to the patient and before disease progression.
- A discharge plan must be a part of the patient's record in the hospital's EHR and may contain part or all of the treatment plan.
- An established protocol or accepted management guidelines for the disease can be considered a treatment plan in the absence of other written documentation.
- If there is no treatment plan, established protocol, or management guidelines, and consultation with a physician advisor is not possible, use the principle: "initial treatment must begin within four months of the date of initial diagnosis."

Time Periods for First Course of Treatment

If first course treatment was provided, the *Date of First Course of Treatment* [1270] is the earliest of *Date of First Surgical Procedure* [1200], *Date Radiation Started* [1210], *Date Systemic Therapy Started* [3230], or *Date Other Treatment Started* [1250].

- If no treatment is given, record the date of the decision not to treat, the date of patient refusal, or the date the patient expired if the patient died before treatment could be given.
- If active surveillance ("watchful waiting") was selected, record the date of that decision.
- Additional data items further define the parameters for specific treatments and treatment modalities, as described in the following sections.
- Data item, *RX Summ–Treatment Status* [1285], implemented in 2010, summarizes whether the patient received any first course treatment, no treatment, or is being managed by active surveillance.

All Malignancies except Leukemias

The first course of treatment includes all therapy planned and administered by the physician(s) during the first diagnosis of cancer. Planned treatment may include multiple modes of therapy and may encompass intervals of a year or more. Any therapy administered after the discontinuation of first course treatment is subsequent treatment.

Leukemias

The first course of treatment includes all therapies planned and administered by the physician(s) during the first diagnosis of leukemia. Record all remission-inducing or remission-maintaining therapy as the

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first course of treatment. Treatment regimens may include multiple modes of therapy. The administration of these therapies can span a year or more. A patient may relapse after achieving a first remission. All therapy administered after the relapse is secondary or subsequent treatment.

Surgery

First course surgery items describe the most definitive type of surgical treatment the patient received from any facility, when it was performed, and its efficacy. When no surgical treatment is given, the reason is recorded. Major aspects of surgical care provided by the individual facility are also recorded so that hospital cancer programs can evaluate local patient care.
Individual item descriptions in Section Two: Instructions for Coding of this manual should be consulted for specific coding instructions. The paragraphs below describe how the surgery items fit together.

The following summary items apply to all surgical procedures performed at this facility and at other facilities:

Rx Summ – Surg 2023 [1291]
Radiation/Surgery Sequence [1380]
Scope of Regional Lymph Node Surgery [1292]
Date of Regional Lymph Node Dissection [682]
Date of Sentinel Lymph Node Biopsy (for breast and melanoma only) [832]
Sentinel Lymph Nodes Examined (for breast and melanoma only) [834]
Sentinel Lymph Nodes Positive (for breast and melanoma only) [835]
Surgical Procedure/Other Site [1294]
Surgical Margins of the Primary Site [1320]
Reason for No Surgery of Primary Site [1340]
Date of First Surgical Procedure [1200]
Date of Most Definitive Surgical Resection of the Primary Site [3170]
Date of Surgical Discharge [3180]
Readmission to the Same Hospital Within 30 Days of Surgical Discharge [3190]

The following items apply to surgical procedures performed at this facility:

Rx Hosp – Surg 2023 [671]
RX Hosp–Surg App 2010 [668]
Scope of Regional Lymph Node Surgery at This Facility [672]
Surgical Procedure/Other Site at This Facility [674]

Relationships among Surgical Items

Date of First Surgical Procedure [1200] is the date that the first Rx Summ – Surg 2023 [1291], *Scope of Regional Lymph Node Surgery* [1292] (excluding code 1), or *Surgical Procedure/Other Site* [1294] is performed as part of first course treatment.

- If surgery was the only type of first course treatment performed or was the first of multiple treatment modalities, *Date of First Surgical Procedure* [1200] is the same as *Date of First Course of Treatment* [1270]. Both dates can be used to describe lag time between diagnosis and initialization of specific aspects of treatment.

Rx Summ – Surg 2023 [1291], Scope of Regional Lymph Node Surgery [1292], and Surgical Procedure/Other Site [1294] record three distinct aspects of first course therapeutic surgical procedures that may be performed during one or multiple surgical events. If multiple primaries are treated by a single surgical event, code the appropriate surgical items separately for each primary.

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When multiple first course procedures coded under the same item are performed for a primary, the most

extensive or definitive is the last performed, and the code represents the cumulative effect of the separate procedures. Do not rely on your registry software to accumulate separate surgeries into the correct code.

- Rx Summ – Surg 2023 [1291] is a site-specific item that describes the most invasive extent of local tumor destruction or surgical resection of the primary site and of surrounding tissues or organs that are removed in continuity with the primary site.
- Scope of Regional Lymph Node Surgery [1292](excluding code 1) describes the removal, biopsy, or aspiration of sentinel nodes and other regional lymph nodes that drain the primary site and may include surgical procedures that aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose and/or stage disease as well as removal of nodes for treatment of the disease.
- Surgical Procedure/Other Site [1294] describes first course resection of distant lymph node(s) and/or regional or distant tissue or organs beyond the Surgical Procedure of the Primary Site range.

If surgery of the respective type was performed, the code that best describes the surgical procedure is recorded whether or not any cancer was found in the resected portion. Incidental removal of tissue or organs, when it is not performed as part of cancer treatment (for example, incidental removal of an appendix), does not alter code assignment.

The code ranges and corresponding descriptions for site-specific Surgical Procedure of Primary Site code are grouped according to the general nature of the procedure:

Codes A100 through A190 are site-specific descriptions of tumor-destruction procedures that do not produce a pathologic specimen.

- Codes A200 through A800 are site-specific descriptions of resection procedures.
- The special code A980 applies to specific tumors that cannot be clearly defined in terms of primary/nonprimary site. Surgical Procedure of Primary Site should be coded 98 for any tumor characterized by the specific sites and/or morphologies identified in the site-specific code instructions for Unknown and Ill-Defined Primary Sites and Hematopoietic/ Reticuloendothelial/ Immunoproliferating/ Myeloproliferative Disease. The item Surgical Procedure/Other Site is used to indicate whether surgery was performed for these tumors.

Response categories are defined in logical sequence. Within groups of codes, procedures are defined with increasing degrees of descriptive precision. Succeeding groups of codes define progressively more extensive forms of resection.

For codes A000 through A790, the descriptions of the surgical procedures are hierarchical. Last-listed responses take precedence over earlier-listed responses (regardless of the code or numeric value).

To the extent possible, codes and their definitions are the same as those previously assigned in ROADS/FORDS to accommodate analysis in registries that maintain unconverted data. As a result of added and modified codes, however, the numeric code sequence may deviate from the order in which the descriptions of the surgical procedures are listed.

Example: A rectosigmoid primary surgically treated by polypectomy with electrocautery, which is listed *after* polypectomy alone, is coded A220.

A200 Local tumor excision, NOS
A260 Polypectomy
A270 Excisional biopsy
Combination of A200 or A260–A270 WITH
A220 Electrocautery

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Scope of Regional Lymph Node Surgery [1292] distinguishes between sentinel lymph node biopsy and removal of other regional lymph nodes and distinguishes removal of regional lymph nodes during the same surgical procedure as a sentinel node biopsy from subsequent removal.

- One important use of registry data is the tracking of treatment patterns over time. In order to compare contemporary treatment to previously published treatment based on the former codes, or to data still unmodified from pre-1998 definitions, the ability to differentiate surgeries in which four or more regional lymph nodes are removed is desirable. The compromise incorporated in the *Scope of Regional Lymph Node Surgery* [1292] codes separates removal of one to three nodes (code 4) from removal of four or more nodes in the response categories (code 5). It is **very important** to note that this distinction is made to permit comparison of current surgical procedures with procedures coded in the past when the removal of fewer than four nodes was not reflected in surgery codes. The distinction between fewer than four nodes and four or more nodes removed is not intended to reflect clinical significance when applied to a particular surgical procedure.

Surgical Procedure/Other Site [1294] describes surgery performed on tissue or organs other than the primary site or regional lymph nodes. It is also used to describe whether surgery was performed for tumors having unknown or ill-defined primary sites or hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease morphologies. If any surgical treatment was performed on these cancers, *Surgical Procedure/Other Site* is coded 1.

Rx Hosp – Surg 2023 [671]*, Scope of Regional Lymph Node Surgery at This Facility* [672]*,* and *Surgical Procedure/Other Site at This Facility* [674] are identical to Rx Summ – Surg 2023 [1291]*, Scope of Regional Lymph Node Surgery* [1292]*,* and *Surgical Procedure/Other Site* [1294], respectively, except they each refer solely to surgery provided by the respective facility.

Six surgery items augment the information recorded in Rx Summ - Surg 2023 [1291]. The items *Date of Most Definitive Surgical Resection of the Primary Site* [3170]*, Surgical Margins of the Primary Site* [1320]*, Date of Surgical Discharge* [3180]*,* and *Readmission to the Same Hospital Within 30 Days of Surgical Discharge* [3190] apply to the most definitive (most invasive) first course primary site surgery performed, that is, to the event recorded under Rx Summ – Surg 2023 [1291]. When no surgical procedure of the primary site is performed, the reason is recorded in the item Reason for No Surgery of Primary Site [1340].

- *Date of Most Definitive Surgical Resection* [3170] is the date on which the specific procedure recorded in Rx Summ – Surg 2023 [1291] was performed. If only one first course surgical procedure was performed, then the date will be the same as that for *Date of First Surgical Procedure* [1200].
- *Surgical Margins of the Primary Site* [1320] records the pathologist's determination of the presence of microscopic or macroscopic involvement of cancer at the margins of resection following the surgical resection described by Rx Summ – Surg 2023 [1291].
- RX Hosp–Surg App 2010 [668] distinguishes among open surgery, laparoscopic surgery, and robotic assisted surgery when it is performed by the reporting facility. If more than one surgical procedure is performed by the facility, this item refers to the most definitive (most invasive) first course primary site surgery performed.
- *Date of Surgical Discharge* [3180] is the date the patient was discharged following the procedure recorded in Rx Summ – Surg 2023 [1291]. It is on or after the *Date of Most Definitive Surgical Resection* [3170].
- *Readmission to the Same Hospital Within 30 Days of Surgical Discharge* [3190] distinguishes a planned from an unplanned hospital admission and is used as a quality of care indicator.

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- *Reason for No Surgery of Primary Site* [1340] identifies why surgical therapy was not provided to the patient and distinguishes a physician's not recommending surgical therapy due to contraindicating conditions from a patient's refusal of a recommended treatment plan.

Radiation Therapy

The radiation items in *STORE* are clinically relevant and reflect contemporary practice. These items record new "phase" terminology, replacing the traditional terms of "regional" and "boost." The first phase (Phase I) of a radiation treatment may be commonly referred to as an initial plan and a subsequent phase (Phase II) may be referred to as a boost or cone down but modern radiotherapy allows phases to be delivered simultaneously so new terminology is needed. Each phase is meant to reflect a "delivered radiation prescription". At the start of the radiation planning process, physicians write radiation prescriptions to treatment volumes and specify the dose per fraction (session), the number of fractions, the modality, and the planning technique. A phase simply represents the radiation prescription that has actually been delivered (as sometimes the intended prescription differs from the delivered prescription.)

The following summary items apply to all radiation therapy administered at this facility and at other facilities:

Date Radiation Started [1210]
Location of Radiation Treatment [1550]
Radiation/Surgery Sequence [1380]
Date Radiation Ended [3220]
Reason for No Radiation [1430]

The following are the new phase-specific data items Phase I [1501-1507], Phase II [1511-1517], Phase III [1521-1527]:

Radiation Primary Treatment Volume
Radiation to Draining Lymph Nodes
Radiation Treatment Modality
Radiation External Beam Planning Technique
Dose per Fraction
Number of Fractions
Total Dose

Radiation Data Items Update

When the data item Phase I Radiation Treatment Modality [1506] was implemented in v18 a code indicating *radiation was given but type of radiation unknown* was not included. Currently patients that receive radiation but the modality is not known are assigned a code 99. Code 99 is also used when it is unknown if radiation is given. This makes it difficult to distinguish patients that did receive radiation from those where it is unknown if radiation was given.
Code 98 is added to the data item Phase I Radiation Treatment Modality for cases where it is known

radiation was given, but modality is unknown. Code 99 is only used when it is unknown if radiation was given. The new code and changed code may be used for all cases abstracted after the v21 implementation regardless of diagnosis year.
Please see a Commission on Cancer training document "CTR Guide to Coding Radiation Therapy Treatment in the STORE" for a wide variety of example cases and detailed discussion on how they should be coded.
The details of the radiation course can typically be found in the radiation oncologist's radiation treatment summary.

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Radiation Treatment Phase-specific Data Items

To promote consistency across the clinical and registry community, new "phase" terminology has been adopted, replacing the traditional terms of "regional" and "boost." A course of radiation is made up of one or more phases and each phase includes a target volume and a delivered prescription. At the start

of the radiation planning process, physicians write radiation prescriptions to treatment volumes and specify the dose per fraction (session), the number of fractions, the modality, and the planning technique. A phase represents the radiation prescription that has actually been delivered as sometimes the intended prescription differs from the delivered prescription. The first phase (Phase I) of a radiation treatment may be referred to as an initial plan and a subsequent phase (Phase II) may be referred to as a boost or cone down. A. Up to three phases of radiation treatment can now be documented.

Note that phases can be delivered sequentially or simultaneously. In sequential phases, a new phase begins when there is a change in the anatomic target volume of a body site, treatment fraction size, modality or technique.

When phases are delivered simultaneously, this is sometimes referred to as "dose painting" or "simultaneous integrated boost (SIB)". If multiple phases start on the same date, then summarize in order from highest 'Total Phase Dose' to lowest 'Total Phase Dose'. If multiple phases start on the same date and have the same Total Phase Dose, then any order is acceptable.

Typically, in each phase, the primary tumor or tumor bed is treated. However, radiation treatment also commonly includes draining lymph node regions that are associated with the primary tumor or tumor bed. Because of this, the historical *Radiation Treatment Volume* [1540] has been divided into the phase-specific data items of *Radiation Primary Treatment Volume* and *Radiation to Draining Lymph Nodes*.

Historically, the previously named *Regional Treatment Modality* [1570] utilized codes that were not mutually exclusive. Rather, it included codes describing a mix of modalities, treatment planning techniques, and delivery techniques that are commonly utilized by radiation oncologists. The implementation of separate phase-specific data items for the recording of radiation modality (Radiation Treatment Modality) and radiation treatment planning techniques (Radiation External Beam Planning Technique) will clarify this information using mutually exclusive categories.

Relationships among Radiation Items

Date Radiation Started [1210] is the date that the first radiation therapy was delivered to the patient as part of all of the first course of therapy. This item in combination with *Date Radiation Ended* [3220] allows the duration of treatment to be calculated.

- If radiation was the only type of first course treatment performed or was the first of multiple treatment modalities, *Date Radiation Started* [1210] is the same as *Date of First Course of Treatment* [1270]. Both dates can be used to describe lag time between diagnosis and initialization of specific aspects of treatment.

Location of Radiation Treatment [1550] can be used to assess where therapy was provided. This item allows for the distinction between summary treatment and treatment given at the accessioning facility. Codes are provided that allow the description of where regional and boost dose therapy were provided, whether all the therapy was provided at the accessioning facility or if all or some of the radiation therapy was referred out to another treatment location.

The targeted anatomic region is described by *Phase I, II and III Radiation Primary Treatment Volume* [1504, 1514 and 1524, respectively]. The treatment volume may be the same as the primary site of disease; however, the available code values provide descriptions of anatomic regions that may extend beyond the

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primary site of disease and may be used to describe the treatment of metastatic disease. If two distinct volumes are radiated, and one of those includes the primary site, record the radiation involving the primary site in all radiation fields.

In addition to knowing the duration of treatment and the modalities and doses involved, it is critical to know the number of treatments to be able to gauge the intensity of the dose delivered to the patient. The data item *Number of Phases of Radiation Treatment to This Volume* [1532] describes the total number of therapeutic treatments (phases) delivered to the anatomic volume coded in *Phase I, II and III Radiation Primary Treatment Volume* [1504, 1514, and 1524, respectively].

Two items augment the information recorded in the radiation modality, dose, volume, and number of treatment items.

- *Radiation/Surgery Sequence* [1380] identifies those instances where radiation therapy and the surgical management of the patient are not discrete and overlap with respect to time. Radiation therapy can precede the surgical resection of a tumor and then be continued after the patient's surgery, or radiation can be administered intraoperatively.

- *Reason for No Radiation* [1430] identifies why radiation therapy was not provided to the patient and distinguishes a physician's not recommending this therapy due to contraindicating conditions from a patient's refusal of a recommended treatment plan.

Systemic Therapy

Systemic therapy encompasses the treatment modalities captured by the items chemotherapy, hormone therapy, and immunotherapy. The systemic therapy items in *FORDS*/*STORE* separate the administration of systemic agents or drugs from medical procedures which affect the hormonal or immunologic balance of the patient.
The following summary items apply to all systemic therapy administered at this facility and at other facilities:

Date Systemic Therapy Started [3230]
Date Chemotherapy Started [1220]
Date Hormone Therapy Started [1230]
Date Immunotherapy Started [1240]
Systemic/Surgery Sequence [1639]
Chemotherapy [1390]
Hormone Therapy [1400]
Immunotherapy [1410]
Hematologic Transplant and Endocrine Procedures [3250]

The following items describe systemic therapy performed at this facility:
Chemotherapy at This Facility [700]
Hormone Therapy at This Facility [710]
Immunotherapy at This Facility [720]

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Clarification of Systemic Therapy Terms	
Term	**Definition**
Chemotherapy	Cancer therapy that achieves its antitumor effect through the use of antineoplastic drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis.
Hormone therapy	Cancer therapy that achieves its antitumor effect through changes in hormonal balance. This type of therapy includes the administration of hormones, agents acting via hormonal mechanisms, antihormones, and steroids.
Immunotherapy	Cancer therapy that achieves its antitumor effect by altering the immune system or changing the host's response to the tumor cells.
Endocrine therapy	Cancer therapy that achieves its antitumor effect through the use of radiation or surgical procedures that suppress the naturally occurring hormonal activity of the patient (when the cancer occurs at another site) and, therefore, alter or affect the long-term control of the cancer's growth.
Hematologic transplants	Bone marrow or stem cell transplants performed to protect patients from myelosuppression or bone marrow ablation associated with the administration of high-dose chemotherapy or radiation therapy.

Important information affecting classification of some systemic therapies. The six drugs listed in the table below were previously classified as Chemotherapy and are now classified as BRM/Immunotherapy. This change is effective for cases diagnosed January 1, 2013, and forward.

For cases diagnosed prior to January 1, 2013, registrars have been instructed to continue coding these drugs as Chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in *SEER*Rx Interactive Drug Database*.

Drug Name(s)	Category Prior to 2013	Category 2013 +
Alemtuzumab/Campath	Chemotherapy	BRM/Immunotherapy
Bevacizumab/Avastin	Chemotherapy	BRM/Immunotherapy
Rituximab	Chemotherapy	BRM/Immunotherapy
Trastuzumab/Herceptin	Chemotherapy	BRM/Immunotherapy
Pertuzumab/Perjeta	Chemotherapy	BRM/Immunotherapy
Cetuxumab/Erbitux	Chemotherapy	BRM/Immunotherapy

Chemotherapy and hormone therapy agents are administered in treatment cycles, either singly or in a combination regimen of two or more drugs. If a patient has an adverse reaction, the managing physician may change one of the agents in a combination regimen. If the replacement agent belongs to the same group as the original agent, there is no change in the regimen. However, if the replacement agent is of a different group than the original agent, the new regimen represents the start of subsequent therapy, *only the original agent or regimen is recorded as first course therapy*. Refer to the *SEER*Rx Interactive Drug Database (https://seer.cancer.gov/tools/seerrx/)* for a list of systemic therapy agents. This rule does not apply for hormone therapy. If a change is made from Tamoxifen to Arimidex this is still all first course of treatment.

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Systemic agents may be administered by intravenous infusion or given orally. Other methods of administration include the following:

Method	Administration
Intrathecal	Administered directly into the cerebrospinal fluid through a lumbar puncture needle into an implanted access device (for example, Ommaya reservoir).
Pleural/pericardial	Injected directly into pleural or pericardial space to control malignant effusions.
Intraperitoneal	Injected into the peritoneal cavity.
Hepatic artery	Injected into a catheter inserted into the artery that supplies blood to the liver.

Relationships Among Systemic Therapy Items

The data item *Date Systemic Therapy Started* describes the first date on which any first course systemic treatment was administered to the patient. Nine out of 10 patients treated with systemic therapy receive only a single class of drugs (chemotherapy, hormone therapy, or immunotherapy). Of the remaining patients who receive a combined regimen of systemic therapies, two-thirds begin these combined regimens simultaneously. For the purposes of clinical surveillance, the collection of multiple dates to describe the sequence of systemic therapy administration is not necessary.

The data items *Chemotherapy, Hormone Therapy,* and *Immunotherapy* describe whether or not each respective class of agent(s) or drug(s) were administered to the patient as part of first course therapy, based on *SEER*Rx*. In the case of chemotherapy, additional distinction is allowed for instances where single or multiagent regimens were administered. Each of these three items includes code values that describe the reason a particular class of drugs is not administered to the patient and distinguishes a physician's not recommending systemic therapy due to contraindicating conditions from a patient's refusal of a recommended treatment plan. The associated date items were previously defined by CoC, though discontinued in ***FORDS*** from 2003 through 2009 and the same fields may be used in STORE to collect them now, if allowed by the registry software.

Hematologic Transplant and Endocrine Procedures captures those infrequent instances in which a medical, surgical, or radiation procedure is performed on a patient that has an effect on the hormonal or immunologic balance of the patient. Hematologic procedures, such as bone marrow transplants or stem cell harvests, are typically employed in conjunction with administration of systemic agent(s), usually chemotherapy.

- Endocrine procedures, either radiologic or surgical, may be administered in combination with systemic agent(s), typically hormonal therapeutic agents.
- As first course therapy, hematologic procedures will rarely be administered in conjunction with endocrine radiation or surgery. The use of code 40 in response to this data item should be reviewed and confirmed with the managing physician(s).

Other Treatment

Other Treatment encompasses first course treatment that cannot be described as surgery, radiation, or systemic therapy according to the defined data items found in this manual.
This item is also used for supportive care treatment for reportable hematopoietic diseases that do not meet the usual definition in which treatment "modifies, controls, removes, or destroys proliferating cancer tissue." Treatments such as phlebotomy, transfusions, and aspirin are recorded in *Other*

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Treatment data item for certain hematopoietic diseases and should be coded 1. Consult the most recent version of the Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual for instructions for coding care of specific hematopoietic neoplasms in this item.

The following items apply to all Other Treatment provided at this facility and at other facilities:

Date Other Treatment Started [1250]
Other Treatment [1420]
Other Treatment at This Facility [730]

Palliative Care

Palliative care is provided to prolong the patient's life by controlling symptoms, to alleviate persistent pain, or to make the patient comfortable. Palliative care provided to relieve symptoms may include surgery, radiation therapy, systemic therapy (chemotherapy, hormone therapy, or other systemic drugs), and/or other pain management therapy. Palliative care is not used to diagnose or stage the primary tumor.

The following items apply to all palliative care provided at this facility and at other facilities:

Palliative Care [3270]
Palliative Care at This Facility [3280]

Any surgical procedure, radiation therapy, and/or systemic therapy that is provided to modify, control, remove, or destroy primary or metastatic cancer tissue, is coded in the respective first course of treatment fields and also identified in the *Palliative Care* items. Refer to the preceding discussion of the surgery, radiation and systemic therapy data items for specific coding guidelines. Because these treatments are less aggressive when given for palliation than for treatment, the treatment plan or treatment notes will indicate when they are performed for palliative purposes.

- Record as palliative care any of the treatment recorded in the first course therapy items that was Provided to prolong the patient's life by managing the patient's symptoms, alleviating pain, or making the patient more comfortable.
- Palliative care can involve pain management that may not include surgery, radiation or systemic treatment.
- It is possible for a patient to receive one or a combination of treatment modalities in conjunction with palliative care intended to reduce the burden of pain. For example, a patient with metastatic prostate cancer may receive an orchiectomy and systemic hormone therapy in combination with palliative radiation for bone metastasis.

Treatment, Palliative, and Prophylactic Care

Any first course radiation or systemic treatment that acts to kill cancer cells is to be reported as treatment. For example, when total body irradiation (TBI) is given to prepare the patient for a bone marrow transplant (BMT), the TBI acts in two ways. First, it suppresses the immune system to reduce the body's ability to reject the BMT. Second, it contributes to the patient's treatment by destroying cancer cells in the bone marrow, though its use alone would generally not be sufficient to produce a cure. Both the TBI and the BMT should be coded as treatment. The situation is analogous to the use of breast-conserving surgery and adjuvant radiation when the surgery or radiation alone may not be sufficient to produce a cure, though together they are more effective.

When first course surgery, systemic treatment, or radiation is undertaken to reduce the patient's symptoms, that treatment should be coded as palliative care. An example is radiation to bone metastases for prostate cancer to reduce bone pain, which is palliative when there is no expectation that the radiation will effectively reduce the cancer burden. Palliative care involving surgery, systemic treatment,

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or radiation is also coded as treatment. This treatment qualifies the patient as analytic if it is given as part of planned first course treatment.

The term "prophylactic" is used in medical practice in a variety of ways. An action taken to prevent cancer from developing (such as a double mastectomy for a healthy woman who has several relatives diagnosed with breast cancer when they were young) is not reportable; there is no cancer to report. Actions taken as part of planned first course treatment to prevent spread or recurrence of the cancer are sometimes characterized as "prophylactic" (for example, performing an oophorectomy or providing Tamoxifen to a breast cancer mastectomy patient). These treatments are to be coded as treatment.

Embolization

The term *embolization* refers to the intentional blocking of an artery or vein. The mechanism and the reason for embolization determine how and whether it is to be recorded.

Chemoembolization is a procedure in which the blood supply to the tumor is blocked surgically or mechanically and anticancer drugs are administered directly into the tumor. This procedure permits a higher concentration of drug to be in contact with the tumor for a longer period of time. Code chemoembolization as *Chemotherapy* when the embolizing agent(s) is a chemotherapeutic drug(s) or when the term *chemoembolization* is used with no reference to the agent. Use *SEER*Rx Interactive Drug Database (https://seer.cancer.gov/tools/seerrx/)* to determine whether the drugs used are classified as chemotherapeutic agents. Also code as *Chemotherapy* when the patient has primary or metastatic cancer in the liver and the only information about embolization is a statement that the patient had chemoembolization, tumor embolization or embolization of the tumor in the liver. However, if alcohol is specified as the embolizing agent, even in the liver, code the treatment as *Other Therapy.*

Radioembolization is embolization combined with injection of small radioactive beads or coils into an organ or tumor. Code *Radiation Modality* as brachytherapy when tumor embolization is performed using a radioactive agent or radioactive seeds.

Embolization is coded as *Other Therapy* (code 1) if the embolizing agent is alcohol, or if the embolized site is other than the liver and the only information in the record is that the patient was given "embolization" with no reference to the agent.

Do not code presurgical embolization of hypervascular tumors with particles, coils or alcohol. These presurgical embolizations are typically performed to make the resection of the primary tumor easier. Examples where presurgical embolization is used include meningiomas, hemangioblastomas, paragangliomas, and renal cell metastases in the brain.

Outcomes

The outcomes data items describe the known clinical and vital status of the patient. Follow-up information is obtained at least annually for all living *Class of Case* 10-22 patients included in a cancer registry's database. Recorded follow-up data should reflect the most recent information available to the registry that originates from reported patient hospitalizations, known patient readmissions, contact with the patient's physician, and/or direct contact with the patient.

Individual item descriptions in Section Two of this manual should be consulted for specific coding instructions. The paragraphs below describe the range of follow-up information that should be obtained.

Follow-up items that are required to be in the facility's database

There may be times when first course treatment information is incomplete. Therefore, it is important to continue follow-up efforts to be certain the necessary treatment information is collected.

This includes:

- Complete first course of treatment information when *Rx Summ – Surg 2023* [1291] is delayed six months or more following the *Date of First Contact* [580].

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- *Readmission to the Same Hospital Within 30 Days of Surgical Discharge* [3190] following the most definitive surgery.
- Radiation, chemotherapy, hormone therapy, immunotherapy, hematologic transplant and endocrine procedures, or other treatment that had been indicated as being planned as part of first course of treatment, but not been started or completed as of the most recent follow-up date. Use "reason for no" treatment codes of 88 or 8 as ticklers to identify incomplete treatment information.
- When all planned first course treatment has been recorded, first course treatment items no longer need to be followed.
- The CoC does not require Class 00 cases to be followed.
- Follow-up for disease recurrence should be conducted until (a) evidence of disease recurrence is reported, or (b) the patient dies. If the *Type of First Recurrence* [1880] is coded 70 (never cancer free), when the patient was last seen, but treatment was still underway, then check at follow-up to see whether the patient subsequently became cancer-free. Occasionally, if first course treatment ends due to disease progression, it may be the second course or subsequent treatment that results in a cancer-free status. If the *Type of First Recurrence* is coded 00 (became cancer-free and has had no recurrence), then continue to follow for recurrence and record the type and date when it occurs.

In order to facilitate research on cancer recurrence, two new follow-up data items have been added for 2018 that allow for the recording of the last date on which the patient's cancer status has been updated.

Unlike the *Date of Last Contact or Death* [1750], which is a patient-specific data item, these new data items are tumor-specific to better document tumor recurrence/no evidence of disease (NED).

- Date of Last Cancer (Tumor) Status [1772]
- Cancer Status [1770]

Recurrence Definition

Local recurrence: recurs in initial primary organ
Trocar recurrence: organ removed, recurs in scar tissue from removal
Regional recurrence: recurs in adjacent organ or lymph nodes draining the organ
Distant recurrence: recurs in a location beyond regional

Once the first recurrence has been recorded, do not update recurrence items further.

While the patient is alive, be sure that contact information is kept current. Contact information includes:

Date of Last Contact or Death [1750]
Follow-Up Source, [1790]
Next Follow-Up Source [1800]

Follow-up for *Vital Status* [1760] and *Cancer Status* [1770] should be conducted annually for all analytic cases in the cancer program's registry. *Class of Case* 00 patients that are not followed will have the most recent information as of the *Date of Last Contact or Death [1750]*.

Once the patient's death has been recorded and all care given prior to death is recorded, no further follow-up is performed.

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Case Administration

Correct and timely management of case records in a registry data set are necessary to describe the nature of the data in the cancer record and to facilitate meaningful analysis of data, and it is necessary

to understand each item's respective purpose to ensure their accuracy and how to use them in facility analysis.

Administrative Tracking

The following administrative tracking items are required to be in the facility's database:

Abstracted By [570]
Facility Identification Number (*FIN)* [540]
NPI-Reporting Facility [545]
Archive FIN [3100]
NPI-Archive FIN [3105]

Abstracted By [570]*, Facility Identification Number (FIN)* [540], and *NPI-Reporting Facility* [545] identify the individual and facility responsible for compiling the record. *Archive FIN* and *NPI-Archive FIN* store the identification numbers assigned to the original abstracting facility and are used to convey the original identity assigned to a facility that has since merged with another. In a registry with more than one abstractor or serving more than one facility, it will ordinarily be necessary to enter these three numbers only when they change. All of these items should be autocoded by the registry software.
Note: NPI numbers are available through the facility's billing or accounting department or at https://nppes.cms.hhs.gov/#/.

EDITS Overrides

Some of the CoC edits identify rare, but possible, code combinations. For these edits, an override flag can be set if, upon review, the unusual combination is verified as being correct. Once set, the error message will not be repeated on subsequent EDITS passes.

- When no error message is generated by an edit that uses an override item, no action by the registrar is needed.
- If an error message is generated, the problem can often be resolved by checking the accuracy of the entry for each item that contributes to the edit and correcting any problems identified. If correction of data entry errors resolves the problem, do not make an override entry. If the codes reflect the information in the patient record, check for physician notes indicating the unusual combination of circumstances (for example, a colon adenocarcinoma in a child) has been confirmed.
- Enter the override code according to the instructions for the data item. If no comment regarding the unusual circumstances can be found in the record, it may be necessary to check with the managing physician or pathologist to determine whether it is appropriate to override the edit.

The following override items are required to be in the facility's database:

Override Site/Type [2030]
Override Site/TNM-StgGrp [1989]

Code Versions Used

Fifteen items describe the version of codes applied to record information in the registry record. Because registries cover many years of cases, registry data will be recorded according to many different coding systems. These items are necessary for the analysis of registry data and for further conversions, so it is important that they be maintained accurately.

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The following code version items are required to be in the facility's database:

TNM Edition Number [1060]
CS Version Input Original [2935; for cases diagnosed 2004-2017]
CS Version Input Current [2937; for cases diagnosed 2004-2017]
CS Version Derived [2936; for cases diagnosed 2004 through 2015]

All of these items are capable of being autocoded.

For newly abstracted cases, code version information will be applied both as the current and original code versions. When registry data are converted to an updated version for a coding system, the code for the current version should be updated automatically by the conversion.

It is not possible to convert from one version of AJCC TNM to another. The registrar should ascertain that the correct version number is recorded for autocoding.

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Section Two: Instructions for Coding

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Patient Identification

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Accession Number

Item #	Length	Allowable Values	Required Status	Date Revised
550	9	See Coding Instructions	All Years	01/04, 01/10

Description

Provides a unique identifier for the patient consisting of the year in which the patient was first seen at the reporting facility and the consecutive order in which the patient was abstracted.

Rationale

This data item protects the identity of the patient and allows cases to be identified on a local, state and national level.

Coding Instructions

- When a patient is deleted from the database, **do not** reuse the accession number for another patient.
- The first four numbers specify the year and the last five numbers are the numeric order in which the patient was entered into the registry database.
- Numeric gaps are allowed in accession numbers.
- A patient's accession number is never reassigned.

Code	Definition
(fill spaces)	Nine-digit number used to identify the year in which the patient was first seen at the reporting facility for the diagnosis and/or treatment of cancer.

Examples

Code	Reason
200300033	Patient enters the hospital in 2003, and is diagnosed with breast cancer. The patient is the thirty-third patient accessioned in 2003.
200300033	A patient with the accession number 200300033 for a breast primary returns to the hospital with a subsequent colon primary in 2004. The accession number will remain the same. *Sequence Number* [560] will distinguish this primary.
200300010	Patient diagnosed in November 2002 at another facility enters the reporting facility in January 2003, and is the tenth case accessioned in 2003.
200300012	Patient diagnosed in staff physician office in December 2002 enters the reporting facility in January 2003, and is the twelfth case accessioned in 2003.
200300001	First patient diagnosed and/or treated and entered into the registry database for 2003.
200300999	Nine hundred ninety-ninth patient diagnosed and/or treated and entered into the registry database for 2003.
200401504	One thousand five hundred fourth patient diagnosed and/or treated and entered into the registry database for 2004.

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Sequence Number

Item #	Length	Allowable Values	Required Status	Date Revised
560	2	00-88, 99	All Years	06/05, 04/07, 01/10, 01/13

Description

Indicates the sequence of malignant and nonmalignant neoplasms over the lifetime of the patient.

Rationale

This data item is used to distinguish among cases having the same accession numbers, to select patients with only one malignant primary tumor for certain follow-up studies, and to analyze factors involved in the development of multiple tumors.

Coding Instructions

- Codes 00–59 and 99 indicate neoplasms of malignant (in situ or invasive) behavior (Behavior equals 2 or 3). Codes 60–88 indicate neoplasms of non-malignant behavior (Behavior equals 0 or 1).
- Code 00 only if the patient has a single malignant primary. If the patient develops a subsequent invasive or in situ primary tumor, change the code for the first tumor from 00 to 01, and number subsequent tumors sequentially.
- Code 60 only if the patient has a single non-malignant primary. If the patient develops a subsequent non-malignant primary, change the code for the first tumor from 60 to 61, and assign codes to subsequent non-malignant primaries sequentially.
- If two or more invasive or in situ neoplasms are diagnosed at the same time, assign the lowest sequence number to the diagnosis with the worst prognosis. If no difference in prognosis is evident, the decision is arbitrary.
- Any tumor in the patient's past which is reportable or reportable-by-agreement at the time the current tumor is diagnosed must be taken into account when sequencing subsequently accessioned tumors. However, do not reassign sequence numbers if one of those tumors becomes non-reportable later.
- Sequence numbers should be reassigned if the facility learns later of an unaccessioned tumor that affects the sequence.

Malignant or In Situ Primaries

Code	Definition
00	One malignant or *in situ* primary only in the patient's lifetime
01	First of two or more independent malignant or *in situ* primaries
02	Second of two or more independent or *in situ* primaries
…	(Actual sequence of this malignant or *in situ* primary)
59	Fifty-ninth of 59 or more independent malignant or *in situ* primaries
99	Unknown number of malignant or *in situ* primaries

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Non-Malignant Primaries

Code	Definition
60	One nonmalignant primary only in the patient's lifetime
61	First of two or more independent nonmalignant primaries
62	Second of two or more independent nonmalignant primaries
…	(Actual sequence of this nonmalignant primary)
87	Twenty-seventh of 27 or more independent nonmalignant primaries
88	Unspecified number of independent nonmalignant primaries

Examples

Code	Reason
00	Patient with no previous history of cancer diagnosed with *in situ* breast carcinoma on June 13, 2003.
01	The sequence number is changed when the patient with an *in situ* breast carcinoma diagnosed June 13, 2003, is diagnosed with a subsequent melanoma on August 30, 2003.
02	Sequence number assigned to the melanoma diagnosed on August 30, 2003, following a breast cancer *in situ* diagnosis on June 13, 2003
04	A nursing home patient is admitted to the hospital for first course surgery for a colon adenocarcinoma. The patient has a prior history of three malignant cancers of the type the registry is required to accession, though the patient was not seen for these cancers at the hospital. No sequence numbers 01, 02 or 03 are accessioned for this patient.
60	The sequence number assigned to a benign brain tumor diagnosed on November 1, 2005, following a breast carcinoma diagnosed on June 13, 2003, and a melanoma on August 30, 2003.
63	Myeloproliferative disease (9975/1) is diagnosed by the facility in 2003 and accessioned as Sequence 60. A benign brain tumor was diagnosed and treated elsewhere in 2002; the patient comes to the facility with a second independent benign brain tumor in 2004. Unaccessioned earlier brain tumor is counted as Sequence 61, myeloproliferative disease is resequenced to 62, and second benign brain tumor is Sequence 63.

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City/Town at Diagnosis (City or Town)

Item #	Length	Allowable Values	Required Status	Date Revised
70	50	See Coding Instructions	1996+	01/10

Description

Identifies the name of the city or town in which the patient resides at the time the tumor is diagnosed and treated.

Rationale

The city or town is part of the patient's demographic data and has multiple uses. It indicates referral patterns and allows for the analysis of cancer clusters or environmental studies.

Coding Instructions

- If the patient resides in a rural area, record the name of the city or town used in his or her mailing address.
- If the patient has multiple malignancies, the city or town may be different for subsequent primaries.
- Do not update this data item if the patient's city or town of residence changes.
- See Residency Rules in Section One for further instructions.

Examples

Code	Reason
CITY NAME	Do not use punctuation, special characters, or numbers. The use of capital letters is preferred by the USPS; it also guarantees consistent results in queries and reporting. Abbreviate where necessary.
UNKNOWN	If the patient's city or town is unknown.

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State at Diagnosis (State)

Item #	Length	Allowable Values	Required Status	Date Revised
80	2	See Coding Instructions	1996+	09/06, 01/10, 01/11, 01/12

Description

Identifies the patient's state of residence at the time of diagnosis.

Rationale

The state of residence is part of the patient's demographic data and has multiple uses. It indicates referral patterns and allows for the analysis of cancer clusters or environmental studies.

Coding Instructions

- Use U.S. Postal Service abbreviation for the state, territory, commonwealth, U.S. possession, or Canadian province or territory in which the patient resides at the time the tumor is diagnosed and treated.
- If the patient has multiple tumors, the state of residence may be different for subsequent primaries.
- If the patient is a foreign resident, then code either XX or YY depending on the circumstance.
- Do not update this data item if the patient's state of residence changes.

Code	Label	Code	Label	Code	Label
AL	Alabama	MB	Manitoba	PW	Palau
AK	Alaska	MH	Marshall Islands	PA	Pennsylvania
AB	Alberta	MD	Maryland	PE	Prince Edward Island
AS	American Samoa	MA	Massachusetts	PR	Puerto Rico
AA	APO/FPO Armed Services America	MI	Michigan	QC	Quebec
AE	APO/FPO Armed Services Europe	FM	Micronesia	ZZ	Residence unknown.
AP	APO/FPO Armed Services Pacific	MN	Minnesota	XX	Resident of a country other than the U.S. (including its territories, commonwealths, or possessions) or Canada and the country is *known*.

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Code	Label	Code	Label	Code	Label
AZ	Arizona	MS	Mississippi	YY	Resident of a country other than the U.S. (including its territories, commonwealths, or possessions) or Canada and the country is *unknown*.
AR	Arkansas	MO	Missouri	CD	Resident of Canada and the province is *unknown*.
BC	British Columbia	MT	Montana	US	Resident of the U.S. (including its territories, commonwealths, or possessions) and the state is *unknown*
CA	California	NE	Nebraska	RI	Rhode Island
CD	Canada, province unknown	NV	Nevada	SK	Saskatchewan
CO	Colorado	NB	New Brunswick	SC	South Carolina
CT	Connecticut	NH	New Hampshire	SD	South Dakota
DE	Delaware	NJ	New Jersey	US	United States, state unknown
DC	District of Columbia	NM	New Mexico	TN	Tennessee
FL	Florida	NY	New York	TX	Texas
GA	Georgia	NL	Newfoundland and Labrador	UT	Utah
GU	Guam	NC	North Carolina	VT	Vermont
HI	Hawaii	ND	North Dakota	VI	Virgin Islands
ID	Idaho	NT	Northwest Territories	VA	Virginia
IL	Illinois	NS	Nova Scotia	WA	Washington
IN	Indiana	NU	Nunavut	WV	West Virginia
IA	Iowa	OH	Ohio	WI	Wisconsin
KS	Kansas	OK	Oklahoma	WY	Wyoming
KY	Kentucky	ON	Ontario	YT	Yukon
LA	Louisiana	OR	Oregon		
ME	Maine	UM	Outlying Islands		

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Postal Code at Diagnosis (Zip Code)

Item #	Length	Allowable Values	Required Status	Date Revised
100	9	See Coding Instructions	All Years	01/04

Description

Identifies the postal code of the patient's address at diagnosis.

Rationale

The postal code is part of the patient's demographic data and has multiple uses. It will provide a referral pattern report and allow analysis of cancer clusters or environmental studies.

Coding Instructions

- For U.S. residents, record the patient's nine-digit extended postal code at the time of diagnosis and treatment.
- For Canadian residents, record the six-character postal code.
- When available, record the postal code for other countries.
- If the patient has multiple malignancies, the postal code may be different for subsequent primaries.
- Do not update this data item if the patient's postal code changes.
- See Residency Rules in Section One for further instructions.

Code	Definition
(fill spaces)	The patient's nine-digit U.S. extended postal code. Do not record hyphens.
60611_ _ _ _	When the nine-digit extended U.S. ZIP Code is not available, record the five-digit postal code, left justified, followed by four blanks.
M6G2S8_ _ _	The patient's six-character Canadian postal code left justified, followed by three blanks.
88888_ _ _ _ or 888888888	Permanent address in a country other than Canada, United States, or U.S. possessions and postal code is unknown.
99999_ _ _ _ or 999999999	Permanent address in Canada, United States, or U.S. possession and postal code is unknown.

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Address at Dx--Country

Item #	Length	Allowable Values	Required Status	Date Revised
102	3	See Coding Instructions	1996+	Added 01/13

Description

Identifies the country of the patient's residence at the time of diagnosis. The codes are based on International Organization for Standardization (ISO) 3166-1 alpha-3 country codes, with some custom codes.

Rationale

The country code is part of the patient's demographic data and has multiple uses. It may be useful for understanding risk factors, assessment of patient prognosis, and chances for survival.

Coding Instructions

- This item corresponds to the other Addr at DX items (state, postal code).
- Do not change if the patient moves to another country. Patients with more than one tumor may have different countries at diagnosis, however.
- See Appendix C for a list of country codes and their respective state codes.
- This item was first defined for use in 2013; cases diagnosed before that date should be converted automatically by the registry's software.

Examples

Code	Label
USA	United States
CAN	Canada

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County at Diagnosis

Item #	Length	Allowable Values	Required Status	Date Revised
90	3	001-997, 998, 999	1996+	09/06, 01/10, 01/15

Description

Identifies the county of the patient's residence at the time the reportable tumor is diagnosed.

Rationale

This data item may be used for epidemiological purposes. For example, to measure the cancer incidence in a particular geographic area.

Coding Instructions

- For U.S. residents, use codes issued by the Federal Information Processing Standards (FIPS) publication Counties and Equivalent Entities of the United States, Its Possessions, and Associated areas. This publication is available in a reference library or can be accessed on the Internet through the U.S. EPA's Envirofacts Data Warehouse and Applications Web site at https://www.epa.gov/.
- If the patient has multiple tumors, the county codes may be different for each tumor.
- If the patient is a non-U.S. resident, use code 999.
- Do not update this data item if the patient's county of residence changes.

Code	Label	Definition
001–997	County at diagnosis	Valid FIPS code.
998	Outside state/county code unknown	Known town, city, state, or country of residence, but county code not known and a resident outside of the state of the reporting institution (must meet all criteria).
999	County unknown	The county of the patient is unknown, or the patient is not a United States resident. County is not documented in the patient's medical record.

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Birthplace—State

Item #	Length	Allowable Values	Required Status	Date Revised
252	2	See Coding Instructions	2013+	01/13

Description

Records the patient's state of birth.

Rationale

This data item is used to evaluate medical care delivery to special populations and to identify populations at special risk for certain cancers.

Coding Instructions

- Use the most specific code.
- This item corresponds to Birthplace—Country.
- See Appendix C for a list of state codes and their respective country codes.
- This item was first defined for use in 2013; cases diagnosed before that date should be converted automatically by the registry's software from the former Place of Birth.

Examples

Code	Reason
IL	If the state in which the patient was born is Illinois, then use the USPS code for the state of Illinois.
XX	Born in a country other than the U.S. (including its territories, commonwealths, or possessions) or Canada and the country *is known* (code the country in *Birthplace-Country*).
YY	Born in a country other than the U.S. (including its territories, commonwealths, or possessions) or Canada and the country *is unknown*.
US	Born in the U.S. (including its territories, commonwealths, or possessions) and the state is *unknown*
CD	Born in Canada and the province is *unknown*.
ZZ	Place of birth is unknown, not mentioned in patient record.

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Birthplace—Country

Item #	Length	Allowable Values	Required Status	Date Revised
254	3	See Coding Instructions	2013+	01/13

Description

Identifies the country where the patient was born. The codes are based on International Organization for Standardization (ISO) 3166-1 alpha-3 country codes, with some custom codes.

Rationale

The country code is part of the patient's demographic data and has multiple uses. It may be useful for understanding risk factors, assessment of patient prognosis, and chances for survival.

Coding Instructions

- This item corresponds to Birthplace—State.
- See Appendix C for a list of country codes and their respective state codes.
- This item was first defined for use in 2013; cases diagnosed before that date should be converted automatically by the registry's software.

Examples

Code	Reason
USA	United States
CAN	Canada
ZZU	Place of birth is unknown, not mentioned in patient record.

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Date of Birth

Item #	Length	Allowable Values	Required Status	Date Revised
240	8	CCYYMMDD	All Years	01/10, 01/23

Description

Identifies the date of birth of the patient.

Rationale

This data item is useful for patient identification. It is also useful when analyzing tumors according to age cohort.

Coding Instructions

- Record the patient's date of birth as indicated in the patient record. For single-digit day or month, record with a lead 0 (for example, September is 09). Use the full four-digit year for year.
- For in utero diagnosis and treatment, record the actual date of birth. It will follow one or both dates for those events.
- If only the patient age is available, calculate the year of birth from age and the year of diagnosis and leave day and month of birth unknown (for example, a 60 year old patient diagnosed in 2010 is calculated to have been born in 1950).
- If month is unknown, the day is coded unknown. If the year cannot be determined, the day and month are both coded unknown.
- Blank is not allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about date entry in their own systems. The traditional format for Date of Birth is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Birth transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date.

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Age at Diagnosis

Item #	Length	Allowable Values	Required Status	Date Revised
230	3	000–120, 999	All Years	09/08

Description

Records the age of the patient at his or her last birthday before diagnosis.

Rationale

This data item is useful for patient identification. It may also be useful when analyzing tumors according to specific patient age.

Coding Instructions

- If the patient has multiple primaries, then the age at diagnosis may be different for subsequent primaries.

Code	Label
000	Less than one year old; diagnosed *in utero*
001	One year old but less than two years old
002	Two years old
...	Actual age in years
120	One hundred twenty years old
999	Unknown age

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Race 1

Item #	Length	Allowable Values	Required Status	Date Revised
160	2	01–08, 10–17, 20–22, 25–28, 30–32, 96–99	All Years	01/04, 09/08, 01/10, 01/12, 01/23

Description

Identifies the primary race of the person.

Rationale

Racial origin captures information used in research and cancer control activities comparing stage at diagnosis and/or treatment by race. The full coding system should be used to allow for an accurate national comparison.

Coding Instructions

- Race 1 is the field used to compare with race data on cases diagnosed prior to January 1, 2000.
- "Race" is analyzed with Spanish/Hispanic Origin [190]. Both items must be recorded. All tumors for the same patient should have the same race code.
- If the person is multiracial and one of the races is white, code the other race(s) first with white in the next race field.
- If the person is multiracial and one of the races is Hawaiian, code Hawaiian as Race 1, followed by the other race(s).
- A known race code (other than blank or 99) must not occur more than once.
- Codes 08–13 became effective with diagnoses on or after January 1, 1988.
- Code 14 became effective with diagnoses on or after January 1, 1994.
- In 2010, code 09 was converted to the new code 15, and codes 16 and 17 were added.
- Codes 20–97 became effective with diagnoses on or after January 1, 1991. SEER participants in San Francisco, San Jose–Monterey, and Los Angeles are permitted to use codes 14 and 20–97 for cases diagnosed after January 1, 1987.

Code	Label	Code	Label
01	White	17	Pakistani
02	Black or African American	20	Micronesian, NOS
03	American Indian or Alaska Native	21	Chamorro
04	Chinese	22	Guamanian, NOS
05	Japanese	25	Polynesian, NOS
06	Filipino	26	Tahitian
07	Native Hawaiian	27	Samoan

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Code	Label	Code	Label
08	Korean	28	Tongan
10	Vietnamese	30	Melanesian, NOS
11	Laotian	31	Fiji Islander
12	Hmong	32	Papua New Guinean
13	Cambodian	96	Other Asian, including Asian, NOS and Oriental, NOS
14	Thai	97	Pacific Islander, NOS
15	Asian Indian, NOS or Pakistani, NOS	98	Some other race
16	Asian Indian	99	Unknown by patient

Examples

Code	Reason
01	A patient was born in Mexico of Mexican parentage. Code also *Spanish/Hispanic Origin* [190].
02	A black female patient.
05	A patient has a Japanese father and a Caucasian mother.

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Spanish Origin–All Sources (Spanish/Hispanic Origin)

Item #	Length	Allowable Values	Required Status	Date Revised
190	1	0–7, 9	All Years	09/04

Description

Identifies persons of Spanish or Hispanic origin.

Rationale

This code is used by hospital and central registries to identify whether or not the person should be classified as "Hispanic" for purposes of calculating cancer rates. Hispanic populations have different patterns of occurrence of cancer from other populations that may be included in the 01 (White category) of *Race 1*.

Coding Instructions

- Persons of Spanish or Hispanic origin may be of any race, but these categories are generally not used for Native Americans, Filipinos, or others who may have Spanish names.
- Code 0 (Non-Spanish; non-Hispanic) for Portuguese and Brazilian persons.
- If the patient has multiple tumors, all records should have the same code.

Code	Label
0	Non-Spanish; non-Hispanic
1	Mexican (includes Chicano)
2	Puerto Rican
3	Cuban
4	South or Central America (except Brazil)
5	Other specified Spanish/Hispanic origin (includes European; excludes Dominican Republic)
6	Spanish, NOS; Hispanic, NOS; Latino, NOS (There is evidence other than surname or maiden name that the person is Hispanic, but he/she cannot be assigned to any category of 1–5)
7	Spanish surname only (The only evidence of the person's Hispanic origin is surname or maiden name, and there is no contrary evidence that the person is not Hispanic)
8	Dominican Republic (for use with patients who were diagnosed with cancer on January 1, 2005, or later)
9	Unknown whether Spanish or not; not stated in patient record

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Sex

Item #	Length	Allowable Values	Required Status	Date Revised
220	1	1–6, 9	All Years	01/15, 01/16

Description

Identifies the sex of the patient.

Rationale

This data item is used to compare cancer rates and outcomes by site. The same sex code should appear in each medical record for a patient with multiple tumors.

Coding Instructions

- Record the patient's sex as indicated in the medical record.
- Natality for transsexuals was added for use in 2015 but may be applied for earlier diagnoses.
- The definition of code 3 was updated to "Other (intersex, disorders of sexual development/DSD)" in 2016.

Code	Label
1	Male
2	Female
3	Other (intersex, disorders of sexual development/DSD)
4	Transsexual, NOS
5	Transsexual, natal male
6	Transsexual, natal female
9	Not stated in patient record

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Primary Payer at Diagnosis

Item #	Length	Allowable Values	Required Status	Date Revised
630	2	01, 02, 10, 20, 21, 31, 35, 60–68, 99	All Years	06/05, 01/10, 1/23

Description

Identifies the patient's primary payer/insurance carrier at the time of initial diagnosis and/or treatment.

Rationale

This item is used in financial analysis and as an indicator for quality and outcome analyses. It is required the patient admission page documents the type of insurance or payment structure that will cover the patient while being cared for at the hospital.

Coding Instructions

- If the patient is diagnosed at the reporting facility, record the payer at the time of diagnosis.
- If the patient is diagnosed elsewhere or the payer at the time of diagnosis is not known record the payer when the patient is initially admitted for treatment.
- Record the type of insurance reported on the patient's admission page.
- Codes 21 and 65–68 are to be used for patients diagnosed on or after January 1, 2006.
- If more than one payer or insurance carrier is listed on the patient's admission page record the first.
- If the patient's payer or insurance carrier changes, do not change the initially recorded code.

Code	Label	Definition
01	Not insured	Patient has no insurance and is declared a charity write-off.
02	Not insured, self-pay	Patient has no insurance and is declared responsible for charges.
10	Insurance, NOS	Type of insurance unknown or other than the types listed in codes 20, 21, 31, 35, 60–68.
20	Private insurance: Managed Care, HMO, or PPO	An organized system of prepaid care for a group of enrollees usually within a defined geographic area. Generally formed as one of four types: a group model, an independent physician association (IPA), a network, or a staff model. "Gate-keeper model" is another term for describing this type of insurance.
21	Private insurance: Fee-for-Service	An insurance plan that does not have a negotiated fee structure with the participating hospital. Type of insurance plan not coded as 20.
31	Medicaid	State government administered insurance for persons who are uninsured, below the poverty level, or covered under entitlement programs. Medicaid other than described in code 35.

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Code	Label	Definition
35	Medicaid administered through a Managed Care plan	Patient is enrolled in Medicaid through a Managed Care program (for example, HMO or PPO). The Managed Care plan pays for all incurred costs.
60	Medicare without supplement, Medicare, NOS	Federal government funded insurance for persons who are 65 years of age or older, or are chronically disabled (Social Security insurance eligible). Not described in codes 61, 62, or 63.
61	Medicare with supplement, NOS	Patient has Medicare and another type of unspecified insurance to pay costs not covered by Medicare.
62	Medicare administered through a Managed Care plan	Patient is enrolled in Medicare through a Managed Care plan (for example, HMO or PPO). The Managed Care plan pays for all incurred costs.
63	Medicare with private supplement	Patient has Medicare and private insurance to pay costs not covered by Medicare.
64	Medicare with Medicaid eligibility	Federal government Medicare insurance with State Medicaid administered supplement.
65	TRICARE	Department of Defense program providing supplementary civilian-sector hospital and medical services beyond a military treatment facility to military dependents, retirees, and their dependents. Formally CHAMPUS (Civilian Health and Medical Program of the Uniformed Services).
66	Military	Military personnel or their dependents who are treated at a military facility.
67	Veterans Affairs	Veterans who are treated in Veterans Affairs facilities.
68	Indian/Public Health Service	Patient who receives care at an Indian Health Service facility or at another facility, and the medical costs are reimbursed by the Indian Health Service. Patient receives care at a Public Health Service facility or at another facility, and medical costs are reimbursed by the Public Health Service.
99	Insurance status unknown	It is unknown from the patient's medical record whether or not the patient is insured.

Examples

Code	Reason
01	An indigent patient is admitted with no insurance coverage.
20	A patient is admitted for treatment and the patient admission page states the primary insurance carrier is an HMO.

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Tobacco Use Smoking Status

Item #	Length	Allowable Values	Required Status	Date Revised
344	1	0- 3, 9	2023+	New

Description

This variable indicates the patient's past or current smoking use of tobacco (cigarette, cigar and/or pipe).

Rationale

- Cigarette smoking is the leading preventable cause of death in the United States and a major risk factor for cancer.
- Reliable registry-based tobacco use data will help public health planners and clinicians target and assess tobacco control efforts.
- Tobacco use data at diagnosis may help health professionals better understand how tobacco use impacts cancer outcomes, prognosis, and effectiveness of treatment.
- Smoking status may be a useful covariate risk factor for cancer cluster investigations.

Coding Instructions

- Record cigarette, cigar and/or pipe use only. Tobacco Use Smoking Status does not include marijuana, chewing tobacco, e-cigarettes, or vaping devices.
- Tobacco smoking history can be obtained from sections such as the Nursing Interview Guide, Flow Chart, Vital Stats or Nursing Assessment section, or other available sources from the patient's hospital medical record or physician office record.
- Use code 1 (Current smoker) if there is evidence in the medical record that the patient quit smoking within 30 days prior to diagnosis. The 30 days prior information is intended to differentiate patients who may have quit recently due to symptoms that led to a cancer diagnosis.
- Use code 2 (Former smoker) if medical record indicates patient smoked tobacco in the past but does not smoke now. Patient must have quit 31 or more days prior to cancer diagnosis to be coded as 'Former smoker' (see above instruction).
- Use code 3 (Ever Smoked, current status unknown) if it cannot be determined whether patient currently smokes or formerly smoked. For example, the medical record only indicates "Yes" for smoking without further information.
- Use code 9 (Unknown if ever smoked) rather than code 0 (Never used),
  - if the medical record only indicates "No" for tobacco use
  - smoking status is not stated or provided
  - the method (cigarette, pipe, cigar) used cannot be verified in the chart.

Code	Label
0	Never smoker
1	Current smoker
2	Former smoker
3	Smoker, current status unknown
9	Unknown if ever smoked

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Comorbidities and Complications #1 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3110	5	00000, 00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2002-2017	06/05, 01/11, 01/12, 01/13, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes only for patients diagnosed before 2018. Use Secondary Diagnosis #1 [3780] to record ICD-10-CM codes for patients diagnosed in 2018 and later. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Secondary diagnoses are found on the discharge abstract. Information from the billing department at your facility may be consulted when a discharge abstract is not available.
- Code the secondary diagnoses in the sequence in which they appear on the discharge abstract or are recorded by the billing department at your facility.
- Report the secondary diagnoses for this cancer using the following priority rules:
    - Surgically treated patients:
        - following the most definitive surgery of the primary site
        - following other non-primary site surgeries
    - Non-surgically treated patients:
        - following the first treatment encounter/episode
    - In cases of non-treatment:
        - following the last diagnostic/evaluative encounter
- If the data item Readmission to the Same Hospital within 30 Days of Surgical Discharge [3190] is coded 1, 2, or 3, report Comorbidities and Complications ICD-9-CM codes appearing on the "readmission" discharge abstract.
- If no ICD-9-CM secondary diagnoses were documented, then code 00000 in this data item, and leave the remaining Comorbidities and Complications data items blank.
- If fewer than 10 ICD-9-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Comorbidities and Complications data items blank.

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Code	Label
00000	No comorbid conditions or complications documented.
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

Examples

Code	Reason
49600	COPD (ICD-9-CM code 496)
25001	Type 1 diabetes mellitus (ICD-9-CM code 250.01)
E8732	The patient was inadvertently exposed to an overdose of external beam radiation (ICD-9-CM code E873.2)
E9300	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-9-CM code E930.0)
V1030	The patient has a personal history of breast cancer (ICD-9-CM code V10.3)

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Comorbidities and Complications #2 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3120	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2002-2017	06/05, 01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #2 [3782] to record ICD-10-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- If only one comorbid condition or complication is listed, then leave this data item blank.
- If only two comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #3 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3130	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2002-2017	06/05, 01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #3 [3784] to record ICD-10-CM codes. During adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- If only two comorbid conditions or complications are listed, then leave this data item blank.
- If only three comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #4 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3140	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2002-2017	06/05, 01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #4 [3786] to record ICD-10-CM codes. During adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- If only three comorbid conditions or complications are listed, then leave this data item blank.
- If only four comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #5 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3150	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2002-2017	06/05, 01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #5 [3788] to record ICD-10-CM codes. During adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- If only four comorbid conditions or complications are listed, then leave this data item blank.
- If only five comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #6 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3160	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2002-2017	06/05, 01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #6 [3790] to record ICD-10-CM codes. During adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- If only five comorbid conditions or complications are listed, then leave this data item blank.
- If only six comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #7 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3161	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2006-2017	01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #7 [3792] to record ICD-10-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Comorbidities and Complications #7 is to be used for patients diagnosed on or after January 1, 2006.
- If only six comorbid conditions or complications are listed, then leave this data item blank.
- If only seven comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #8 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3162	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2006-2017	01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #8 [3794] to record ICD-10-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Comorbidities and Complications #8 is to be used for patients diagnosed on or after January 1, 2006.
- If only seven comorbid conditions or complications are listed, then leave this data item blank.
- If only eight comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #9 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3163	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2006-2017	01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #9 [3796] to record ICD-10-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Comorbidities and Complications #9 is to be used for patients diagnosed on or after January 1, 2006.
- If only eight comorbid conditions or complications are listed, then leave this data item blank.
- If only nine comorbid conditions or complications are listed, then code the diagnoses listed and leave the remaining Comorbidities and Complications items blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Comorbidities and Complications #10 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3164	5	00100–13980, 24000–99990, E8700–E8799, E9300–E9499, V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400– V4589, V5041–V5049, Blank	2006-2017	01/11, 01/12, 01/13, 01/15, 01/18

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-9-CM codes. All are considered secondary diagnoses.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-9-CM codes. Use Secondary Diagnosis #10 [3796] to record ICD-10- CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Comorbidities and Complications #10 is to be used for patients diagnosed on or after January 1, 2006.
- If only nine comorbid conditions or complications are listed, then leave this data item blank.
- For further Instructions for Coding, see *Comorbidities and Complications #1* [3110].

Code	Label
00100–13980, 24000–99990	Comorbid conditions: Omit the decimal point between the third and fourth characters.
E8700–E8799, E9300–E9499	Complications: Omit the decimal point between the fourth and fifth characters.
V0720–V0739, V1000–V1590, V2220–V2310, V2540, V4400–V4589, V5041–V5049	Factors affecting health status: Omit the decimal point between the fourth and fifth characters.

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Secondary Diagnosis #1 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3780	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #1 [3110] to record ICD-9-CM codes only for patients diagnosed before 2018. During the adoption of ICD-10- CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- Secondary diagnoses are found on the discharge abstract. Information from the billing department at your facility may be consulted when a discharge abstract is not available.
- Code the secondary diagnoses in the sequence in which they appear on the discharge abstract or are recorded by the billing department at your facility.
- Report the secondary diagnoses for this cancer using the following priority rules:
    - Surgically treated patients:
        - following the most definitive surgery of the primary site
        - following other non-primary site surgeries
    - Non-surgically treated patients:
        - following the first treatment encounter/episode
    - In cases of non-treatment:
        - following the last diagnostic/evaluative encounter
- If the data item Readmission to the Same Hospital within 30 Days of Surgical Discharge [3190] is coded 1, 2, or 3, report Secondary Diagnosis ICD-10-CM codes appearing on the "readmission" discharge abstract.

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- If no ICD-10-CM secondary diagnoses were documented, then code 0000000 in this data item, and leave the remaining Secondary Diagnosis data items blank.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)
0000000	No applicable ICD-10-CM codes are recorded in this patient's record

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Secondary Diagnosis #2 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3782	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #2 [3120] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #3 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3784	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #3 [3130] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #4 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3786	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681-Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #4 [3140] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #5 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3788	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #5 [3150] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #6 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3790	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #6 [3160] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #7 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3792	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #7 [3161] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #8 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3794	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #8 [3162] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #9 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3796	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ, Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #9 [3163] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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Secondary Diagnosis #10 (Secondary Diagnoses)

Item #	Length	Allowable Values	Required Status	Date Revised
3798	7	0000000; all values beginning with A-B, E, G-P, R-S; and the following ranges: T36-T50996ZZ, U070-U071, Y62- Y849ZZZ, Z1401-Z229ZZZ, Z681- Z6854ZZ, Z751-Z753, Z80-Z809ZZZ, Z8500-Z9989ZZ Blank	2015+	01/15, 02/21, 01/22

Description

Records the patient's preexisting medical conditions, factors influencing health status, and/or complications during the patient's hospital stay for the treatment of this cancer using ICD-10-CM values.

Rationale

Preexisting medical conditions, factors influencing health status, and/or complications may affect treatment decisions and influence patient outcomes. Information on comorbidities is used to adjust outcome statistics when evaluating patient survival and other outcomes. Complications may be related to the quality of care.

Coding Instructions

- Use this item to record ICD-10-CM codes. Use Comorbidities and Complications #10 [3164] to record ICD-9-CM codes. During the adoption of ICD-10-CM codes, it is possible both will appear in the same patient record.
- Note that, while the ICD-9-CM Comorbidities and Complications codes were to be followed by zeroes if they did not fill the field, only the actual ICD-10-CM code is to be entered for Secondary Diagnosis fields, leaving blanks beyond those characters.
- Omit the decimal points when coding.
- If fewer than 10 ICD-10-CM secondary diagnoses are listed, then code the diagnoses listed, and leave the remaining Secondary Diagnosis data items blank.

Examples

Code	Reason
J449	Chronic obstructive pulmonary disease, unspecified (ICD-10-CM code J44.9)
E119	Type 2 diabetes mellitus without complications (ICD-10-CM code E11.9)
Y632	The patient was inadvertently exposed to an overdose of radiation during a medical procedure (ICD-10-CM code E873.2)
T360X5	During hospitalization the patient has an adverse reaction to Ampicillin, a semisynthetic form of penicillin (ICD-10-CM code T36.0X5)
Z853	The patient has a personal history of breast cancer (ICD-10-CM code Z85.3)

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NPI–Primary Surgeon

Item #	Length	Allowable Values	Required Status	Date Revised
2485	10	10 digits, Blank	2008+	04/07, 09/08, 01/11

Description

Identifies the physician who performed the most definitive surgical procedure.

Rationale

Administrative, physician, and service referral reports are based on this item.

Coding Instructions

- Record the 10-digit NPI for the physician who performed the most definitive surgical procedure.
- Check with the billing or health information departments to determine the physician's NPI or search at https://nppes.cms.hhs.gov/.
- NPI should be recorded as available for cases diagnosed during 2007 and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- NPI may be blank for cases diagnosed on or before December 31, 2006.
- Do not update this item. Once the registry has designated a primary surgeon for the patient, the information should not be changed or updated even if the patient receives care from another surgeon.

Code	Label
(fill spaces)	10-digit NPI number for the primary surgeon.
(leave blank)	The patient did not have surgery. NPI for the primary surgeon is unknown or not available. The physician who performed the surgical procedure was not a surgeon (for example, general practitioner).

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NPI–Physician #3 (Radiation Oncologist–CoC Preferred)

Item #	Length	Allowable Values	Required Status	Date Revised
2495	10	10 digits, Blank	2008+	4/07, 9/08, 1/10, 1/11

Description

Records the NPI for a physician involved in the care of the patient. The Commission on Cancer recommends that this item identify the physician who performed the most definitive radiation therapy.

Rationale

Administrative, physician, and service referral reports are based on this data item. It also can be used for follow-up purposes.

Coding Instructions

- Record the 10-digit NPI for the physician.
- Check with the billing or health information departments to determine the physician's NPI or search at https://nppes.cms.hhs.gov/#/.
- Do not update this item. If the registry has designated a primary radiation oncologist for the patient, the information in this data item should not be changed or updated even if the patient receives care from another radiation oncologist.
- NPI should be recorded as available for cases diagnosed during 2007 and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- NPI may be blank for cases diagnosed on or before December 31, 2006.

Code	Label
(fill spaces)	10-digit NPI number for the primary radiation oncologist.
(leave blank)	NPI for the primary radiation oncologist is unknown or not available.

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NPI–Physician #4 (Medical Oncologist–CoC Preferred)

Item #	Length	Allowable Values	Required Status	Date Revised
2505	10	10 digits, Blank	2008+	4/07, 9/08, 1/10, 1/11, 1/12

Description

Records the NPI for a physician involved in the care of the patient. The Commission on Cancer recommends that this data item identify the physician who gives the most definitive systemic therapy.

Rationale

Administrative, physician, and service referral reports are based on this data item. It also can be used for follow-up purposes.

Coding Instructions

- Record the 10-digit NPI for the physician.
- Check with the billing or health information departments to determine the physician's NPI or search at https://nppes.cms.hhs.gov/#/.
- Do not update this item. If the registry has designated a primary medical oncologist for the patient, the information in this data item should not be changed or updated even if the patient receives care from another medical oncologist.
- NPI should be recorded as available for cases diagnosed during 2007 and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- NPI may be blank for cases diagnosed on or before December 31, 2006.

Code	Label
(fill spaces)	10-digit NPI number for the primary medical oncologist.
(leave blank)	NPI for the primary medical oncologist is unknown or not available.

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Cancer Identification

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Class of Case

Item #	Length	Allowable Values	Required Status	Date Revised
610	2	00, 10-14, 20-22, 30-38, 40-43, 49, 99	All Years	09/08, 01/10, 05/10, 01/11, 01/12, 01/14, 01/15

Description

Class of Case divides cases into two groups. Analytic cases (codes 00–22) are those that are required by CoC to be abstracted because of the program's primary responsibility in managing the cancer. Analytic cases are grouped according to the location of diagnosis and first course of treatment. Nonanalytic cases (codes 30–49 and 99) may be abstracted by the facility to meet central registry requirements or in response to a request by the facility's cancer program. Nonanalytic cases are grouped according to the reason a patient who received care at the facility is nonanalytic, or the reason a patient who never received care at the facility may have been abstracted.

Rationale

Class of Case reflects the facility's role in managing the cancer and whether the cancer is required to be reported by CoC.

Coding Instructions

- Code the Class of Case that most precisely describes the patient's relationship to the facility.
- Code 00 applies only when it is known the patient went elsewhere for treatment. If it is not known that the patient actually went somewhere else, code Class of Case 10.
- It is possible that information for coding Class of Case will change during the patient's first course of care. If that occurs, change the code accordingly.
- Document NPI–Institution Referred To [2425] or the applicable physician NPI (NAACCR #s 2485, 2495, 2505) for patients coded 00 to establish that the patient went elsewhere for treatment
- Code 34 or 36 if the diagnosis benign or borderline (Behavior 0 or 1) for any site is diagnosed before 2004 or for any site other than meninges (C70._), brain (C71._), spinal cord, cranial nerves, and other parts of central nervous system (C72._), pituitary gland (C75.1), craniopharyngeal duct (C75.2) and pineal gland (C75.3) that was diagnosed in 2004 or later.
- Code 34 or 36 for carcinoma in situ of the cervix (CIS) and intraepithelial neoplasia grade III (8077/2 or 8148/2) of the cervix (CIN III), prostate (PIN III), vulva (VIN III), vagina (VAIN III), and anus (AIN III).
- Physicians who are not employed by the hospital but are under contract with it or have routine admitting privileges there are described in codes 10-12 and 41 as physicians with admitting privileges. Treatment provided in the office of a physician with admitting privileges is provided "elsewhere". That is because care given in the physician's office is not within the hospital's realm of responsibility.
- If the hospital purchases a physician practice, it will be necessary to determine whether the practice is now legally considered part of the hospital (their activity is coded as the hospital's) or not. If the practice is not legally part of the hospital, it will be necessary to determine whether the physicians involved have routine admitting privileges or not, as with any other physician.

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- "In-transit" care is care given to a patient who is temporarily away from the patient's usual practitioner for continuity of care. If these cases are abstracted, they are Class of Case 31. Monitoring of oral medication started elsewhere is coded Class of Case 31. If a patient begins first course radiation or chemotherapy infusion elsewhere and continues at the reporting facility, and the care is not in-transit, then the case is analytic (Class of Case 21).
- First course maintenance treatment provided at the reporting facility prior to disease progression or recurrence is reportable IF the maintenance treatment is part of first course treatment plan and is provided by reported facility with documentation of prescription/administration. For example, if a patient is diagnosed and treated at another facility per the treatment plan was started on hormone therapy at the other facility then presents to your facility for continuation of hormone therapy the continuation of hormone therapy by your facility must be documented in medical record to assign class of case 21 (part of first course treatment elsewhere, part of first course of treatment at the reporting facility). This applies even if there is no longer active disease.

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Code	Label
Analytic Classes of Case (Required by CoC to be abstracted by accredited programs)	
Initial diagnosis at reporting facility or in a staff physician's office	
00	Initial diagnosis at the reporting facility AND all treatment or a decision not to treat was done elsewhere
10	Initial diagnosis at the reporting facility or in an office of a physician with admitting privileges AND part or all of first course treatment or a decision not to treat was at the reporting facility, NOS
11	Initial diagnosis in an office of a physician with admitting privileges AND part of first course treatment was done at the reporting facility
12	Initial diagnosis in an office of a physician with admitting privileges AND all first course treatment or a decision not to treat was done at the reporting facility
13	Initial diagnosis at the reporting facility AND part of first course treatment was done at the reporting facility; part of first course treatment was done elsewhere
14	Initial diagnosis at the reporting facility AND all first course treatment or a decision not to treat was done at the reporting facility
Initial diagnosis elsewhere	
20	Initial diagnosis elsewhere AND all or part of first course treatment was done at the reporting facility, NOS
21	Initial diagnosis elsewhere AND part of first course treatment was done at the reporting facility; part of first course treatment was done elsewhere.
22	Initial diagnosis elsewhere AND all first course treatment or a decision not to treat was done at the reporting facility
Classes of Case not required by CoC to be abstracted (May be required by Cancer Committee, state or regional registry, or other entity)	
Patient appears in person at reporting facility	
30	Initial diagnosis and all first course treatment elsewhere AND reporting facility participated in diagnostic workup (for example, consult only, treatment plan only, staging workup after initial diagnosis elsewhere)
31	Initial diagnosis and all first course treatment elsewhere AND reporting facility provided in-transit care; or hospital provided care that facilitated treatment elsewhere (for example, stent placement)
32	Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease recurrence or persistence (active disease)
33	Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease history only (disease not active)
34	Type of case not required by CoC to be accessioned (for example, a benign colon tumor) AND initial diagnosis AND part or all of first course treatment by reporting facility
35	Case diagnosed before the program's Reference Date AND initial diagnosis AND all or part of first course treatment by reporting facility

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Code	Label
36	Type of case not required by CoC to be accessioned (for example, a benign colon tumor) AND initial diagnosis elsewhere AND all or part of first course treatment by reporting facility
37	Case diagnosed before the program's Reference Date AND initial diagnosis elsewhere AND all or part of first course treatment by facility
38	Initial diagnosis established by autopsy at the reporting facility, cancer not suspected prior to death
Patient does not appear in person at reporting facility	
40	Diagnosis AND all first course treatment given at the same staff physician's office
41	Diagnosis and all first course treatment given in two or more different offices of physicians with admitting privileges
42	Nonstaff physician or non-CoC accredited clinic or other facility, not part of reporting facility, accessioned by reporting facility for diagnosis and/or treatment by that entity (for example, hospital abstracts cases from an independent radiation facility)
43	Pathology or other lab specimens only
49	Death certificate only
99	Nonanalytic case of unknown relationship to facility (not for use by CoC accredited cancer programs for analytic cases).

Examples

Code	Reason
00	Leukemia was diagnosed at the facility, and all care was given in an office of a physician with practice privileges. The treatment may be abstracted if the cancer committee desires, but the case is *Class of Case* 00.
13	Breast cancer was diagnosed at the reporting hospital and surgery performed there. Radiation was given at the hospital across the street with which the reporting hospital has an agreement.
10	Reporting hospital found cancer in a biopsy, but was unable to discover whether the homeless patient actually received any treatment elsewhere.
32	After treatment failure, the patient was admitted to the facility for supportive care.
11	Patient was diagnosed by a physician with practice privileges, received neoadjuvant radiation at another facility, then underwent surgical resection at the reporting facility.
42	Patients from an unaffiliated, free-standing clinic across the street that hospital voluntarily abstracts with its cases because many physicians work both at the clinic and the hospital.
31	Patient received chemotherapy while attending daughter's wedding in the reporting hospital's city, then returned to the originating hospital for subsequent treatments.

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NPI–Institution Referred From

Item #	Length	Allowable Values	Required Status	Date Revised
2415	10	10 digits, Blank	2008+	04/07, 09/08, 01/11

Description

Identifies the facility that referred the patient to the reporting facility.

Rationale

Each facility's NPI is unique. This number is used to document and monitor referral patterns.

Coding Instructions

- Record the 10-digit NPI for the referring facility.
- NPI should be recorded as available for cases diagnosed during 2007, and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- NPI may be blank for cases diagnosed on or before December 31, 2006.
- Check with the registry, billing, or health information departments of the facility to determine its NPI, or search on https://nppes.cms.hhs.gov/#/.

Code	Label
(fill spaces)	10-digit NPI number for the facility.
(leave blank)	NPI for the referring facility is unknown or not available.
(leave blank)	If the patient was not referred to the reporting facility from another facility.

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NPI–Institution Referred To

Item #	Length	Allowable Values	Required Status	Date Revised
2425	10	10 digits, Blank	2008+	04/07, 09/08, 01/11

Description

Identifies the facility to which the patient was referred for further care after discharge from the reporting facility.

Rationale

Each facility's NPI is unique. This number is used to document and monitor referral patterns.

Coding Instructions

- Record the 10-digit NPI for the facility to which the patient was referred.
- NPI should be recorded as available for cases diagnosed during 2007, and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- NPI may be blank for cases diagnosed on or before December 31, 2006.
- Check with the registry, billing, or health information departments of the facility to determine its NPI or search on https://nppes.cms.hhs.gov/#/ .

Code	Label
(fill spaces)	10-digit NPI number for the facility.
(leave blank)	NPI for the facility referred to is unknown or not available.
(leave blank)	If the patient was not referred to another facility.

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Date of First Contact

Item #	Length	Allowable Values	Required Status	Date Revised
580	8	CCYYMMDD, Blank	All Years	09/06, 01/04, 01/10, 01/11, 01/23

Description

Date of first contact with the reporting facility for diagnosis and/or treatment of this cancer.

Rationale

This data item can be used to measure the time between first contact and the date that the case was abstracted. It can also be used to measure the length of time between the first contact and treatment for quality of care reports.

Coding Instructions

- Record the date the patient first had contact with the facility as either an inpatient or outpatient for diagnosis and/or first course treatment of a reportable tumor. The date may be the date of an outpatient visit for a biopsy, x-ray, or laboratory test, or the date a pathology specimen was collected at the hospital.
- For analytic cases (Class of Case 00-22), the Date of First Contact is the date the patient became analytic. For non-analytic cases, it is the date the patient first qualified for the Class of Case that causes the case to be abstracted.
- If this is an autopsy-only or death certificate-only case, then use the date of death.
- When a patient is diagnosed in a staff physician's office, the date of first contact is the date the patient was physically first seen at the reporting facility.
- Blank is allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of First Contact is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of First Contact transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date.

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Examples

Code	Label	Definition
20090914	September 14, 2009	Patient undergoes a biopsy in a staff physician's office on September 8, 2009. The pathology specimen was sent to the reporting facility and was read as malignant melanoma. The patient enters that same reporting facility on September 14, 2009 for wide re-excision.
20101207	December 7, 2010	Patient has an MRI of the brain on December 7, 2010, for symptoms including severe headache and disorientation. The MRI findings are suspicious for astrocytoma. Surgery on December 19 removes all gross tumor.
20110499	April 2011	Information is limited to the description "Spring," 2011.
20110799	July 2011	Information is limited to the description "The middle of the year," 2011.
20111099	October 2011	Information is limited to the description "Fall," 2011.
CCYY1299 or CCYY0199	December or January	If information is limited to the description "Winter," try to determine if this means the beginning or the end of the year.

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Date of Initial Diagnosis

Item #	Length	Allowable Values	Required Status	Date Revised
390	8	CCYYMMDD	All Years	09/04, 09/08, 1/10, 01/11, 01/23

Description

Records the date of initial diagnosis by a physician for the tumor being reported.

Rationale

The timing for staging and treatment of cancer begins with the date of initial diagnosis for cancer.

Coding Instructions

- Use the first date of diagnosis whether clinically or histologically established.
- If the physician states that in retrospect the patient had cancer at an earlier date, use the earlier date as the date of diagnosis.
- Refer to the list of Ambiguous Terms in Section One for language that represents a diagnosis of cancer.
- Use the date treatment was started as the date of diagnosis if the patient receives a first course of treatment before a diagnosis is documented.
- The date of death is the date of diagnosis for a Class of Case [610] 38 (diagnosed at autopsy) or 49 (death certificate only).
- Use the actual date of diagnosis for an in utero diagnosis, for cases diagnosed on January 1, 2009, or later.
- If the year of diagnosis cannot be identified, it must be approximated. In that instance, the month and day are unknown.
- Blanks are not allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of Initial Diagnosis MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Initial Diagnosis transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date.

Examples

Code	Label	Definition
20100612	June 12, 2010	Cytology “suspicious” for cancer June 12, 2010; pathology positive July 2, 2010. Do not consider cytology with ambiguous terms to be diagnostic, however positive pathology supports the cytology diagnosis.

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Code	Label	Definition
20100517	May 17, 2010	Pathology “suspicious” for cancer May 17, 2010; confirmed positive May 22, 2010
20100499	April 2010	Physician’s referral notes dated July 5, 2010, indicate the patient was diagnosed with cancer spring of 2010. Use April for “spring”, July for “summer” or “mid-year”, October for “fall” or “autumn”. In winter, attempt to determine whether the diagnosis was “late in the year” (use December with the applicable year) or “early in year” (use January with the respective year).

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Primary Site

Item #	Length	Allowable Values	Required Status	Date Revised
400	4	C+3 digits	All Years	01/04, 09/08, 01/10

Description

Identifies the primary site.

Rationale

Primary site is a basis for staging and the determination of treatment options. It also affects the prognosis and course of the disease.

Coding Instructions

- Record the ICD-O-3 topography code for the site of origin.
- Consult the physician advisor to identify the primary site or the most definitive site code if the medical record does not contain that information.
- Topography codes are indicated by a "C" preceding the three-digit code number. Do not record the decimal point.
- Follow the Instructions for Coding in ICD-O-3, pages 20–40 and in the current SEER Multiple Primary and Histology Coding Rules to assign site for solid tumors.
- Refer to the instructions for Occult Cervical Lymph Node and Cutaneous Carcinoma of the Head and Neck found in the Overview of Coding Principles section.
- Follow the instructions in Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual and the Hematopoietic and Lymphoid Neoplasms Database (Hematopoietic DB) for assigning site for lymphomas, leukemia and other hematopoietic neoplasms.
- Use subcategory 8 for single tumors that overlap the boundaries of two or more sub-sites and the point of origin is not known.
- Use subcategory 9 for multiple tumors that originate in different subsites of one organ.

Examples

Code	Reason
C108	Overlapping lesion of oropharynx. Code overlapping lesion when a large tumor involves both the lateral wall of the oropharynx (C10.2) and the posterior wall of the oropharynx (C10.3) and the point of origin is not stated.
C678	Overlapping lesion of bladder. Code overlapping lesion of the bladder when a single lesion involves the dome (C67.1) and the lateral wall (C67.2) and the point of origin is not stated.
C189	Colon, NOS. Familial polyposis with carcinoma and carcinoma in situ throughout the transverse (C18.4) and descending colon (C18.6) would be one primary and coded to colon, NOS (C18.9). For a full explanation see the *SEER 2007 Multiple Primary and Histology Coding Rules*.
C16–	Stomach (sub-site as identified). An extranodal lymphoma of the stomach is coded to C16.– (sub-site as identified).

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Laterality

Item #	Length	Allowable Values	Required Status	Date Revised
410	1	0-5, 9	All Years	01/10, 05/10, 01/13

Description

Identifies the side of a paired organ or the side of the body on which the reportable tumor originated. This applies to the primary site only.

Rationale

Laterality supplements staging and extent of disease information and defines the number of primaries involved.

Coding Instructions

- Code laterality for all paired sites. (See Section One for additional information.)
- Do not code metastatic sites as bilateral involvement.
- If both lungs have nodules or tumors and the lung of origin is not known, assign code 4.
- Where the right and left sides of paired sites are contiguous (come into contact) and the lesion is at the point of contact of the right and left sides, use code 5, midline. Note that "midline of the right breast" is coded 1, right; midline in this usage indicates the primary site is C50.8 (overlapping sites).
- Non-paired sites may be coded right or left, if appropriate. Otherwise, code non-paired sites 0.

Code	Label
0	Organ is not a paired site.
1	Origin of primary is right.
2	Origin of primary is left.
3	Only one side involved, right or left origin not specified.
4	Bilateral involvement at time of diagnosis, lateral origin unknown for a single primary; or both ovaries involved simultaneously, single histology; bilateral retinoblastomas; bilateral Wilms tumors
5	Paired site: midline tumor
9	Paired site, but no information concerning laterality

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Histology

Item #	Length	Allowable Values	Required Status	Date Revised
522	4	Four digits	2001+	09/06, 01/10, 03/10

Description

Identifies the microscopic anatomy of cells.

Rationale

Histology is a basis for staging and the determination of treatment options. It also affects the prognosis and course of the disease.

Coding Instructions

- ICD-O-3 identifies the morphology codes with an "M" preceding the code number. Do not record the "M."
- Record histology using the ICD-O-3, current edition (https://seer.cancer.gov/icd-o-3/) codes in the Numeric Lists/Morphology section (ICD-O-3, pp. 69–104) and in the Alphabetic Index (ICD-O-3, pp. 105– 218).
- Follow the coding rules outlined on pages 20 through 40 of ICD-O-3, current edition.
- Use the current Solid Tumor Rules (https://seer.cancer.gov/tools/solidtumor/) when coding the histology for all reportable solid tumors. These rules are effective for cases diagnosed January 1, 2007, or later. Do not use these rules to abstract cases diagnosed prior to January 1, 2007.
- Review all pathology reports.
- Code the final pathologic diagnosis for solid tumors.
- For lymphomas, leukemias and other hematopoietic tumors, follow the instructions in Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual and the Hematopoietic and Lymphoid Neoplasms Database (Hematopoietic DB)
- The codes for cancer, NOS (8000) and carcinoma, NOS (8010) are **not** interchangeable. If the physician says that the patient has carcinoma, then code carcinoma, NOS (8010).

Examples

Code	Label	Definition
8140	Adenocarcinoma	Final pathologic diagnosis is carcinoma, NOS (8010) of the prostate. Microscopic diagnosis specifies adenocarcinoma (8140) of the prostate.
9680	Diffuse large B-cell lymphoma	Diffuse large B-cell lymphoma, per the WHO Classification of Hematopoietic and Lymphoid Neoplasms.

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Behavior Code

Item #	Length	Allowable Values	Required Status	Date Revised
523	1	0–3	>2001	04/04, 01/10, 01/12, 01/13, 01/15

Description

Records the behavior of the tumor being reported. The fifth digit of the morphology code is the behavior code.

Rationale

The behavior code is used by pathologists to describe whether tissue samples are benign (0), borderline (1), in situ (2), or invasive (3).

Coding Instructions

- Code 3 if any malignant invasion is present, no matter how limited.
- Code 3 if any malignant metastasis to nodes or tissue beyond the primary is present.
- If the specimen is from a metastatic site, code the histology of the metastatic site and code 3 for behavior.
- ***Note***: The ICD-O-3 behavior code for juvenile astrocytoma (9421/1) is coded as 3 by agreement of North American registry standard-setters. Refer to "Case Eligibility" in Section One for information.

Code	Label	Definition
0	Benign	Benign
1	Borderline	Uncertain whether benign or malignant
		Borderline malignancy
		Low malignant potential
		Uncertain malignant potential
2	In situ and synonymous with in situ	Adenocarcinoma in an adenomatous polyp with no invasion of stalk
		Bowen disease (not reportable for C44._)
		Clark level 1 for melanoma (limited to epithelium)
		Comedocarcinoma, noninfiltrating (C50.–)
		Confined to epithelium
		Hutchinson melanotic freckle, NOS (C44.–)
		Intracystic, noninfiltrating.(carcinoma)

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Code	Label	Definition
		Intraductal.(carcinoma)
		Intraepidermal, NOS (carcinoma)
		Intraepithelial, NOS (carcinoma)
		Involvement up to, but not including the basement membrane
		Lentigo maligna (C44.–)
		Lobular neoplasia (C50.–)
		Lobular, noninfiltrating (C50.–) (carcinoma)
		Noninfiltrating (carcinoma)
		Noninvasive (carcinoma only)
		No stromal invasion or involvement
		Papillary, noninfiltrating or intraductal (carcinoma)
		Precancerous melanosis (C44.–)
		Queyrat erythroplasia (C60.–)
3	Invasive	Invasive or microinvasive.

Examples

Code	Reason
3	Intraductal carcinoma (8500/2) with focal areas of invasion
1	Atypical meningioma (9539/1) invading bone of skull (the meninges, which line the skull, are capable of invading into the bone without being malignant; do not code as malignant unless it is specifically mentioned)
3	Malignant GIST

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Grade Clinical

Item #	Length	Allowable Values	Required Status	Date Revised
3843	1	1-5, 8, 9, A, B, C, D, E, L, H, M, S	2018+	01/18

Description

This data item records the grade of a solid primary tumor before any treatment (surgical resection or initiation of any treatment including neoadjuvant).

For cases diagnosed January 1, 2018 and later, this data item, along with *Grade Pathological* [3844] and *Grade Post-Therapy* [3845], replaces *Grade/Differentiation* [440] as well as SSF's for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Rationale

Grade is a measure of the aggressiveness of the tumor. Grade and cell type are important prognostic indicators for many cancers**. For some sites, grade is required to assign the clinical stage group.**

For those cases that are eligible for AJCC staging, the recommended grading system is specified in the AJCC 8th Edition Chapter. The AJCC 8th Edition Chapter-specific grading systems (codes 1-5, L, H, M, S) take priority over the generic grade definitions (codes A-E, 8, 9). For those cases that are not eligible for AJCC staging, if the recommended grading system is not documented, the generic grade definitions would apply.

Coding Instructions

- Please see the following URL for detailed coding instructions and site-specific coding rules: https://www.naaccr.org/SSDI/Grade-Manual.pdf.

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Grade Pathological

Item #	Length	Allowable Values	Required Status	Date Revised
3844	1	1-5, 8, 9, A, B, C, D, E, L, H, M, S	2018+	01/18

Description

This data item records the grade of a solid primary tumor that has been resected and for which no neoadjuvant therapy was administered. If AJCC staging is being assigned, the tumor must have met the surgical resection requirements in the AJCC manual. This may include the grade from the clinical workup. Since all clinical information is used in pathological staging. Record the highest grade documented from any microscopic specimen of the primary site whether from the clinical workup or the surgical resection.

For cases diagnosed January 1, 2018 and later, this data item, along with *Grade Clinical* [3843] and *Grade Post Therapy Path (yp)* [3845], replaces *Grade/Differentiation* [440] as well as SSF's for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Rationale

Grade is a measure of the aggressiveness of the tumor. Grade and cell type are important prognostic indicators for many cancers. For some sites, grade is required to assign the pathological stage group.

For those cases that are eligible AJCC staging, the recommended grading system is specified in the AJCC 8th Edition Chapter. The AJCC 8th Edition Chapter-specific grading systems (codes 1-5, L, H, M, S) take priority over the generic grade definitions (codes A-E, 8, 9). For those cases that are not eligible for AJCC staging, if the recommended grading system is not documented, the generic grade definitions would apply.

Coding Instructions

- Please see the following URL for detailed coding instructions and site-specific coding rules: https://www.naaccr.org/SSDI/Grade-Manual.pdf.

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Diagnostic Confirmation

Item #	Length	Allowable Values	Required Status	Date Revised
490	1	1, 2, 4–9	All Years	01/04, 01/10, 01/11, 01/12, 01/13, 01/23

Description

Records the best method of diagnostic confirmation of the cancer being reported at any time in the patient's history. The rules for coding differ between solid tumors and hematopoietic and lymphoid neoplasms.

Rationale

This item is an indicator of the precision of diagnosis. The percentage of solid tumors that are clinically diagnosed only is an indication of whether casefinding includes sources beyond pathology reports. Complete casefinding must include both clinically and pathologically confirmed cases.

Coding Instructions – Solid Tumors (all tumors *except* M9590-9993)

- These instructions apply to "Codes for Solid Tumors" below. See the section following this one for "Coding Hematopoietic or Lymphoid Tumors (9590-9992)".
- The codes are in **priority order**; code 1 has the highest priority. Always code the procedure with the lower numeric value when presence of cancer is confirmed with multiple diagnostic methods. This data item must be changed to the lower (higher priority) code if a more definitive method confirms the diagnosis at any time during the course of the disease.
- Assign code 1 when the microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, autopsy or D&C or from aspiration of biopsy of bone marrow specimens.
- Assign code 2 when the microscopic diagnosis is based on cytologic examination of cells such as sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears, or from paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid. CoC does not require programs to abstract cases that contain ambiguous terminology regarding a cytologic diagnosis.
- Code 5 when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer.
- Code 6 when the diagnosis is based only on the surgeon's operative report from a surgical exploration or endoscopy or from gross autopsy findings in the absence of tissue or cytological findings.
- Assign code 8 when the case was diagnosed by any clinical method not mentioned in preceding codes. A number of hematopoietic and lymphoid neoplasms are diagnosed by tests of exclusion where the tests for the disease are equivocal and the physician makes a clinical diagnosis based on the information from the equivocal tests and the patient's clinical presentation.

Coding Instructions – Hematopoietic or Lymphoid Tumors (M9590-9993)

- These instructions apply to "Codes for Hematopoietic and Lymphoid Neoplasms" below. See the preceding section for instructions "Coding Solid Tumors".
- There is no priority hierarchy for coding Diagnostic Confirmation for hematopoietic and lymphoid

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tumors. Most commonly, the specific histologic type is diagnosed by immunophenotyping or genetic testing See the Hematopoietic Database (DB) for information on the definitive diagnostic confirmation for specific types of tumors.

- Use code 2 when the microscopic diagnosis is based on cytologic examination of cells (rather than tissue) including but not limited to spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears, or from paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid. These methods are rarely used for hematopoietic or lymphoid tumors.
- Assign code 3 when there is a histology positive for cancer AND positive immunophenotyping and/or positive genetic testing results. Do not use code 3 for neoplasms diagnosed prior to January 1, 2010.
- Assign code 5 when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer, but no positive histologic confirmation.
- Assign code 6 when the diagnosis is based only on the surgeon's report from a surgical exploration or endoscopy or from gross autopsy findings without tissue or cytological findings.
- Assign code 8 when the case was diagnosed by any clinical method not mentioned in preceding codes. A number of hematopoietic and lymphoid neoplasms are diagnosed by tests of exclusion where the tests for the disease are equivocal and the physician makes a clinical diagnosis based on the information from the equivocal tests and the patient's clinical presentation.

Code	Label	Definition
1	Positive histology	Histologic confirmation (tissue microscopically examined).
2	Positive cytology	Cytologic confirmation (no tissue microscopically examined; fluid cells microscopically examined).
3	Positive histology PLUS Positive immunophenotyping AND/OR Positive genetic studies	Histology is positive for cancer, and there are also positive immunophenotyping and/or genetic test results. For example, bone marrow examination is positive for acute myeloid leukemia. (9861/3) Genetic testing shows AML with inv(16)(p13.1q22) (9871/3). (Used only for hematopoietic and lymphoid neoplasms M-9590/3-9993/3)
4	Positive microscopic confirmation, method not specified	Microscopic confirmation is all that is known. It is unknown if the cells were from histology or cytology.
5	Positive laboratory test/marker study	A clinical diagnosis of cancer is based on laboratory tests/marker studies which are clinically diagnostic for cancer.
6	Direct visualization without microscopic confirmation	The tumor was visualized during a surgical or endoscopic procedure only with no tissue resected for microscopic examination.
7	Radiography and other imaging techniques without microscopic confirmation	The malignancy was reported by the physician from an imaging technique report only.
8	Clinical diagnosis only, other than 5, 6 or 7	The malignancy was reported by the physician in the medical record.
9	Unknown whether or not microscopically confirmed	A statement of malignancy was reported in the medical record, but there is no statement of how the cancer was diagnosed (usually nonanalytic).

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Stage of Disease at Diagnosis

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Date of Surgical Diagnostic and Staging Procedure

Item #	Length	Allowable Values	Required Status	Date Revised
1280	8	CCYYMMDD, Blank	All Years	01/10, 01/11, 01/23

Description

Records the date on which the surgical diagnostic and/or staging procedure was performed.

Rationale

This data item is used to track the use of surgical procedure resources that are not considered treatment.

Coding Instructions

- Record the date on which the surgical diagnostic and/or staging procedure described in Surgical Diagnostic and Staging Procedure [1350] was performed at this or any facility.
- Blank is allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this modification does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of Surgical Diagnostic and Staging Procedure is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Surgical Diagnostic and Staging Procedure transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Surgical Diagnostic and Staging Procedure

Item #	Length	Allowable Values	Required Status	Date Revised
1350	2	00–07, 09	All Years	09/06, 09/08, 01/12, 01/15

Description

Identifies the positive surgical procedure(s) performed to diagnose and/or stage disease.

Rationale

This data item is used to track the use of surgical procedure resources that are not considered treatment.

Coding Instructions

- Record the type of procedure performed as part of the initial diagnosis and workup, whether this is done at your institution or another facility.
- Only record positive procedures. For benign and borderline reportable tumors, report the biopsies positive for those conditions. For malignant tumors, report procedures if they were positive for malignancy.
- If both an incisional biopsy of the primary site and an incisional biopsy of a metastatic site are done, use code 02 (Incisional biopsy of primary site).
- If a lymph node is biopsied or removed to diagnose or stage lymphoma, and that node is NOT the only node involved with lymphoma, use code 02. If there is only a single lymph node involved with lymphoma, use the data item *Rx Summ – Surg 2023* [1291] to code these procedures.
- Do not code surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose and/or stage disease in this data item. Use the data item Scope of Regional Lymph Node Surgery [1292] to code these procedures. Do not record the date of surgical procedures which aspirate, biopsy, or remove regional lymph nodes in the data item Date of Surgical Diagnostic and Staging Procedure [1280]. See instructions for Scope of Regional Lymph Node Surgery [1292].
- Code brushings, washings, cell aspiration, and hematologic findings (peripheral blood smears) as positive cytologic diagnostic confirmation in the data item Diagnostic Confirmation [490]. These are not considered surgical procedures and should not be coded in this item.
- Do not code excisional biopsies with clear or microscopic margins in this data item. Use the data item *Rx Summ – Surg 2023* [1291] to code these procedures.
- If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure [1350] data item and the excisional biopsy or more extensive surgery in the *Rx Summ – Surg 2023* data item [1291].
- Do not code palliative surgical procedures in this data item. Use the data item Palliative Procedure [3270] to code these procedures.

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Code	Label
00	No surgical diagnostic or staging procedure was performed.
01	A biopsy (incisional, needle, or aspiration) was done to a site other than the primary site. No exploratory procedure was done.
02	A biopsy (incisional, needle, or aspiration) was done to the primary site; or biopsy or removal of a lymph node to diagnose or stage lymphoma.
03	A surgical exploration only. The patient was not biopsied or treated.
04	A surgical procedure with a bypass was performed, but no biopsy was done.
05	An exploratory procedure was performed, and a biopsy of either the primary site or another site was done.
06	A bypass procedure was performed, and a biopsy of either the primary site or another site was done.
07	A procedure was done, but the type of procedure is unknown.
09	No information of whether a diagnostic or staging procedure was performed.

Examples

Code	Reason
00	A lung cancer primary was diagnosed by CT scan. The patient expired. No surgical diagnostic or staging surgical procedure was performed.
00	A sputum sample is examined cytologically to confirm a diagnosis of suspected lung cancer. The procedure is not surgical.
01	A needle biopsy of a liver metastasis in a patient with suspected widespread colon cancer was done. Gross residual tumor is left at the biopsy site.
03	During abdominal exploratory surgery, a gastric lesion and suspicious retroperitoneal lymph nodes were observed. No biopsy or treatment was done.
04	An abdominal exploration of a patient revealed pancreatic carcinoma with extension into surrounding organs and arteries. No attempt to treat. A bypass was performed to alleviate symptoms.
05	An exploratory procedure was performed for primary colon carcinoma with biopsy of suspicious liver lesions.
06	Esophagogastrostomy was performed for infiltrating gastric tumor following a biopsy of the primary site.
07	Stage III lung carcinoma was diagnosed and staged prior to admission.
09	A patient expires in the emergency room with recently diagnosed metastatic melanoma. It is unknown whether a diagnostic or staging procedure was done.

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Surgical Diagnostic and Staging Procedure at This Facility

Item #	Length	Allowable Values	Required Status	Date Revised
740	2	00–07, 09	All Years	01/04, 09/08, 01/12

Description

Identifies the positive surgical procedure(s) performed to diagnose and/or stage disease.

Rationale

This data item is used to track the use of surgical procedure resources that are not considered treatment.

Coding Instructions

- Record the type of procedure performed as part of the initial diagnosis and workup at this facility.
- Only record positive procedures. For benign and borderline reportable tumors, report the biopsies positive for those conditions. For malignant tumors, report procedures if they were positive for malignancy.
- If both an incisional biopsy of the primary site and an incisional biopsy of a metastatic site are done, use code 02 (Incisional biopsy of primary site).
- If a lymph node is biopsied or removed to diagnose or stage lymphoma, and that node is NOT the only node involved with lymphoma, use code 02. If there is only a single lymph node involved with lymphoma, use the data item Rx Hosp – Surg 2023 [671] to code these procedures.
- Do not code surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose and/or stage disease in this data item. Use the data item Scope of Regional Lymph Node Surgery at This Facility [672] to code these procedures. Do not record the date of surgical procedures which aspirate, biopsy, or remove regional lymph nodes in the data item Date of Surgical Diagnostic and Staging Procedure [1280]. See instructions for Scope of Regional Lymph Node Surgery at This Facility [672].
- Code brushings, washings, cell aspiration, and hematologic findings (peripheral blood smears) as positive cytologic diagnostic confirmation in the data item Diagnostic Confirmation [490]. These are not considered surgical procedures and should not be coded in this item.
- Do not code excisional biopsies with clear or microscopic margins in this data item. Use the data item Rx Hosp – Surg 2023 [671] to code these procedures.
- If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure at this Facility [740] data item and the excisional biopsy or more extensive surgery in the Rx Hosp – Surg 2023 [671].
- Do not code palliative surgical procedures in this data item. Use the data item Palliative Procedure at This Facility [3280] to code these procedures.

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Code	Label
00	No surgical diagnostic or staging procedure was performed.
01	A biopsy (incisional, needle, or aspiration) was done to a site other than the primary site. No exploratory procedure was done.
02	A biopsy (incisional, needle, or aspiration) was done to the primary site; or biopsy or removal of a lymph node to diagnose or stage lymphoma.
03	A surgical exploration only. The patient was not biopsied or treated.
04	A surgical procedure with a bypass was performed, but no biopsy was done.
05	An exploratory procedure was performed, and a biopsy of either the primary site or another site was done.
06	A bypass procedure was performed, and a biopsy of either the primary site or another site was done.
07	A procedure was done, but the type of procedure is unknown.
09	No information of whether a diagnostic or staging procedure was performed.

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Lymphovascular Invasion

Item #	Length	Allowable Values	Required Status	Date Revised
1182	1	0-4, 8-9	2010+	01/11, 01/18, 01/22

Description

Indicates the presence or absence of tumor cells in lymphatic channels (not lymph nodes) or blood vessels within the primary tumor as noted microscopically by the pathologist.

Rationale

Lymphovascular invasion is an indicator of prognosis.

Coding Instructions

- This coding convention has been developed and implemented for use in the AJCC Cancer Staging Manual, Seventh Edition, and updated with new codes in the AJCC 8th Edition staging manual for appropriate disease sites. Additional clarifications implemented for thyroid and adrenal per suggestions from CAP.
- Revised CAP Protocols and 8th Edition chapters will indicate which chapters will use the new codes (2, 3, and 4) and which will only use the existing codes (0, 1, 8, 9), as there are some disease sites where distinguishing between L and V is not medically appropriate.
- Code 8, Not Applicable for benign/borderline brain and CNS tumors and Gastrointestinal Stromal Tumors (GIST).
- For cases diagnosed January 1, 2018 and later, new codes indicating lymphatic, small vessel, and/or large vessel invasion were added.

1. Code from pathology report(s). Code the absence or presence of lymphovascular invasion as described in the medical record.
    a. The primary sources of information about lymphovascular invasion are the pathology check lists (synoptic reports) developed by the College of American Pathologists. If the case does not have a checklist or synoptic report, code from the pathology report or a physician's statement, in that order.
    b. Do not code perineural invasion in this field.
    c. Information to code this field can be taken from any specimen from the primary tumor (biopsy or resection.)
    d. If lymphovascular invasion is identified in any specimen, it should be coded as present/identified.
    e. For cases with benign or borderline behavior , code the lymphovascular invasion documented (negative or positive) and, if not documented, code unknown. Benign/borderline brain and/or CNS and GIST use code 8 (not applicable).
    f. 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.
    g. If LVI was present prior to neoadjuvant therapy (codes 1-4) but LVI was not present after neoadjuvant therapy (codes 0 or 9), code the LVI to present (codes 1-4).
    h. If the 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).

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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*

2. Use of codes.
    a. 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.
    b. Use code 1 when the pathology report or a physician's statement indicates that lymphovascular invasion (or one of its synonyms) is present in the specimen.
    c. Lymphovascular invasion must be coded 0, 1, 2, 3, 4, or 9 for the Schema IDs in the following list:

00071	Lip
00072	Tongue Anterior
00073	Gum
00074	Floor of Mouth
00075	Palate Hard
00076	Buccal Mucosa
00077	Mouth Other
00080	Major Salivary Glands
00100	Oropharynx (p16+)
00111	Oropharynx (p16-)
00112	Hypopharynx
00121	Maxillary Sinus
00122	Nasal Cavity and Ethmoid Sinus
00130	Larynx Other
00131	Larynx Supraglottic
00132	Larynx Glottic
00133	Larynx Subglottic
00161	Esophagus (incl GE Junction) Squamous
00169	Esophagus (incl GE Junction) (excl Squamous)
00170	Stomach
00180	Small Intestine
00190	Appendix
00200	Colon and Rectum
00230	Bile Ducts Intrahepatic

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00250	Bile Ducts Perihilar
00260	Bile Ducts Distal
00270	Ampulla Vater
00280	Pancreas
00290	NET Stomach
00301	NET Duodenum
00302	NET Ampulla of Vater
00320	NET Appendix
00330	NET Colon and Rectum
00340	NET Pancreas
00350	Thymus
00360	Lung
00460	Merkel Cell Skin
00470	Melanoma Skin
00500	Vulva
00510	Vagina
00520	Cervix
00530	Corpus Carcinoma
00541	Corpus Sarcoma
00542	Corpus Adenosarcoma
00560	Placenta
00570	Penis
00590	Testis
00620	Bladder

d. Lymphovascular invasion must be coded 0, 2, 3, 4, or 9 for the Schema IDs in the following list:

00730	Thyroid
00740	Thyroid medullary
00760	Adrenal gland

e. Lymphovascular invasion may be coded any code (0, 1, 2, 3, 4, 8, or 9) for the remaining Schema IDs (shown in the following list):

00060	Cervical Lymph Nodes, Occult Head and Neck
00090	Nasopharynx
00118	Pharynx Other
00119	Middle Ear
00128	Sinus Other
00140	Melanoma Head and Neck
00150	Cutaneous Carcinoma Head and Neck
00210	Anus
00220	Liver
00241	Gallbladder
00242	Cystic Duct
00278	Biliary Other
00288	Digestive Other
00310	Net Jejunum and Ileum
00358	Trachea
00370	Pleural Mesothelioma
00378	Respiratory Other
00381	Bone Appendicular Skeleton
00382	Bone Spine
00383	Bone Pelvis
00400	Soft Tissue Head and Neck
00410	Soft Tissue Trunk and Extremities

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00421	Soft Tissue Abdomen and Thorax
00422	Heart, Mediastinum, and Pleura
00430	GIST (2018-2020)
00440	Retroperitoneum
00450	Soft Tissue Other
00458	Kaposi Sarcoma
00478	Skin Other
00480	Breast (Invasive)
00551	Ovary
00552	Primary Peritoneal Carcinoma
00553	Fallopian Tube
00558	Adnexa Uterine Other
00559	Genital Female Other
00580	Prostate
00598	Genital Male Other
00600	Kidney Parenchyma
00610	Kidney Renal Pelvis
00631	Urethra
00633	Urethra-Prostatic
00638	Urinary Other
00640	Skin Eyelid
00650	Conjunctiva
00660	Melanoma Conjunctiva
00671	Melanoma Iris
00672	Melanoma Choroid and Ciliary Body
00680	Retinoblastoma
00690	Lacrimal Gland
00698	Lacrimal Sac
00700	Orbital Sarcoma
00718	Eye Other
00721	Brain
00722	CNS Other
00723	Intracranial Gland
00750	Parathyroid
00770	NET Adrenal Gland
00778	Endocrine Other
99999	Ill-Defined Other

f. Lymphovascular invasion must be coded 8 (not applicable) for all other Schema IDs:

00430	GIST (2021+)
00710	Lymphoma Ocular Adnexa
00790	Lymphoma
00795	Lymphoma (CLL/SLL)
00811	Mycosis Fungoides
00812	Primary Cutaneous Lymphoma non MF
00821	Plasma Cell Myeloma
00822	Plasma Cell Disorder
00830	HemeRetic

g. Use code 9 when:

i. there is no microscopic examination of a primary tissue specimen
ii. the primary site specimen is cytology only or a fine needle aspiration
iii. the biopsy is only a very small tissue sample

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iv. it is not possible to determine whether lymphovascular invasion is present
v. the pathologist indicates the specimen is insufficient to determine lymphovascular invasion
vi. lymphovascular invasion is not mentioned in the pathology report
vii. primary site is unknown

h. Clarification between codes 8 and 9:

- Code 8 should only be used in the following situations:
  1. Standard-setter does not require this item and you are not collecting it.
  2. Those schemas noted above described in code 8 for which LVI is always not applicable.
- For those cases where there is no information/documentation from the pathology report or other sources, use code 9.

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

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Macroscopic Evaluation of the Mesorectum

Item #	Length	Allowable Values	Required Status	Date Revised
3950	2	00, 10,20, 30, 40, 99 or Blank	2022+	01/22, 01/23

Description

This data item records whether a Total Mesorectal Excision (TME) was performed and the macroscopic evaluation of the completeness of the excision. Collect on all cases after implementation date regardless of date of diagnosis.

Rationale

Numerous studies have demonstrated that total mesorectal excision (TME) improves local recurrence rates and the corresponding survival by as much as 20%. Macroscopic pathologic assessment of the completeness of the mesorectum, scored as complete, partially complete, or incomplete, accurately predicts both local recurrence and distant metastasis.

Coding Instructions

- The American Society of Colon and Rectal Surgeons most recent Practice Parameters for the Management of Rectal Cancer states that total mesorectal excision is used for curative resection of tumors of the middle and lower thirds of the rectum, either as part of low anterior or abdomino- perineal resection. For tumors of the upper third of the rectum, a tumor-specific mesorectal excision should be used with the mesorectum divided ideally no less than 5 cm below the lower margin of the tumor. Pathologic evaluation of the resection specimen has been shown to be a sensitive means of assessing the quality of rectal surgery.
- Macroscopic pathologic assessment of the completeness of the mesorectum, is scored as complete, partially complete, or incomplete.
- Information for this data item comes from the pathology report only.
- Leave this field blank if primary site is other than C20.9
- Neoadjuvant therapy does not alter coding of this data item
- Code 00 if patient did not have a Total Mesorectal Excision.
- Codes 10, 20, and 30 must be based on pathology report
- Registrar should not assign codes 10-30 based on criteria used by pathologist to assess completeness status
- If the pathologist does not indicate incomplete, nearly complete, or complete for a TME specimen assign code 40.

Code	Label
00	Patient did not receive TME
10	Incomplete TME
20	Nearly Complete
30	Complete TME
40	TME performed not specified on pathology report as incomplete, nearly complete, or complete TME performed but pathology report not available Physician statement that TME performed, no mention of incomplete, nearly complete or complete status
99	UNKNOWN if TME performed
BLANK	Site not rectum (C20.9)

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Sentinel and Regional Lymph Nodes

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Date of Sentinel Lymph Node Biopsy

Item #	Length	Allowable Values	Required Status	Date Revised
832	8	CCYYMMDD, Blank	2018+	01/18, 01/23

Description

Records the date of the sentinel lymph node(s) biopsy procedure. This data item is required for CoC-accredited facilities for cases diagnosed 01/01/2018 and later. **This data item is required for breast and cutaneous melanoma cases only.**

Rationale

It is a known fact that sentinel lymph node biopsies have been under-reported. Additionally, the timing and results of sentinel lymph node biopsy procedures are used in quality of care measures. This data item can be used to more accurately assess the date of the sentinel lymph node biopsy procedure separate from the date of a subsequent regional node dissection procedure, if performed.

Coding Instructions

- Record the date of the sentinel lymph node biopsy procedure documented in the Sentinel Lymph Node Examined [834].
- This data items documents the date of sentinel node biopsy; do not record the date of lymph node aspiration, fine needle aspiration, fine needle aspiration biopsy, core needle biopsy, or core biopsy.
- Sentinel node procedures are common for other sites, but data is only collected in these fields for breast and cutaneous melanoma. Use the AJCC N suffix to designate sentinel node procedures for ALL sites.
- If the sentinel lymph node biopsy is the first or only surgical procedure performed, record the date documented in this data item in the Date First Surgical Procedure [1200].
- If separate sentinel node biopsy procedure and subsequent regional node dissection procedure are performed, record the date of the sentinel lymph node biopsy in this data item, and record the date the subsequent regional node dissection was performed in the Date Regional Lymph Node Dissection [682].
- If a sentinel lymph node biopsy is performed in the same procedure as the regional node dissection, record the date of the procedure in both this data item and in the Date of Regional Lymph Node Dissection [682] (i.e., the dates should be equal).
- Blank is allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of Sentinel Lymph Node Biopsy is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Sentinel Lymph Node Biopsy transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Sentinel Lymph Nodes Examined

Item #	Length	Allowable Values	Required Status	Date Revised
834	2	00-90, 95, 98, 99, Blank	2018+	01/18, 01/22

Description

Records the total number of lymph nodes sampled during the sentinel node biopsy and examined by the pathologist. This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018 and later. **This data item is required for breast and cutaneous melanoma cases only.**

Rationale

It is a known fact that sentinel lymph node biopsies have been under-reported. Additionally, the timing and results of sentinel lymph node biopsy procedures are used in quality of care measures. This data item can be used to more accurately assess the number of lymph nodes biopsied during the sentinel node biopsy procedure separate from the number of lymph nodes dissected during additional subsequent regional node procedures.

Coding Instructions

- If, during a sentinel node biopsy procedure, a few non-sentinel nodes happen to be sampled, document the **total number of nodes sampled during the sentinel node procedure** in this data item. I.e., record the total number of nodes from the sentinel node biopsy procedure regardless of sentinel node status.
- If a sentinel node biopsy procedure and then a subsequent, separate regional node dissection procedure are performed, record the total number of nodes biopsied during the sentinel node procedure in this data item, and record the total number of regional lymph nodes biopsied/dissected (**which includes the number of nodes documented in this data item**) in Regional Lymph Nodes Examined [830].
- If a sentinel lymph node biopsy is performed during the same procedure as the regional node dissection, record the total number of nodes biopsied during the sentinel node procedure in this data item, and record the total number of regional lymph nodes biopsied/dissected (**which includes the number of nodes documented in this data item**) in Regional Lymph Nodes Examined [830].
- If aspiration of sentinel lymph node(s) AND a sentinel node biopsy procedure were performed for same patient, record the results for the sentinel node biopsy.
- The number of sentinel lymph nodes examined will typically be found in the pathology report; radiology reports, or documented by the physician. Determination of the exact number of sentinel lymph nodes examined may require assistance from the managing physician for consistent coding.
- Sentinel node procedures are common for other sites, but data is only collected in these fields for breast and cutaneous melanoma. Use the AJCC N suffix to designate sentinel node procedures for ALL sites.
- The number of sentinel nodes should be equal to or less than the number of regional nodes examined recorded in the Regional Lymph Nodes Examined [830] data item.

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Code	Label
00	No sentinel nodes were examined
01-90	Sentinel nodes were examined (code the exact number of sentinel lymph nodes examined)
95	No sentinel nodes were removed, but aspiration of sentinel node(s) was performed
98	Sentinel lymph nodes were biopsied, but the number is unknown
99	It is unknown whether sentinel nodes were examined; not applicable; not stated in medical record

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Sentinel Lymph Nodes Positive

Item #	Length	Allowable Values	Required Status	Date Revised
835	2	00-90, 95, 97-99, Blank	2018+	01/18, 01/22

Description

Records the exact number of sentinel lymph nodes biopsied by the pathologist and found to contain metastases. This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018 and later. **This data item is required for breast and cutaneous melanoma cases only.**

Rationale

It is a known fact that sentinel lymph node biopsies have been under-reported. Additionally, the timing and results of sentinel lymph node biopsy procedures are used in quality of care measures. This data item can be used to more accurately assess the number of positive sentinel lymph nodes biopsied separate from the number of positive lymph nodes identified during additional subsequent regional node dissection procedures, if performed.

Coding Instructions

- If, during a sentinel node biopsy procedure, a few non-sentinel nodes happen to be sampled and are positive, document the **total number of positive nodes identified during the sentinel node procedure** in this data item. I.e., record the total number of positive nodes from the sentinel node biopsy procedure regardless of whether the nodes contain dye or colloidal material (tracer or radiotracer).
- If both a sentinel node biopsy procedure and then a subsequent, separate regional node dissection procedure are performed, record the total number of **positive sentinel nodes** identified during the sentinel node procedure in this data item, and record the total number of positive regional lymph nodes biopsied/dissected (**which includes the number of sentinel nodes documented in this data item**) in Regional Lymph Nodes Positive [820].
- If a positive aspiration of sentinel lymph node(s) AND a positive sentinel node biopsy procedure were performed for same patient, record the results for the positive sentinel node biopsy procedure.
- Sentinel node procedures are common for other sites, but data is only collected in these fields for breast and cutaneous melanoma. Use the AJCC N suffix to designate sentinel node procedures for ALL sites.
- **FOR BREAST ONLY**: If a sentinel lymph node biopsy is performed **during the same procedure** as the regional node dissection, use code 97 in this data item, and record the total number of positive regional lymph nodes biopsied/dissected (both sentinel and regional) in Regional Lymph Nodes Positive [820].
- The CAP Protocol for Breast is designed to capture information from the resection (there is no diagnostic protocol for breast). As a result, when the sentinel lymph node biopsy is performed during the same procedure as the regional node dissection, only the overall total number of positive regional nodes (both sentinel and regional) is recorded; the number of positive sentinel nodes is not captured.
- **FOR MELANOMA ONLY:** If a sentinel lymph node biopsy is performed **during the same procedure** as the regional node dissection, record the total number of **positive sentinel nodes** identified in this data item, and record the total number of positive regional lymph nodes identified (**which includes the number of positive sentinel nodes documented in this data item**) in Regional Lymph Nodes Positive [820].

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- When the sentinel lymph node biopsy is performed during the same procedure as the regional node dissection the CAP Protocol for Melanoma captures both the number of positive sentinel nodes as well as the number of positive regional nodes (i.e., the number of positive sentinel nodes is captured).
- The number of sentinel lymph nodes biopsied and found positive will typically be found in the pathology report; radiology reports, or documented by the physician. Determination of the exact number of sentinel lymph nodes positive may require assistance from the managing physician for consistent coding.
- The number of sentinel nodes positive should be less than or equal to than the total number of Regional Nodes Positive [820].
- For carcinoma of the breast, if only positive Isolated Tumor Cells (ITC) are identified the sentinel lymph nodes are considered **negative**.
- For melanoma, if only positive Isolated Tumor Cells (ITC) are identified the sentinel lymph nodes are considered **positive**.
- mi (microscopic or micro mets) sentinel lymph nodes are considered positive.

Code	Label
00	All sentinel nodes examined are negative
01-90	Sentinel nodes are positive (code exact number of nodes positive)
95	Positive aspiration of sentinel lymph node(s) was performed
97	Positive sentinel nodes are documented, but the number is unspecified; For breast ONLY: SLN and RLND occurred during the same procedure
98	No sentinel nodes were biopsied
99	It is unknown whether sentinel nodes are positive; not applicable; not stated in medical record

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Date Regional Lymph Node Dissection

Item #	Length	Allowable Values	Required Status	Date Revised
682	8	CCYYMMDD, Blank	2018+	01/18

Description

Records the date non-sentinel regional node dissection was performed. This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018 and later.

Rationale

It is a known fact that sentinel lymph node biopsies have been under-reported. Additionally, the timing and results of sentinel lymph node biopsy procedures are used in quality of care measures. This data item can be used to more accurately assess the date of regional node dissection separate from the date of sentinel lymph node biopsy if performed.

Coding Instructions

- Record the date of regional lymph node dissection documented in the Regional Lymph Nodes Examined [830].
- Sentinel node procedures are common for other sites, but data is only collected in these fields for breast and cutaneous melanoma. Use the AJCC N suffix to designate sentinel node procedures for ALL sites.
- **For Breast and Melanoma cases**, if both a sentinel node biopsy procedure and then a subsequent, separate regional node dissection procedure are performed, record the date of the regional lymph node dissection in this data item and record the date of the sentinel node biopsy procedure in the Date of Sentinel Lymph Node Biopsy [832].
- If a sentinel lymph node biopsy is **performed in the same procedure** as the regional node dissection, record the date of the procedure in both this data item and in the Date of Sentinel Lymph Node Biopsy [832] data item (i.e., the dates should be equal).
- **For all other cases**, record the date of the regional lymph node dissection in this data item.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The interoperable form of Date Regional Lymph Node Dissection transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Regional Lymph Nodes Examined

Item #	Length	Allowable Values	Required Status	Date Revised
830	2	00–90, 95–99	All Years	09/06, 01/10, 2/21, 01/22, 1/23

Description

Records the total number of regional lymph nodes that were removed and examined by the pathologist. Beginning with cases diagnosed on or after January 1, 2004, this item became a component of the Collaborative Staging System (CS). In 2016, use of CS was discontinued, however this data item continued to be required.

Rationale

This data item serves as a quality measure of the pathologic and surgical evaluation and treatment of the patient.

Coding Instructions

- **Regional lymph nodes only.** Record information about only regional lymph nodes in this field. 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 preoperative treatment.
- **Use of Code 00.** Code 00 may be used in several situations.
    - 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.
- **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 coded to 95.
    - 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.
    - If the aspiration or core biopsy is from a node in a different node region, include the node in the count of Regional Nodes Examined.
    - If the location of the lymph node that is aspirated or core-biopsied is not known, assume it is part of the lymph node chain surgically removed, and do not include it in the count of Regional Nodes Examined.
    - When neither the type of lymph node removal procedure nor the number of lymph nodes examined is known, use code 98.
- **Priority of lymph node counts.** If there is a discrepancy regarding the number of lymph nodes examined, use information in the following priority: final diagnosis, synoptic report (also known as CAP protocol or pathology report checklist), microscopic, gross.

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- **Use of code 95.** Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue).
- **Lymph node biopsy.** If a lymph node biopsy was performed, code the number of nodes removed, if known. If the number of nodes removed by biopsy is not known, use code 96.
- **Definition of "sampling" (code 96).** 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.
- **Definition of "dissection" (code 97).** 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.
- **Multiple lymph node procedures.** 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.
- **Use of Code 99.** If it is unknown whether nodes were removed or examined, code as 99.
- Use code **99** for
    a. Any case coded to primary site: C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809
    b. Lymphoma 00790
    c. Lymphoma-CLL/SLL 00795
    d. Plasma Cell Disorders (excluding 9734/3) 00822
    e. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424)
    f. Ill-Defined/Other 99999
    g. Cases with no information about positive regional lymph nodes
- When definition of regional nodes differs between the AJCC Cancer Staging Manual and the SEER Program Coding and Staging Manual, use the AJCC definition.

Code	Label
00	No nodes were examined
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 regional nodes were removed, but aspiration of regional nodes was performed
96	Regional lymph node removal was documented as a sampling, and the number of nodes is unknown/not stated
97	Regional lymph node removal was documented as a dissection, and the number of nodes is unknown/not stated
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 examined; not applicable or negative; not stated in medical record

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Regional Lymph Nodes Positive

Item #	Length	Allowable Values	Required Status	Date Revised
820	2	00–99	All Years	09/06, 01/10, 2/21, 01/22, 1/23

Description

Records the exact number of regional lymph nodes examined by the pathologist and found to contain metastases. Beginning with cases diagnosed on or after January 1, 2004, this item became a component of the Collaborative Staging System (CS). In 2016, use of CS was discontinued, however this data item continued to be required.

Rationale

This data item is necessary for pathological staging, and it serves as a quality measure for pathology reports and the extent of the surgical evaluation and treatment of the patient.

Coding Instructions

- **Regional lymph nodes only.** Record information about only regional lymph nodes in this field. 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 preoperative 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 remove lymph nodes through the completion of surgeries in the first course of treatment.
  - 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 when there are positive nodes in the resection. In other words, if there are positive regional lymph nodes in a lymph node dissection, do not count the core needle biopsy or the fine needle aspiration if it is in the same chain. See also Use of Code 95 below.
  - If the aspiration or core biopsy is from a node in a different node region, include the node in the count of Regional Nodes Positive.
  - If the location of the lymph node that is core-biopsied or aspirated is not known, assume it is part of the lymph node chain surgically removed, and do not include it in the count of Regional Nodes Positive.
- **Priority of lymph node counts.** If there is a discrepancy regarding the number of positive lymph nodes, use information in the following priority: final diagnosis, synoptic report (also known as CAP protocol or pathology report checklist), microscopic, gross.
- **Positive Nodes in Multiple Primaries in Same Organ.** If there are multiple primary cancers with different histologic types in the same organ and the pathology report just states the number of nodes positive, the registrar should first try to determine the histology of the metastases in the nodes and code the nodes as positive for the primary with that histology. If no further information is available, code the nodes as positive for all primaries.
- **Isolated tumor cells (ITCs) in lymph nodes.** For all primary sites except cutaneous melanoma and Merkel cell carcinoma of skin, count only lymph nodes that contain micrometastases or larger (metastases greater than 0.2 millimeters in size). Do not include in the count of lymph nodes positive

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any nodes that are identified as containing isolated tumor cells (ITCs). If the path report indicates that nodes are positive but the size of metastasis is not stated, assume the metastases are larger than 0.2 mm and count the lymph node(s) as positive.

- **For cutaneous melanoma and Merkel cell carcinoma**, count nodes with ITCs as positive lymph nodes.
- **Use of Code 95.** Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue). Use code 95 when a positive lymph node is aspirated and there are no surgically resected lymph nodes. Use code 95 when a positive lymph node is aspirated and surgically resected lymph nodes are negative.
- **Definition of Code 97.** 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.
- **Use of Code 98.** Code 98 may be used in several situations. 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.
- **Use of code 99.** Use code 99 if it is unknown whether regional lymph nodes are positive.
- Use code 99 for
    a. Any case coded to primary site: C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809
    b. Lymphoma 00790
    c. Lymphoma-CLL/SLL 00795
    d. Plasma Cell Disorders (excluding 9734/3) 00822
    e. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424)
    f. Ill-Defined/Other 99999
    g. Cases with no information about positive regional lymph nodes
    - When definition of regional nodes differs between the AJCC Cancer Staging Manual and the SEER Program Coding and Staging Manual use the AJCC definition.

Code	Label
00	All nodes examined are negative
01-89	1-89 nodes are positive (code exact number of nodes positive)
90	90 or more nodes are positive
95	Positive aspiration of lymph node(s) was performed
97	Positive nodes are documented, but the number is unspecified
98	No nodes were examined
99	It is unknown whether nodes are positive; not applicable; not stated in medical record

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Tumor Size and Mets

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Tumor Size Summary

Item #	Length	Allowable Values	Required Status	Date Revised
756	3	000-990, 998, 999	2016+	01/16, 2/21, 01/22

Description

This data item records the most accurate measurement of a solid primary tumor, usually measured on the surgical resection specimen.

Rationale

Tumor size is one indication of the extent of disease. As such, it is used by both clinicians and researchers. Tumor size that is independent of stage is also useful for quality assurance efforts.

Coding Instructions

Note: All measurements should be in millimeters (mm).

Record size in specified order:

1. Size measured on the surgical resection specimen, when surgery is administered as the first definitive treatment, i.e., no pre-surgical treatment administered.
   If there is a discrepancy among tumor size measurements in the various sections of the pathology report, code the size from the synoptic report (also known as CAP protocol or pathology report checklist).
   If only a text report is available, use: final diagnosis, microscopic, or gross examination, in that order.
   Example: Chest x-ray shows 3.5 cm mass; the pathology report from the surgery states that the same mass is malignant and measures 2.8 cm. Record tumor size as 028 (28 mm).
   Example: Pathology report states lung carcinoma is 2.1 cm x 3.2 cm x 1.4 cm. Record tumor size as 032 (32 mm).
2. 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 unknown code size as 999.
   Example: Patient has a 2.2 cm mass in the oropharynx; find needle aspiration of mass confirms squamous cell carcinoma. Patient receives a course of neoadjuvant combination chemotherapy. Pathologic size after total resection is 2.8 cm. Record tumor size as 022 (22mm).
3. 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 other form of treatment (See Coding Rules below).
4. If 1, 2, and 3 do not apply, the largest size from all information available within four months of the date of diagnosis, in the absence of disease progression.

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Coding Rules

1. Tumor size is the **diameter** of the tumor, **not the depth or thickness** of the tumor.
2. Recording less than/greater than Tumor Size:
    a. If tumor size is reported as less than x mm or less than x cm, the reported tumor size should be 1 mm less; for example if size is <10 mm, code size as 009. Often these are given in cm such as < 1 cm which is coded as 009, < 2 cm is coded as 019, < 3 cm is coded as 029, < 4 cm is coded as 039, < 5 cm is coded as 049. If stated as less than 1 mm, use code 001.
    b. If tumor size is reported as more than x mm or more than x cm, code size as 1 mm more; for example if size is >10 mm, size should be coded as 011. Often these are given in cm such as > 1 cm, which is coded as 011, > 2 cm is coded as 021, > 3 cm is coded as 031, > 4 cm is coded as 041, > 5 cm is coded as 051. If described as anything greater than 989 mm (98.9 cm) code as 989.
    c. If tumor size is reported to be between two sizes, record tumor size as the midpoint between the two: i.e., add the two sizes together and then divide by two ("between 2 and 3 cm" is coded as 025).
3. **Rounding**: Round the tumor size only if it is described in fractions of millimeters. If the largest dimension of a tumor is less than 1 millimeter (between 0.1 and 0.9 mm), record size as 001 (do not round down to 000). If tumor size is greater than 1millimeter, round tenths of millimeters in the 1-4 range down to the nearest whole millimeter, and round tenths of millimeters in the 5-9 range up to the nearest whole millimeter. Do not round tumor size expressed in centimeters to the nearest whole centimeter (rather, move the decimal point one space to the right, converting the measurement to millimeters). For breast cancer, please follow the AJCC 8th Edition, Breast Chapter.

    Examples:

    Breast cancer described as 6.5 millimeters in size. Round up *Tumor Size as 007*.

    Cancer in polyp described as 2.3 millimeters in size. Round down *Tumor Size as 002*. Focus of cancer described as 1.4 mm in size. *Round down as 001*.

    5.2 mm breast cancer. *Round down to 5 mm and code as 005*.

4. **Priority of imaging/radiographic techniques**: 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.
5. **Tumor size discrepancies among imaging and radiographic reports**: If there is a difference in reported tumor size among imaging and radiographic techniques, unless the physician specifies which imaging is most accurate, record the largest size in the record, regardless of which imaging technique reports it.
6. **Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastasis**. However, if the tumor is described as a "cystic mass," and only the size of the entire mass is given, code the size of the entire mass, since the cysts are part of the tumor itself.
7. Record the size of the invasive component, if given.
    a. If both an in situ and an invasive component are present and the invasive component is measured, record the size of the invasive component even if it is smaller.

        Example: Tumor is mixed in situ and invasive adenocarcinoma, total 3.7 cm in size, of which 1.4 cm is invasive. Record tumor size as 014 (14 mm)

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b. If the size of the invasive component is not given, record the size of the entire tumor from the surgical report, pathology report, radiology report or clinical examination.

Example: A breast tumor with infiltrating duct carcinoma with extensive in situ component; total size 2.3 cm. Record tumor size as 023 (23 mm).

Example: Duct carcinoma in situ measuring 1.9 cm with an area of invasive ductal carcinoma. Record tumor size as 019 (19 mm).

8. Record the largest dimension or diameter of tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor.

    i. *Example*: Tumor is described as 2.4 x 5.1 x 1.8 cm in size. Record tumor size as 051 (51 mm).

9. Record the size as stated for purely in situ lesions.
10. **Disregard microscopic residual or positive surgical margins when coding tumor size**. Microscopic residual tumor does not affect overall tumor size. The status of primary tumor margins may be recorded in a separate data item.
11. **Do not add the size of pieces or chips together to create a whole**; they may not be from the same location, or they may represent only a very small portion of a large tumor. However, if the pathologist states an aggregate or composite size (determined by fitting the tumor pieces together and measuring the total size), record that size. If the only measurement describes pieces or chips, record tumor size as 999.
12. **Multifocal/multicentric tumors**: If the tumor is multi-focal or if multiple tumors are reported as a single primary, code the size of the largest invasive tumor or if all of the tumors are in situ, code the size of the largest in situ tumor.
13. **Tumor size code 999 is used when size is unknown or not applicable**. Sites/morphologies where tumor size is not applicable are listed here.
    Primary sites: C420, C421, C423-C424, C770-C779 or C809
    - Hematopoietic, Reticuloendothelial, and Myeloproliferative neoplasms: histology codes 9590-9993
        - *Excludes* cases collected in the following schemas: Lymphoma Ocular Adnexa, Primary Cutaneous Lymphomas, Mycosis Fungoides and lymphomas that are collected in the Brain, CNS Other and Intracranial Gland Schemas
    - Kaposi Sarcoma
    - Melanoma Choroid
    - Melanoma Ciliary Body
    - Melanoma Iris
14. Tumor size code 000 is used for the following schema:
    ii. Schema is Cervical Lymph Nodes and Unknown Primary 00060
    iii. Occult Cervical Lymph Node (See STORE, Overview of Coding Principles, page 44).
15. Document the information to support coded tumor size in the appropriate text data item of the abstract.

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16. Tumor size is also important for staging for the following sites/schemas and schema IDs:
    Schema (Schema ID)

00760	Adrenal Gland
00210	Anus
00260	Bile Duct Distal
00230	Bile Ducts Intrahepat
00381	Bone Appendicular Skeleton
00383	Bone Pelvis
00480	Breast
00076	Buccal Mucosa
00520	Cervix
00650	Conjunctiva
00541	Corpus Sarcoma
00150	Cutaneous Carcinoma of Head and Neck
00074	Floor of Mouth
00430	GIST
00073	Gum
00112	Hypopharynx
00600	Kidney Parenchyma
00690	Lacrimal Gland
00071	Lip
00220	Liver
00360	Lung
00080	Major Salivary Glands
00460	Merkel Cell Skin
00077	Mouth Other
00770	NET Adrenal Gland
00320	NET Appendix
00330	NET Colon and Rectum
00340	NET Pancreas
00290	NET Stomach
00700	Orbital Sarcoma
00111	Oropharynx (p16-)
00100	Oropharynx HPV-Mediated (p16+)
00075	Palate Hard
00280	Pancreas
00812	Primary Cutaneous Lymphomas (excluding Mycosis Fungoides)
00440	Retroperitoneum
00640	Skin Eyelid
00400	Soft Tissues Head and Neck
00410	Soft Tissues Trunk and Extremities
00730	Thyroid
00740	Thyroid Medullary
00072	Tongue Anterior
00510	Vagina
00500	Vulva

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Code	Label
000	No mass/tumor found
001	1 mm or described as less than 1 mm
002-988	Exact size in millimeters (2 mm to 988 mm)
989	989 millimeters or larger
990	Microscopic focus or foci only and no size of focus is given
998	SITE-SPECIFIC CODES Alternate descriptions of tumor size for specific sites: Familial/multiple polyposis: Rectosigmoid and rectum (C19.9, C20.9) Colon (C18.0, C18.2-C18.9) If no size is documented: Circumferential: Esophagus (C15.0-C15.5, C15.8-C15.9) Diffuse; widespread: 3/4s or more; linitis plastica: Stomach and Esophagus GE Junction (C16.0-C16.6, C16.8-C16.9) Diffuse, entire lung or NOS: Lung and main stem bronchus (C34.0-C34.3, C34.8-C34.9) Diffuse: Breast (C50.0-C50.6, C50.8-C50.9)
999	Unknown; size not stated Not documented in medical record Size of tumor cannot be assessed Not applicable

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Mets at Diagnosis – Bone

Item #	Length	Allowable Values	Required Status	Date Revised
1112	1	0, 1, 8, 9	2016+	01/16, 02/21, 01/22, 1/23

Description

This data item identifies whether bone is an involved metastatic site. The six Mets at Dx-Metastatic Sites data items provide information on specific metastatic sites for data analysis.

Rationale

Information on site of metastatic disease at diagnosis has prognostic implications to survival among patients with initial late stage disease. Capturing data on where the patient's metastatic lesions (including the number of locations) will be an important variable to include when looking at survival. Survival among metastatic patients is becoming increasingly important for cancer survivors. CoC requires this data item be recorded in its accredited program cancer registries beginning with cases diagnosed January 1, 2016.

Coding Instructions

1. **Code information about bone metastases only** (discontinuous or distant metastases to bone) identified at the time of diagnosis. This data item should not be coded for bone marrow involvement.
    a. Bone involvement may be single or multiple
    b. Information about bone involvement may be clinical or pathological
    c. Code this data item for bone metastases even if the patient had any preoperative systemic therapy
    d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites
2. **Use of codes**. Assign the code that best describes whether the case has bone metastases at diagnosis.
    a. Use code 0 when the medical record
        i. indicates that there are no distant (discontinuous) metastases at all
        ii. includes a clinical or pathologic statement that there are no bone metastases
        iii. includes imaging reports that are negative for bone metastases
        iv. indicates that the patient has distant (discontinuous) metastases but bone is not mentioned as an involved site

        ***Example*:** use code 0 when the patient has lung and liver metastases but not bone
    b. Use code 0 when:
        i. Tumor is a borderline or benign brain or CNS tumor
        ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

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c. Use code 1 when the medical record
   i. indicates that the patient has distant (discontinuous) metastases and bone is mentioned as an involved site
   ii. indicates that bone is the primary site and there are metastases in a different bone or bones
   iii. do not assign code 1 for a bone primary with multifocal bone involvement of the same bone
   iv. indicates that the patient is diagnosed as an unknown primary (C80.9) and bone is mentioned as a distant metastatic site
d. Use code 8 (Not applicable) for the following site/histology combinations for which a code for distant metastasis is not clinically relevant
   i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
e. Use code 9 when it cannot be determined from the medical record whether the patient specifically has bone metastases; for example, when there is documentation of carcinomatosis but bone is not specifically mentioned as a metastatic site. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include bone.

Code	**Label**
0	None; no bone metastases
1	Yes; distant bone metastases
8	Not applicable
9	Unknown whether bone is an involved metastatic site Not documented in patient record

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Mets at Diagnosis – Brain

Item #	Length	Allowable Values	Required Status	Date Revised
1113	1	0, 1, 8, 9	2016+	01/16, 02/21, 01/22, 1/23

Description

This data item identifies whether brain is an involved metastatic site. The six Mets at Dx-Metastatic Sites data items provide information on specific metastatic sites for data analysis.

Rationale

Information on site of metastatic disease at diagnosis has prognostic implications to survival among patients with initial late stage disease. Capturing data on where the patient's metastatic lesions (including the number of locations) will be an important variable to include when looking at survival. Survival among metastatic patients is becoming increasingly important for cancer survivors. CoC requires this data item be recorded in its accredited program cancer registries beginning with cases diagnosed January 1, 2016.

Coding Instructions

1. **Code information about brain metastases only** (discontinuous or distant metastases to brain) identified at the time of diagnosis. This data item should not be coded for involvement of spinal cord or other parts of the central nervous system.
    a. Brain involvement may be single or multiple
    b. Information about brain involvement may be clinical or pathological
    c. Code this data item whether or not the patient had any preoperative systemic therapy
    d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites
2. **Use of codes**. Assign the code that best describes whether the case has brain metastases at diagnosis.
    a. Use code 0 when the medical record
        i. indicates that there are no distant (discontinuous) metastases at all
        ii. includes a clinical or pathologic statement that there are no brain metastases
        iii. includes imaging reports that are negative for brain metastases
        iv. indicates that the patient has distant (discontinuous) metastases but brain is not mentioned as an involved site

        ***Example*:** use code 0 when the patient has lung and liver metastases but not brain
    b. Use code 0 when:
        i. Tumor is a borderline or benign brain or CNS tumor
        ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)
    c. Use code 1 when the medical record
        i. indicates that the patient has distant (discontinuous) metastases and brain is mentioned as an involved site
        ii. indicates that the patient is diagnosed as an unknown primary (C80.9) and brain is mentioned as a distant metastatic site

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d. Use code 8 (Not applicable) for the following site/histology combinations for which a code for distant metastasis is not clinically relevant
    i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
e. Use code 9 when it cannot be determined from the medical record whether the patient specifically has brain metastases; for example, when there is documentation of carcinomatosis but brain is not specifically mentioned as a metastatic site. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include brain.

Code	**Label**
0	None; no brain metastases
1	Yes; distant brain metastases
8	Not applicable
9	Unknown whether brain is involved metastatic site Not documented in patient record

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Mets at Diagnosis – Distant Lymph Nodes

Item #	Length	Allowable Values	Required Status	Date Revised
1114	1	0, 1, 8, 9	2016+	01/16, 02/21, 1/23

Description

This data item identifies whether distant lymph node(s) are an involved metastatic site. The six Mets at Dx-Metastatic Sites data items provide information on specific metastatic sites for data analysis.

Rationale

Information on site of metastatic disease at diagnosis has prognostic implications to survival among patients with initial late stage disease. Capturing data on where the patient's metastatic lesions (including the number of locations) will be an important variable to include when looking at survival. Survival among metastatic patients is becoming increasingly important for cancer survivors. CoC requires this data item be recorded in its accredited program cancer registries beginning with cases diagnosed January 1, 2016.

Coding Instructions

1. **Code information about distant lymph node(s) metastases only** (metastases to distant lymph nodes) identified at the time of diagnosis.
   a. Distant lymph node involvement may be single or multiple
   b. Information about distant lymph node involvement may be clinical or pathological
   c. Code this data item whether or not the patient had any preoperative systemic therapy
   d. This data item should not be coded for regional lymph node involvement with the exception of lymph nodes for placenta which are in the M1 category
   e. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites.
2. **Use of codes**. Assign the code that best describes whether the case has distant lymph node metastases at diagnosis.
   a. Use code 0 when the medical record
      i. indicates that there are no distant (discontinuous) metastases at all
      ii. includes a clinical or pathologic statement that there are no distant lymph node metastases
      iii. includes imaging reports that are negative for distant lymph node metastases
      iv. indicates that the patient has distant (discontinuous) metastases but distant lymph node(s) are not mentioned as an involved site

      ***Example*:** use code 0 when the patient has lung and liver metastases but not distant lymph node(s).
   b. Use code 0 when:
      i. Tumor is a borderline or benign brain or CNS tumor
      ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

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c. Use code 1 when the medical record
    i. indicates that the patient has distant (discontinuous) metastases and distant lymph node(s) are mentioned as an involved site
    ii. indicates that the patient is diagnosed as an unknown primary (C80.9) and distant lymph node(s) are mentioned as a metastatic site
d. Use code 8 (Not applicable) for the following site/histology combinations for which a code for distant metastasis is not clinically relevant.
    i. Use code 8 when primary site is C420, C421, C423, C424, C770-C779 or histology is 9671, 9734, 9731 or 9761 for any primary site.
e. Use code 9 when it cannot be determined from the medical record whether the patient specifically has distant lymph node metastases; for example, when there is documentation of carcinomatosis but distant lymph node(s) are not specifically mentioned as a metastatic site. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include distant lymph node(s).

Code	**Label**
0	None; no distant lymph node metastases
1	Yes; distant lymph node metastases
8	Not applicable
9	Unknown whether distant lymph node(s) are involved metastatic site Not documented in patient record

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Mets at Diagnosis – Liver

Item #	Length	Allowable Values	Required Status	Date Revised
1115	1	0, 1, 8, 9	2016+	01/16, 02/21, 01/22, 1/23

Description

This data item identifies whether liver is an involved metastatic site. The six Mets at Dx-Metastatic Sites data items provide information on specific metastatic sites for data analysis.

Rationale

Information on site of metastatic disease at diagnosis has prognostic implications to survival among patients with initial late stage disease. Capturing data on where the patient's metastatic lesions (including the number of locations) will be an important variable to include when looking at survival. Survival among metastatic patients is becoming increasingly important for cancer survivors. CoC requires this data item be recorded in its accredited program cancer registries beginning with cases diagnosed January 1, 2016.

Coding Instructions

1. **Code information about liver metastases only** (discontinuous or distant metastases to liver) identified at the time of diagnosis.
   a. Liver involvement may be single or multiple
   b. Information about liver involvement may be clinical or pathological
   c. Code this data item whether or not the patient had any preoperative systemic therapy
   d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites
2. **Use of codes.** Assign the code that best describes whether the case has liver metastases at diagnosis.
   a. Use code 0 when the medical record
      i. indicates that there are no distant (discontinuous) metastases at all
      ii. includes a clinical or pathologic statement that there are no liver metastases
      iii. includes imaging reports that are negative for liver metastases
      iv. indicates that the patient has distant (discontinuous) metastases but liver is not mentioned as an involved site

      ***Example*:** use code 0 when the patient has lung and brain metastases but not liver
   b. Use code 0 when:
      i. Tumor is a borderline or benign brain or CNS tumor
      ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)
   c. Use code 1 when the medical record
      i. indicates that the patient has distant (discontinuous) metastases and liver is mentioned as an involved site
      ii. indicates that the patient is diagnosed as an unknown primary (C80.9) and liver is mentioned as a distant metastatic site
   d. Use code 8 (Not applicable) for the following site/histology/combinations for which a code for distant metastasis is not clinically relevant.
      i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.

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e. Use code 9 when it cannot be determined from the medical record whether the patient specifically has liver metastases; for example, when there is documentation of carcinomatosis but liver is not specifically mentioned as a metastatic site. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include liver.

Code	Label
0	None; no liver metastases
1	Yes; distant liver metastases
8	Not applicable
9	Unknown whether liver is involved metastatic site Not documented in patient record

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Mets at Diagnosis – Lung

Item #	Length	Allowable Values	Required Status	Date Revised
1116	1	0, 1, 8, 9	2016+	01/16, 02/21, 01/22, 01/23

Description

This data item identifies whether lung is an involved metastatic site. The six Mets at Dx-Metastatic Sites data items provide information on specific metastatic sites for data analysis.

Rationale

Information on site of metastatic disease at diagnosis has prognostic implications to survival among patients with initial late stage disease. Capturing data on where the patient's metastatic lesions (including the number of locations) will be an important variable to include when looking at survival. Survival among metastatic patients is becoming increasingly important for cancer survivors. CoC requires this data item be recorded in its accredited program cancer registries beginning with cases diagnosed January 1, 2016.

Coding Instructions

1. **Code information about lung metastases only** (discontinuous or distant metastases to lung) identified at the time of diagnosis. This data item should not be coded for pleural or pleural fluid involvement.
    a. Lung involvement may be single or multiple
    b. Information about lung involvement may be clinical or pathological
    c. Code this data item whether or not the patient had any preoperative systemic therapy
    d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites
2. **Use of codes.** Assign the code that best describes whether the case has lung metastases at diagnosis.
3. Use code 0 when the medical record
    a. indicates that there are no distant (discontinuous) metastases at all
        i. includes a clinical or pathologic statement that there are no lung metastases
        ii. includes imaging reports that are negative for lung metastases
        iii. indicates that the patient has distant (discontinuous) metastases but lung is not mentioned as an involved site

        ***Example*:** use code 0 when the patient has liver and brain metastases but not lung
    b. Use code 0 when:
        i. Tumor is a borderline or benign brain or CNS tumor
        ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)
    c. Use code 1 when the medical record
        i. indicates that the patient has distant (discontinuous) metastases and lung is mentioned as an involved site
        ii. indicates that lung is the primary site and there are metastases in the contralateral lung
        iii. do not assign code 1 for a lung primary with multifocal involvement of the same lung
        iv. indicates that the patient is diagnosed as an unknown primary (C80.9) and lung is mentioned as a distant metastatic site

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d. Use code 8 (Not applicable) for the following site/histology combinations for which a code for distant metastasis is not clinically relevant
    i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
e. Use code 9 when it cannot be determined from the medical record whether the patient specifically has lung metastases; for example, when there is documentation of carcinomatosis but lung is not specifically mentioned as a metastatic site. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include lung.

Code	Label
0	None; no lung metastases
1	Yes; distant lung metastases
8	Not applicable
9	Unknown whether lung is involved metastatic site Not documented in patient record

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Mets at Diagnosis – Other

Item #	Length	Allowable Values	Required Status	Date Revised
1117	1	0, 1, 2, 8, 9	2016+	01/16, 01/18, 02/21, 01/22, 01/23

Description

The six Mets at Dx-Metastatic Sites fields provide information on metastases for data analysis. This data item identifies any type of distant involvement not captured in the **Mets at Diagnosis – Bone, Mets at Diagnosis – Brain, Mets at Diagnosis – Liver, Mets at Diagnosis – Lung, and Mets at Diagnosis – Distant Lymph Nodes fields. It includes involvement of other specific sites and more generalized metastases such as carcinomatosis.** Some examples include but are not limited to the adrenal gland, bone marrow, pleura, malignant pleural effusion, peritoneum, and skin.

Rationale

Information on site of metastatic disease at diagnosis has prognostic implications to survival among patients with initial late stage disease. Capturing data on where the patient's metastatic lesions (including the number of locations) will be an important variable to include when looking at survival. Survival among metastatic patients is becoming increasingly important for cancer survivors. CoC requires this data item be recorded in its accredited program cancer registries beginning with cases diagnosed January 1, 2016.

Coding Instructions

1. **Code information about other metastases only** (discontinuous or distant metastases) identified at the time of diagnosis. This data item should not be coded for bone, brain, liver, lung or distant lymph node metastases.
    a. Other involvement may be single or multiple
    b. Information about other involvement may be clinical or pathological.
    c. Code this data item whether or not the patient had any preoperative (neoadjuvant) systemic therapy
    d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites.
2. **Use of codes.** Assign the code that best describes whether the case has other metastases at diagnosis.
    a. Use code 0 when the medical record
        i. indicates that there are no distant (discontinuous) metastases at all
        ii. includes a clinical or pathologic statement that there are no other metastases
        iii. includes imaging reports that are negative for other metastases
        iv. indicates that the patient has distant (discontinuous) metastases but other sites are not mentioned as involved

    ***Example*:** use code 0 when the patient has lung and liver metastases only
    b. Use code 0 when:
        i. Tumor is a borderline or benign brain or CNS tumor
        ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

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c. Use code 1 when the medical record
    i. indicates that the patient has distant (discontinuous) metastases in any site(s) other than bone, brain, liver, lung or distant lymph node(s)
    ii. Includes but not limited to the adrenal gland, bone marrow, pleura, malignant pleural effusion, peritoneum and skin.
d. Use code 8 (Not applicable) for the following site/histology combination for which a code for distant metastasis is not clinically relevant.
    i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.
e. Use code 9 when it cannot be determined from the medical record whether the patient has metastases other than bone, brain, liver, lung and distant lymph node(s). In other words, use code 9 when there are known distant metastases but it is not known specifically what they are.

Code	**Label**
0	None; no other metastases
1	Yes; distant metastases in known site(s) other than bone, brain, liver, lung or distant lymph nodes
2	Generalized metastases such as carcinomatosis
8	Not applicable
9	Unknown whether any other metastatic site Not documented in patient record

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AJCC TNM Stage, Current Edition

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AJCC TNM Clin T

Item #	Length	Allowable Values	Required Status	Date Revised
1001	15	Alphanumeric, Blank	2018+	01/18

Description

Evaluates the primary tumor (T) and reflects the tumor size and/or extension of the tumor known ***prior*** to the start of any therapy. Detailed site-specific values for the clinical T category as defined by the current AJCC edition.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Codes and Labels for the different categories are exact matches to what is listed in the current system (except for code 88).
The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The clinical T category staging data item must be recorded for Class of Case 10-22.
- It is strongly recommended that the clinical T category staging data item be recorded for Class of Case 00 cases if the patient's workup at the facility allows assigning of clinical T.
- Assign clinical T category as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded clinical T, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for detailed staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Clin T Suffix

Item #	Length	Allowable Values		Required Status	Date Revised
1031	4		(m), (s), Blank	2018+	01/18

Description

Identifies the AJCC TNM clinical T category suffix for the tumor ***prior*** to the start of any therapy. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Codes and Labels for the different categories are exact matches to what is listed in the current system (except for code 88).
The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- Record the clinical T category suffix as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded the suffix when applicable, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC manual, leave this data item blank.
- Refer to the current AJCC Cancer Staging System for staging rules.

Code	Label
(blank)	No information available; not recorded
(m)	Multiple synchronous tumors OR Multifocal tumor (differentiated and anaplastic thyroid only)
(s)	Solitary tumor (differentiated and anaplastic thyroid only)

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AJCC TNM Clin N

Item #	Length	Allowable Values	Required Status	Date Revised
1002	15	Alphanumeric, Blank	2018+	01/18

Description

Identifies the absence or presence of regional lymph node (N) metastasis and describes the extent of regional lymph node metastasis of the tumor known ***prior*** to the start of any therapy. Detailed site-specific values for the clinical N category as defined by the current AJCC edition.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Codes and Labels for the different categories are exact matches to what is listed in the current system (except for code 88).
The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The clinical N category staging data item must be assigned for Class of Case 10-22.
- It is strongly recommended that the clinical N category staging data item be recorded for Class of Case 00 cases if the patient's workup at the facility allows assigned of clinical N category.
- Record clinical N category as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded clinical N, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Clin N Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1034	4	(sn), (f), Blank	2018+	01/18

Description

Identifies the AJCC TNM clinical N category suffix for the tumor ***prior*** to the start of any therapy. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- To distinguish lymph nodes identified during diagnostic evaluation by sentinel node biopsy or FNA or core needle biopsy from those identified by physical examination and imaging, the following suffixes are used in assigning the clinical N (cN) category.
- If SLN biopsy is performed as part of the diagnostic workup, the cN category should have the sn suffix: for example, cN1(sn).
- If an FNA or a core biopsy is performed on lymph nodes as part of the diagnostic workup, the cN category should have the f suffix: for example, cN1(f).
- If you do not know which procedure was done, leave it blank.
- Record the clinical N category suffix as documented by the managing physician in the medical record.
- If the managing physician has not recorded the suffix, registrars will code this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC manual, leave this data item blank.
- Refer to the current AJCC Cancer Staging System for staging rules.

Code	Label
(sn)	Sentinel node procedure with or without FNA or core needle biopsy
(f)	FNA or core needle biopsy only
(blank)	No suffix needed or appropriate; not recorded

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AJCC TNM Clin M

Item #	Length	Allowable Values	Required Status	Date Revised
1003	15	Alphanumeric, Blank	2018+	01/18

Description

Identifies the presence or absence of distant metastasis (M) of the tumor known ***prior*** to the start of any therapy. Detailed site-specific values for the clinical T category suffix as defined by the current AJCC edition.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The clinical M category staging data item must be assigned for Class of Case 10-22.
- It is strongly recommended that the clinical M category staging data item be recorded for Class of Case 00 cases if the patient's workup at the facility allows assigning of clinical M.
- Record clinical M category as documented by the first treating physician or managing physician in the medical record.
- If the managing physician has not recorded clinical M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Clin Stage Group

Item #	Length	Allowable Values	Required Status	Date Revised
1004	15	Alphanumeric, Blank	2018+	01/18

Description

Identifies the anatomic extent of disease based on the T, N, and M category data items known ***prior*** to the start of any therapy. Detailed site-specific values for the clinical stage group as defined by the current AJCC edition.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are still utilized for the stage groups only due to the decision to maintain Arabic numerals in the stage groups. New groups will be used for cases diagnosed in 2018 and later.

Coding Instructions

- Record the clinical stage group as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded the clinical stage, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- Code 99 for clinical, pathological, post therapy clinical or post therapy pathological stage group if the TNM combination along with any required prognostic factors does not result in a valid stage group according to the current AJCC system.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Convert all Roman numerals to Arabic numerals and use upper-case (capital letters) only.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Clin (yc) T

Item #	Length	Allowable Values	Required Status	Date Revised
1062	15	Alphanumeric, Blank	2021+	02/21

Description

Evaluates the primary tumor (T) and reflects the tumor size and/or extension of the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and before planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The post therapy clin T category staging data item must be assigned for *Class of Case* 10-22.
- Assign post therapy clin T category as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded post therapy clin T category, registrars *will* assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC system and for in situ tumors that are not staged according to the current AJCC system. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- For lung, occult carcinoma is assigned TX according to the definition in the current AJCC system.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current *AJCC Cancer Staging* System for staging rules.
- The valid codes and labels for the *AJCC Cancer Staging System* have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Clin (yc) T Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1063	4	(m), (s), Blank	2021+	02/21

Description

Identifies the AJCC TNM post therapy clinical T category suffix for the tumor following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and before planned **post- neoadjuvant therapy surgical resection**. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- Record the post therapy clin T category suffix as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded the post therapy clin T category suffix, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC system, leave this data item blank.
- Refer to the current *AJCC Cancer Staging System* for staging rules.

Code	Label
(blank)	No information available; not recorded
(m)	Multiple synchronous tumors OR Multifocal tumor (differentiated and anaplastic thyroid only)
(s)	Solitary tumor (differentiated and anaplastic thyroid only)

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AJCC TNM Post Therapy Clin (yc) N

Item #	Length	Allowable Values	Required Status	Date Revised
1064	15	Alphanumeric, Blank	2021+	02/21

Description

Identifies the absence or presence of regional lymph node (N) metastasis and describes the extent of lymph node metastasis of the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and before planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The post therapy clin N category staging data item must be assigned for *Class of Case* 10-22.
- Assign post therapy clin N category as documented by the treating physician(s) or managing physician in the medical record.
- If the managing physician has not recorded post therapy clin N category, registrars *will* assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current *AJCC Cancer Staging System* for staging rules.
- The valid codes and labels for the *AJCC Cancer Staging System* have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Clin (yc) N Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1065	4	(sn), (f), Blank	2021+	02/21

Description

Identifies the AJCC TNM post therapy clinical N suffix for the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and before planned **post- neoadjuvant therapy surgical resection**. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- If SLN biopsy is performed in the absence of complete dissection of the nodal basin, the ypN category should have the sn suffix: for example, ypN0(sn).
- If an FNA or a core biopsy is performed in the absence of a complete dissection of the nodal basin, the ypN category should have the f suffix: for example, ypN0(f).
- If you do not know which procedure was done, leave it blank.
- Record the post therapy clinical N category suffix as documented by the managing physician in the medical record.
- If the managing physician has not recorded the suffix, registrars will code this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC System, leave this data item blank.
- Refer to the current *AJCC Cancer Staging System* for staging rules.

Code	Label
(sn)	Sentinel node procedure with or without FNA or core needle biopsy
(f)	FNA or core needle biopsy only
(blank)	No suffix needed or appropriate; not recorded

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AJCC TNM Post Therapy Clin (yc) M

Item #	Length	Allowable Values	Required Status	Date Revised
1066	15	Alphanumeric, Blank	2021+	02/21

Description

Identifies the presence or absence of distant metastasis (M) of the tumor as known in the clinical stage before initiation of neoadjuvant therapy and records this information following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and before planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The post therapy clin M category staging data item must be assigned for *Class of Case* 10-22.
- Assign post therapy clin M category as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded post therapy clin M category, registrars *will* assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current *AJCC Cancer Staging System* for staging rules.
- The valid codes and labels for the *AJCC Cancer Staging System* have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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Grade Post Therapy Clin (yc)

Item #	Length	Allowable Values	Required Status	Date Revised
1068	1	1-5, 8, 9, A, B, C, D, E, L, H, M, S, Blank	2021+	02/21

Description

This data item records the grade of a solid primary tumor that has been resected following neoadjuvant therapy. If AJCC staging is being assigned, the tumor must have met the surgical resection requirements in the AJCC manual. Record the highest grade documented from the surgical treatment resection specimen of the primary site following neoadjuvant therapy.

For cases diagnosed January 1, 2021 and later, this data item, along with *Grade Clinical* [3843], *Grade Pathological* [3844], and *Grade Post Therapy Path* [3845] replaces *Grade/Differentiation* [440] as well as SSF's for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Rationale

Grade is a measure of the aggressiveness of the tumor. Grade and cell type are important prognostic indicators for many cancers. For some sites, grade is required to assign the post-neoadjuvant stage group.

For those cases that are eligible AJCC staging, the recommended grading system is specified in the AJCC Staging System. The AJCC Chapter-specific grading systems (codes 1-5, L, H, M, S) take priority over the generic grade definitions (codes A-E, 8, 9). For those cases that are not eligible for AJCC staging, if the recommended grading system is not documented, the generic grade definitions would apply.

Coding Instructions

- Please see the following URL for detailed coding instructions and site-specific coding rules: https://www.naaccr.org/SSDI/Grade-Manual.pdf.

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AJCC TNM Path T

Item #	Length	Allowable Values	Required Status	Date Revised
1011	15	Alphanumeric, Blank	2018+	01/18

Description

Evaluates the primary tumor (T) and reflects the tumor size and/or extension of the tumor known ***following*** the completion of surgical therapy. Detailed site-specific values for the pathological tumor (T) as defined by the current AJCC edition.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The pathological T category staging data item must be assigned for Class of Case 10-22.
- Assign pathological T category as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded pathological T category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC system and for in situ tumors that are not staged according to the current AJCC system. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- For lung, occult carcinoma is assigned TX according to the definition in the current AJCC system.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Path T Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1032	4	(m), (s), Blank	2018+	01/18

Description

Identifies the AJCC TMN pathological T category suffix for the tumor ***following*** the completion of surgical therapy. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires that AJCC TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- Record the pathological stage T category suffix as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded the descriptor, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC system, leave this data item blank.
- Refer to the current AJCC Cancer Staging System for staging rules.

Code	Label
(blank)	No information available; not recorded
(m)	Multiple synchronous tumors OR Multifocal tumor (differentiated and anaplastic thyroid only)
(s)	Solitary tumor (differentiated and anaplastic thyroid only)

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AJCC TNM Path N

Item #	Length	Allowable Values	Required Status	Date Revised
1012	15	Alphanumeric, Blank	2018+	01/18

Description

Identifies the absence or presence of regional lymph node (N) metastasis and describes the extent of regional lymph node metastasis of the tumor known ***following*** the completion of surgical therapy.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The pathological N category staging data item must be assigned for Class of Case 10-22.
- Assign pathological N category as documented by the treating physician(s) or managing physician in the medical record.
- If the managing physician has not recorded pathological N category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Path N Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1035	4	(sn), (f), Blank	2018+	01/18

Description

Identifies the AJCC TNM pathological N suffix for the tumor ***following*** the completion of surgical therapy. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires that AJCC TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- If SLN biopsy is performed in the absence of complete dissection of the nodal basin, the pN category should have the sn suffix: for example, pN0(sn).
- If an FNA or a core biopsy is performed in the absence of a complete dissection of the nodal basin, the pN category should have the f suffix: for example, pN0(f).
- If you do not know which procedure was done, leave it blank.
- Record the pathological N category suffix as documented by the managing physician in the medical record.
- If the managing physician has not recorded the suffix, registrars will code this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC System, leave this data item blank.
- Refer to the current AJCC Cancer Staging System for staging rules.

Code	Label
(sn)	Sentinel node procedure without resection of nodal basin
(f)	FNA or core needle biopsy without resection of nodal basin
(blank)	No suffix needed or appropriate; not recorded

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AJCC TNM Path M

Item #	Length	Allowable Values	Required Status	Date Revised
1013	15	Alphanumeric, Blank	2018+	01/18

Description

Identifies the presence or absence of distant metastasis (M) of the tumor known ***following*** the completion of surgical therapy.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The pathological M category staging data item must be assigned for Class of Case 10-22.
- Assign pathological M category as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded pathological M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Path Stage Group

Item #	Length	Allowable Values	Required Status	Date Revised
1014	15	Alphanumeric, Blank	2018+	01/18

Description

Identifies the anatomic extent of disease based on the T, N, and M category data items known ***following*** the completion of surgical therapy.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires that AJCC TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- Record the pathological stage group as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded the pathological stage, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician(s).
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- Code 99 for clinical, pathological, post therapy clinical or post therapy pathological stage group if the TNM combination along with any required prognostic factors does not result in a valid stage group according to the current AJCC system.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Convert all Roman numerals to Arabic numerals and use upper-case (capital letters) only.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Path (yp) T

Item #	Length	Allowable Values	Required Status	Date Revised
1021	15	Alphanumeric, Blank	2018+	01/18, 02/21

Description

Evaluates the primary tumor (T) and reflects the tumor size and/or extension of the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The post therapy path T category staging data item must be assigned for Class of Case 10-22.
- Assign post therapy path T category as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded post therapy path T category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC system and for in situ tumors that are not staged according to the current AJCC system. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- For lung, occult carcinoma is assigned TX according to the definition in the current AJCC system
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Path (yp) T Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1033	4	(m), (s), Blank	2018+	01/18, 02/21

Description

Identifies the AJCC TNM post therapy pathological T category suffix for the tumor following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and planned **post- neoadjuvant therapy surgical resection**. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires that AJCC TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- Record the post therapy path T category suffix as documented by the first treating physician or the managing physician in the medical record.
- If the managing physician has not recorded the post therapy path T category suffix, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC System, leave this data item blank.
- Refer to the current AJCC Cancer Staging System for staging rules.

Code	Label
(blank)	No information available; not recorded
(m)	Multiple synchronous tumors OR Multifocal tumor (differentiated and anaplastic thyroid only)
(s)	Solitary tumor (differentiated and anaplastic thyroid only)

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AJCC TNM Post Therapy Path (yp) N

Item #	Length	Allowable Values	Required Status	Date Revised
1022	15	Alphanumeric, Blank	2018+	01/18, 02/21

Description

Identifies the absence or presence of regional lymph node (N) metastasis and describes the extent of lymph node metastasis of the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The post therapy path N category staging data item must be assigned for Class of Case 10-22.
- Assign post therapy path N category as documented by the treating physician(s) or managing physician in the medical record.
- If the managing physician has not recorded post therapy path N category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site.. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Path (yp) N Suffix

Item #	Length	Allowable Values	Required Status	Date Revised
1036	4	(sn), (f), Blank	2018+	01/18, 02/21

Description

Identifies the AJCC TNM post therapy pathological N suffix for the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and planned **post- neoadjuvant therapy surgical resection**. Stage suffices identify special cases that need separate analysis. Suffices are adjuncts to and do not change the stage group.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires that AJCC TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- If SLN biopsy is performed in the absence of complete dissection of the nodal basin, the ypN category should have the sn suffix: for example, ypN0(sn).
- If an FNA or a core biopsy is performed in the absence of a complete dissection of the nodal basin, the ypN category should have the f suffix: for example, ypN0(f).
- If you do not know which procedure was done, leave it blank.
- Record the post therapy pathological N category suffix as documented by the managing physician in the medical record.
- If the managing physician has not recorded the suffix, registrars will code this item based on the best available information, without necessarily requiring additional contact with the physician.
- If the tumor is not staged according to the AJCC System, leave this data item blank.
- Refer to the current AJCC Cancer Staging System for staging rules.

Code	Label
(sn)	Sentinel node procedure without resection of nodal basin
(f)	FNA or core needle biopsy without resection of nodal basin
(blank)	No suffix needed or appropriate; not recorded

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AJCC TNM Post Therapy Path (yp) M

Item #	Length	Allowable Values	Required Status	Date Revised
1023	15	Alphanumeric, Blank	2018+	01/18, 02/21

Description

Identifies the presence or absence of distant metastasis (M) of the tumor as known in the clinical stage before initiation of neoadjuvant therapy and records this information following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions

- The post therapy path M category staging data item must be assigned for Class of Case 10-22.
- Assign post therapy path M category as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded post therapy path M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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AJCC TNM Post Therapy Path (yp) Stage Group

Item #	Length	Allowable Values	Required Status	Date Revised
1024	15	Alphanumeric, Blank	2018+	01/18, 02/21

Description

Identifies the anatomic extent of disease based on the T, N, and M category data items of the tumor known following the completion of **neoadjuvant** therapy (satisfying the definition for that disease site) and planned **post-neoadjuvant therapy surgical resection**.

Rationale

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires that AJCC TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Coding Instructions

- Record the post therapy path stage group as documented by the treating physician(s) or the managing physician in the medical record.
- If the managing physician has not recorded the post therapy path stage, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician(s).
- Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.
- Code 99 for clinical and pathological or post therapy clinical or post therapy pathological stage group if the TNM combination along with any required prognostic factors does not result in a valid stage group according to the current AJCC system.
- If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.
- Convert all Roman numerals to Arabic numerals and use upper-case (capital letters) only.
- Refer to the current AJCC Cancer Staging System for staging rules.
- The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: https://cancerstaging.org/Pages/Vendors.aspx.

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Grade Post Therapy Path (yp)

Item #	Length	Allowable Values	Required Status	Date Revised
3845	1	1-5, 8, 9, A, B, C, D, E, L, H, M, S, Blank	2018+	01/18

Description

This data item records the grade of a solid primary tumor that has been resected following neoadjuvant therapy. If AJCC staging is being assigned, the tumor must have met the surgical resection requirements in the AJCC manual. Record the highest grade documented from the surgical treatment resection specimen of the primary site following neoadjuvant therapy.

For cases diagnosed January 1, 2018 and later, this data item, along with *Grade Clinical* [3843], *Grade Pathological* [3844], and *Grade Post Therapy Clin* [1068] replaces *Grade/Differentiation* [440] as well as SSF's for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Rationale

Grade is a measure of the aggressiveness of the tumor. Grade and cell type are important prognostic indicators for many cancers. For some sites, grade is required to assign the post-neoadjuvant stage group.
For those cases that are eligible AJCC staging, the recommended grading system is specified in the AJCC Staging System. The AJCC Chapter-specific grading systems (codes 1-5, L, H, M, S) take priority over the generic grade definitions (codes A-E, 8, 9). For those cases that are not eligible for AJCC staging, if the recommended grading system is not documented, the generic grade definitions would apply.

Coding Instructions

- Please see the following URL for detailed coding instructions and site-specific coding rules: https://www.naaccr.org/SSDI/Grade-Manual.pdf.

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Site-Specific Data Items

For cases diagnosed on January 1, 2018 and later, use of the Collaborative Stage (CS) Site-Specific Factors (SSF's) is discontinued, and Site-Specific Data Items (SSDIs) are used for collection of site-specific information.

For cases diagnosed on January 1, 2018 and later, the Site-Specific Data Items in the below table are required by CoC. Data items are listed by their respective NAACCR Data Item Number and Name.

Please see the SSDI Manual at the following URL for detailed descriptions, rationales, coding instructions and site-specific coding rules: https://apps.naaccr.org/ssdi/list/

One new SSDI [3956].

Two SSDIs [3828, 3916] no longer required.

Item #	Site-Specific Data Item
3801	Chromosome 1p: Loss of Heterozygosity (LOH)
3802	Chromosome 19q: Loss of Heterozygosity (LOH)
3803	Adenoid Cystic Basaloid Pattern
3804	Adenopathy
3805	AFP Post-Orchiectomy Lab Value
3806	AFP Post-Orchiectomy Range
3807	AFP Pre-Orchiectomy Lab Value
3808	AFP Pre-Orchiectomy Range
3809	AFP Pretreatment Interpretation
3810	AFP Pretreatment Lab Value
3811	Anemia
3812	B symptoms
3813	Bilirubin Pretreatment Total Lab Value
3814	Bilirubin Pretreatment Unit of Measure
3815	Bone Invasion
3817	Breslow Tumor Thickness
3818	CA-125 Pretreatment Interpretation
3819	CEA Pretreatment Interpretation
3820	CEA Pretreatment Lab Value
3821	Chromosome 3 Status
3822	Chromosome 8q Status
3823	Circumferential Resection Margin (CRM)
3824	Creatinine Pretreatment Lab Value
3825	Creatinine Pretreatment Unit of Measure
3826	Estrogen Receptor Percent Positive or Range
3827	Estrogen Receptor Summary
3829	Esophagus and EGJ Tumor Epicenter
3830	Extranodal Extension Clin (non-Head and Neck)
3831	Extranodal Extension Head and Neck Clinical
3832	Extranodal Extension Head and Neck Pathological
3833	Extranodal Extension Path (non-Head and Neck)
3834	Extravascular Matrix Patterns
3835	Fibrosis Score
3836	FIGO Stage
3837	Gestational Trophoblastic Prognostic Scoring Index
3838	Gleason Patterns Clinical
3839	Gleason Patterns Pathological
3840	Gleason Score Clinical
3841	Gleason Score Pathological
3842	Gleason Tertiary Pattern
3843	Grade Clinical
3844	Grade Pathological
3845	Grade Post Therapy
3846	hCG Post-Orchiectomy Lab Value
3847	hCG Post-Orchiectomy Range
3848	hCG Pre-Orchiectomy Lab Value
3849	hCG Pre-Orchiectomy Range
3855	HER2 Overall Summary
3856	Heritable Trait
3857	High Risk Cytogenetics
3858	High Risk Histologic Features
3860	International Normalized Ratio Prothrombin Time
3861	Ipsilateral Adrenal Gland Involvement
3862	JAK2
3863	Ki-67
3865	KIT Gene Immunohistochemistry

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Item #	Site-Specific Data Item
3866	KRAS
3867	LDH Post-Orchiectomy Range
3868	LDH Pre-Orchiectomy Range
3869	LDH Level
3870	LDH Upper Limits of Normal
3871	LN Assessment Method Femoral-Inguinal
3872	LN Assessment Method Para-Aortic
3873	LN Assessment Method Pelvic
3874	LN Distant Assessment Method
3875	LN Distant: Mediastinal, Scalene
3876	LN Head and Neck Levels I-III
3877	LN Head and Neck Levels IV-V
3878	LN Head and Neck Levels VI-VII
3879	LN Head and Neck Other
3880	LN Isolated Tumor Cells (ITC)
3881	LN Laterality
3882	LN Positive Axillary Level I-II
3883	LN Size
3884	LN Status Femoral-Inguinal, Para-Aortic, Pelvic
3885	Lymphocytosis
3886	Major Vein Involvement
3887	Measured Basal Diameter
3888	Measured Thickness
3889	Methylation of O6-Methylguanine-Methyltransferase
3890	Microsatellite Instability (MSI)
3891	Microvascular Density
3892	Mitotic Count Uveal Melanoma
3893	Mitotic Rate Melanoma
3894	Multigene Signature Method
3895	Multigene Signature Results
3896	NCCN International Prognostic Index (IPI)
3897	Number of Cores Examined
3898	Number of Cores Positive
3899	Number of Examined Para-Aortic Nodes
3900	Number of Examined Pelvic Nodes
3901	Number of Positive Para-Aortic Nodes
3902	Number of Positive Pelvic Nodes
3904	Oncotype Dx Recurrence Score-Invasive
3905	Oncotype Dx Risk Level-DCIS
3906	Oncotype Dx Risk Level-Invasive

Item #	Site-Specific Data Item
3907	Organomegaly
3908	Percent Necrosis Post Neoadjuvant
3909	Perineural Invasion
3910	Peripheral Blood Involvement
3911	Peritoneal Cytology
3913	Pleural Effusion
3914	Progesterone Receptor Percent Positive or Range
3915	Progesterone Receptor Summary
3917	Primary Sclerosing Cholangitis
3918	Profound Immune Suppression
3919	EOD Prostate Pathological Extension
3920	PSA (Prostatic Specific Antigen) Lab Value
3921	Residual Tumor Volume Post Cytoreduction
3922	Response to Neoadjuvant Therapy
3923	S Category Clinical
3924	S Category Pathological
3925	Sarcomatoid Features
3926	Schema Discriminator 1
3927	Schema Discriminator 2
3928	Schema Discriminator 3
3929	Separate Tumor Nodules
3930	Serum Albumin Pretreatment Level
3931	Serum Beta-2 Microglobulin Pretreatment Level
3932	LDH Lab Value
3933	Thrombocytopenia
3934	Tumor Deposits
3935	Tumor Growth Pattern
3936	Ulceration
3937	Visceral and Parietal Pleural Invasion
3938	ALK Rearrangement
3939	EGFR Mutational Analysis
3940	BRAF Mutational Analysis
3941	NRAS Mutational Analysis
3942	CA 19-9 PreTx Lab Value
3956	P 16 Anus
3960	Histologic Subtype
3961	Clinical Margin Width

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First Course of Treatment

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Date of First Course of Treatment

Item #	Length	Allowable Values	Required Status	Date Revised
1270	8	CCYYMMDD, Blank	2003+	01/10, 01/11, 01/23

Description

Records the date on which treatment (surgery, radiation, systemic, or other therapy) of the patient began at any facility.

Rationale

It is important to be able to measure the delay between diagnosis and the onset of treatment. A secondary use for this date is as a starting point for survival statistics (rather than using the diagnosis date). This date cannot be calculated from the respective first course treatment modality dates if no treatment was given. Therefore, providing the date on which active surveillance is chosen, a physician decides not to treat a patient, or a patient's family or guardian declines treatment is important.

Coding Instructions

- Record the earliest of the following dates: Date of First Surgical Procedure [1200], Date Radiation Started [1210], Date Systemic Therapy Started [3230], or Date Other Treatment Started [1250].
- If active surveillance or watchful waiting is selected as the first course of treatment (RX Summ– Treatment Status [1285] = 2) record the date this decision is made.
- In cases of non-treatment (RX Summ–Treatment Status [1285] = 0), in which a physician decides not to treat a patient, a patient's family or guardian declines all treatment, or patient receives palliative care for pain management only, the date of first course of treatment is the date this decision was made.
- Leave this item blank if the cancer was diagnosed at autopsy and not suspected prior to that.
- Blank is allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of First Course of Treatment is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of First Course of Treatment transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

Examples

Code	Reason
20040214	A patient has a core biopsy on February 12, 2004, and subsequently undergoes an excisional biopsy on February 14, 2004.
20050421	A patient begins receiving preoperative radiation therapy elsewhere on April 21, 2005, and subsequent surgical therapy at this facility on June 2, 2005.

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Rx Summ – Treatment Status

Item #	Length	Allowable Values	Required Status	Date Revised
1285	1	0-2, 9	2010+	01/11, 02/21

Description

This data item summarizes whether the patient received any treatment or the tumor was under active surveillance.

Rationale

This item documents active surveillance (watchful waiting) and eliminates searching each treatment modality to determine whether treatment was given. It is used in conjunction with *Date of First Course of Treatment* [1270] to document whether treatment was or was not given, it is unknown if treatment was given, or treatment was given on an unknown date.

Coding Instructions

- This item may be left blank for cases diagnosed prior to 2010.
- Treatment given after a period of active surveillance is considered subsequent treatment, and it is not coded in this item.
- Use code 0 when treatment is refused or the physician decides not to treat for any reason such as the presence of comorbidities.
- Assign code 0 when the patient does not receive any treatment
    - Scope of Regional Lymph Node Surgery may be coded 0, 1-7, or 9
- Assign code 1 when the patient receives treatment collected in any of the following data items
    - Surgery of Primary Site
    - Surgical Procedure of Other Site
    - Radiation Treatment Modality, Phase I, II, III
    - Chemotherapy
    - Hormone Therapy
    - Immunotherapy
    - Hematologic Transplant and Endocrine Procedures
    - Other Therapy

Code	Label
0	No treatment given
1	Treatment given
2	Active surveillance (watchful waiting)
9	Unknown if treatment was given

Examples

Code	Reason
0	An elderly patient with pancreatic cancer requested no treatment.

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Code	Reason
0	Patient is expected to receive radiation, but it has not occurred yet (*Reason for No Radiation* [1430] = 8)
2	Treatment plan for a lymphoma patient is active surveillance.

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Surgery Data Items

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Date of First Surgical Procedure

Item #	Length	Allowable Values	Required Status	Date Revised
1200	8	CCYYMMDD, Blank	<1996, 2002+	01/10, 01/11, 02/21, 01/23

Description

Records the earliest date on which any first course surgical procedure was performed. Formerly called "Date of Cancer-Directed Surgery."

Rationale

This item can be used to sequence multiple treatment modalities and to evaluate the time intervals between treatments.

Coding Instructions

- Record the date of the first surgical procedure of the types coded as *Rx Summ – Surg 2023* [1291], Scope of Regional Lymph Node Surgery [1292] (excluding code 1) or Surgical Procedure/Other Site [1294] performed at this or any facility.
- The date in this item may be the same as that in Date of Most Definitive Surgical Resection of the Primary Site [3170], if the patient received only one surgical procedure and it was a resection of the primary site.
- If surgery is the first or only treatment administered to the patient, then the date of surgery should be the same as the date entered into the item Date of First Course Treatment [1270].
- Blank is allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of First Surgical Procedure is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of First Surgical Procedure transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

Examples

Code	Reason
20080323	A melanoma patient had an excisional biopsy on March 23, 2008, then a wide excision on March 28, 2008.
20091116	The patient had a small (0.5 cm) lump removed from her breast on November 16, 2009.
20070327	The patient's primary tumor was treated with radiation beginning on April 16, 2007, after a distant metastasis was removed surgically on March 27, 2007.

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Date of Most Definitive Surgical Resection of the Primary Site

Item #	Length	Allowable Values	Required Status	Date Revised
3170	8	CCYYMMDD, Blank	2003+	09/08, 01/10, 01/11, 01/23

Description

Records the date of the most definitive surgical procedure of the primary site performed as part of the first course of treatment.

Rationale

This item is used to measure the lag time between diagnosis and the most definitive surgery of the primary site. It is also used in conjunction with *Date of Surgical Discharge* [3180] to calculate the duration of hospitalization following the most definitive primary site surgical procedure. This can then be used to evaluate treatment efficacy.

Coding Instructions

- Record the date on which the surgery described by *Rx Summ – Surg 2023* [1291] was performed at this or any facility.
- Blank is allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of Most Definitive Surgical Resection of the Primary Site is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Most Definitive Surgical Resection of the Primary Site transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Rx Hosp-- Surg 2023

Item #	Length	Allowable Values	Required Status	Date Revised
671	4	A000, B000, A200-A990, B200-B990, Alphanumeric, Blank	2023+	New

Description

Records the surgical procedure(s) performed to the primary site at this facility with a diagnosis year of 2023 and forward.

Rationale

This data item can be used to compare the efficacy of treatment options.

Coding Instructions

- Site-specific surgical codes for this data item are found in Appendix A.
    - All surgery codes begin with the letter A except for skin.
    - Skin surgery codes begin with the letter B to indicate a significant change in coding.
- For diagnosis year 2023 and forward, this data item must be completed.
- For diagnosis years 2003 – 2022, this data item should be left blank.
    - Complete data item Surgical Procedure of Primary Site at this Facility [NAACCR #670] utilizing the STORE manual that is applicable for the date of diagnosis.
- If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.
- If registry software allows multiple procedures to be recorded, this item refers to the most invasive surgical procedure for the primary site.
- For codes A000 through A790, the response positions are hierarchical. Last-listed responses take precedence over responses written above.
- Use codes A800 and A900 only if more precise information about the surgery is not available.
- Code A980 for any case coded to primary site C420, C421, C423, C424, C760-C768, C809
- Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.
- If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the *Surgical Diagnostic and Staging Procedure* [1350] and the excisional biopsy or more extensive surgery in the RX Summ-Surg 2023 [1291].
- Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site.
- If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care at This Facility* [3280].
- For cases diagnosed prior to January 1, 2023, this data item should be blank.
- For any site other than C420, C421, C423, C424, C760-768, C809, this data item can be blank.

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- *Clinical Margin Width* [3961] collected in the Site-Specific Data Item following SEER coding rules and instructions.
- For melanoma skin surgical codes ONLY:
    - The priority order for sources used to assign surgery codes:
        - Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure.
        - Do not code base on margin status documented in the pathology report.

Code	Label	Definition
A000	None	No surgical procedure of primary site. Diagnosed at autopsy.
A100–A190	Site-specific codes; tumor destruction	Tumor destruction, no pathologic specimen produced. Refer to Appendix A for the correct site-specific code for the procedure.
A200–A800	Site-specific codes; resection	Refer to Appendix A for the correct site-specific code for the procedure.
A900	Surgery, NOS	A surgical procedure to primary site was done, but no information on the type of surgical procedure is provided.
A980	Site-specific codes; special	Special code. Refer to Appendix A for the correct site-specific code for the procedure. Code A980 for the following sites/schema unless the case is death certificate only: . Any case coded to primary site C420, C421, C423, C424, C760-C768, C809 When Surgery of Primary Site is coded A980 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
A990	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available. Death certificate only.

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Rx Summ—Surg 2023

Item #	Length	Allowable Values	Required Status	Date Revised
1291	4	A000, B000, A200-A990, B000-B990, Alphanumeric, Blank	2023+	New

Description

Records the surgical procedure(s) performed to the primary site with a diagnosis year of 2023 and forward.

Rationale

This data item can be used to compare the efficacy of treatment options.

Coding Instructions

- Site-specific surgical codes for this data item are found in Appendix A.
  - All surgery codes begin with the letter A except for skin.
  - Skin surgery codes begin with the letter B to indicate a significant change in coding.
- For diagnosis year 2023 and forward, this data item must be completed.
- For diagnosis years 2003 – 2022, this data item should be left blank.
  - Complete data item Surgical Procedure of Primary Site [NAACCR #1290] utilizing the STORE manual that is applicable for the date of diagnosis.
- If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.
- If registry software allows multiple procedures to be recorded, this item refers to the most invasive surgical procedure of the primary site.
- For codes A000 through A790, the response positions are hierarchical. Last-listed responses take precedence over responses written above.
- Use codes A800 and A900 only if more precise information about the surgery is not available.
- Code A980 for any case coded to primary site C420, C421, C423, C424, C760-C768, C809
- Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.
- If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the *Surgical Diagnostic and Staging Procedure* [1350] and the excisional biopsy or more extensive surgery in the RX Summ-Surg 2023[1291].
- Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site, except where noted in Appendix A.
- If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care* [3270].
- There may be times when the first course of treatment information is incomplete. Therefore, it is important to continue follow-up efforts to be certain the complete treatment information is collected.
- For cases diagnosed prior to January 1, 2023, this data item should be blank.

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- For any site other than C420, C421, C423, C424, C760-768, C809, this data item can be blank.
- *Clinical Margin Width* [3961] collected in the Site Specific Data Item following SEER coding rules and instructions.
- For melanoma skin surgical codes ONLY:
    - The priority order for sources used to assign surgery codes:
        - Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure.
        - Do not code base on margin status documented in the pathology report.

Code	Label	Definition
A000	None	No surgical procedure of primary site. Diagnosed at autopsy.
A100–A190	Site-specific codes; tumor destruction	Tumor destruction, no pathologic specimen produced. Refer to Appendix A for the correct site-specific code for the procedure.
A200–A800	Site-specific codes; resection	Refer to Appendix A for the correct site-specific code for the procedure.
A900	Surgery, NOS	A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided.
A980	Site-specific codes; special	Special code. Refer to Appendix A for the correct site-specific code for the procedure. Code A980 for the following sites/schema unless the case is death certificate only: a. Any case coded to primary site C420, C421, C423, C424, C760-C768, C809 When Surgery of Primary Site is coded A980 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
A990	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available. Death certificate only.

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Rx Hosp- Surg Breast

Item #	Length	Allowable Values	Required Status	Date Revised
10104	4	B000, B200-B990, Alphanumeric, Blank	2022+	01/22, 01/23

Description

Records the surgical procedure performed of the primary site **at this facility**. This data item is required beginning with diagnosis year 2022 breast cases only.

Rationale

Field study for updating the surgery codes in Appendix A, to support the Synoptic Operative Reporting and to allow for more descriptive surgery codes. This data item can be used to compare the efficacy of treatment options.

Coding Instructions

- Review the operative report or procedure note to code the appropriate surgical code.
- Code the surgical resection code for Breast primaries performed at this facility with diagnosis date ≥ 1/1/2022.
- Code the most definitive surgical procedure for the primary site performed at this facility.
- Reconstruction performed immediately after the surgical resection (codes B200-B900) at this facility should be coded in the Rx Hosp – Recon Breast [Item# 10106] site specific data item.
- If reconstruction is not performed, assign code A000 to data item Rx Hosp-Recon Breast [10106].
- Use code B600, B610 or B620 if patient had a modified radical mastectomy.
- For codes B200 to B760, code in order of hierarchy, the response positions are hierarchical. Last-listed responses take precedence over responses written above.
- Use codes B800 and B900 only if more precise information about the surgery performed at this facility is not available.
- Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item using code B210. Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site.
- If contralateral breast reveals a second primary, each breast is abstracted separately.
- This data item is effective for Breast cases with diagnosis year 2022+.
- Leave this data item blank for:
    - Breast cases diagnosed prior year 2022
    - All other sites

Codes and Code Definitions

B000	None; no surgery of primary site; autopsy ONLY
B200	Partial mastectomy; less than total mastectomy; lumpectomy, segmental mastectomy, quadrantectomy, tylectomy, with or without nipple resection
B210	Excisional breast biopsy - Diagnostic excision, no pre-operative biopsy proven diagnosis of cancer
NOTE: An excisional biopsy can occur when the nodule was previously not expected to be cancer. **Example**: Use code B210, when a surgeon removes the mass and it comes back cancer and there is no biopsy (either core or FNA) done prior to the mass being removed.	
B215	Excisional breast biopsy, for atypia

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NOTE: An excisional breast biopsy removes the entire tumor and/or leave only microscopic margins. This surgical code was added to collect code when atypia tissue is excised and found to be reportable. Approx. 10-15% of excised atypia are cancer and reportable. **Example:** Use code B215 when patient has biopsy that shows atypical ductal hyperplasia, an excision is then performed, and pathology shows in situ or invasive cancer. The excisional breast biopsy for the ADH diagnosed the cancer, not the core biopsy.	
B240	Re-excision of margins from primary tumor site for gross or microscopic residual disease when less than total mastectomy performed.
B290	Central lumpectomy, only performed for a prior diagnosis of cancer, which includes removal of the nipple areolar complex
Note: A central lumpectomy removes the nipple areolar complex, whereas a lumpectomy does not. Central lumpectomy and central portion lumpectomy, central portion excision, central partial mastectomy are interchangeable terms. **Example:** Use code B290, when patients with Paget's disease or cancer directly involving the nipple areolar complex, where the nipple areolar complex needs to be removed.	
B300	Skin-sparing mastectomy
B310	WITHOUT removal of uninvolved contralateral breast
B320	WITH removal of uninvolved contralateral breast
NOTE: A skin sparing mastectomy removes all breast tissue and the nipple areolar complex and preserves native breast skin. It is performed with and without sentinel node biopsy or ALND.	
B400	Nipple-sparing mastectomy
B410	WITHOUT removal of uninvolved contralateral breast
B420	WITH removal of uninvolved contralateral breast
NOTE: A nipple sparing mastectomy removes all breast tissue but preserves the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B500	Areolar-sparing mastectomy
B510	WITHOUT removal of uninvolved contralateral breast
B520	WITH removal of uninvolved contralateral breast
NOTE: An areolar sparing mastectomy removes all breast tissue and the nipple but preserves the areola and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B600	Total (simple) mastectomy
B610	WITHOUT removal of uninvolved contralateral breast
B620	WITH removal of uninvolved contralateral breast
NOTE: A total (simple) mastectomy removes all breast tissue, the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND. Use code 600, 610 or 620 if patient had a modified radical mastectomy.	
B700	Radical mastectomy, NOS
B710	WITHOUT removal of uninvolved contralateral breast
B720	WITH removal of uninvolved contralateral breast
NOTE: A radical mastectomy removes all breast tissue, the nipple areolar complex, breast skin, and pectoralis muscle. It is performed with level l-III ALND.	
B760	Bilateral mastectomy for a single tumor involving both breasts, as for bilateral inflammatory carcinoma.
B800	Mastectomy, NOS (including extended radical mastectomy)
B900	Surgery, NOS
B990	Unknown if surgery was performed; death certificate ONLY

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Examples

Code	Reason
B000	Patient diagnosed 2022 by way of needle core biopsy but declined primary site breast resection.
B000	Patient diagnosed 2022 on mammogram at the reporting facility. Right areola sparing mastectomy performed at an outside facility. No procedure performed to uninvolved left breast.
B200	Patient diagnosed 2022 by way of needle core biopsy and left lumpectomy procedure at the reporting facility. Pathology revealed positive margins. Left total mastectomy with immediate placement of tissue expanders at outside facility. No procedure performed on uninvolved right breast.
B240	Patient diagnosed 2022 by way of needle core biopsy and had a left lumpectomy at reporting facility, margins undetermined. Two weeks later, patient returned to same surgery suite for re-excision of margins of left lumpectomy site to ensure negative margins and proceeded with immediate reconstruction with local advancement flap at the reporting facility.
B620	Patient diagnosed 2022 by way of needle core biopsy. Right modified radical mastectomy with removal of uninvolved left breast with immediate reconstruction with autologous tissue from abdomen at the reporting facility.
Leave Blank	Patient diagnosed 2021 by way of needle core biopsy and had simple mastectomy at the reporting facility during 2022.

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Rx Summ-Surg Breast

Item #	Length	Allowable Values	Required Status	Date Revised
10105	4	B000, B200-B990, Alphanumeric, Blank	2022+	01/22, 01/23

Description

Records the surgical procedure performed of the primary site performed at **any facility**. This data item is required beginning with diagnosis year 2022 breast cases only.

Rationale

Field study for updating the surgery codes in Appendix A to support the Synoptic Operative Reporting and allow for more descriptive surgery codes. This data item can be used to compare the efficacy of treatment options.

Coding Instructions

- Review the operative report or procedure note to code the appropriate surgical code.
- Code the surgical resection code for Breast primaries performed at any facility with diagnosis date ≥ 1/1/2022 .
- Code the most definitive surgical procedure for the primary site performed at any facility.
- Reconstruction that is performed immediately after surgical resection (codes B200-B900) at any facility should be coded in the Rx Summ – Recon Breast [Item # 10107] site specific data item.
- If reconstruction is not performed, assign code A000 to data item Rx Summ-Recon Breast [10107].
- Use code B600, B610, or B620 if patient had a modified radical mastectomy.
- For codes B200 to B760, code in order of hierarchy, the response positions are hierarchical. Last-listed responses take precedence over responses written above.
- Use codes B800 and B900 only if more precise information about the surgery performed at any facility is not available.
- Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item using code B210.
- Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are
- removed in continuity with the primary site.
- If contralateral breast reveals a second primary, each breast is abstracted separately.
- This data item is effective for Breast cases with diagnosis year 2022+.
- Leave this data item blank for:
    - Breast cases diagnosed prior year 2022
    - All other sites

Codes and Code Definitions

B000	None; no surgery of primary site; autopsy ONLY
B200	Partial mastectomy; less than total mastectomy; lumpectomy, segmental mastectomy, quadrantectomy, tylectomy, with or without nipple resection
B210	Excisional breast biopsy - Diagnostic excision, no pre-operative biopsy proven diagnosis of cancer
NOTE: An excisional biopsy can occur when the nodule was previously not expected to be cancer. **Example**: Use code B210, when a surgeon removes the mass and it comes back cancer and there is no biopsy (either core or FNA) done prior to the mass being removed.	
B215	Excisional breast biopsy, for atypia

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NOTE: An excisional breast biopsy removes the entire tumor and/or leave only microscopic margins. This surgical code was added to collect code when atypia tissue is excised and found to be reportable. Approx. 10-15% of excised atypia are cancer and reportable. **Example:** Use code B215 when patient has biopsy that shows atypical ductal hyperplasia, an excision is then performed, and pathology shows in situ or invasive cancer. The excisional breast biopsy for the ADH diagnosed the cancer, not the core biopsy.	
B240	Re-excision of margins from primary tumor site for gross or microscopic residual disease when less than total mastectomy performed.
B290	Central lumpectomy, only performed for a prior diagnosis of cancer, which includes removal of the nipple areolar complex
Note: A central lumpectomy removes the nipple areolar complex, whereas a lumpectomy does not. Central lumpectomy and central portion lumpectomy, central portion excision, central partial mastectomy are interchangeable terms. **Example:** Use code B290, when patients with Paget's disease or cancer directly involving the nipple areolar complex, where the nipple areolar complex needs to be removed.	
B300	Skin-sparing mastectomy
B310	WITHOUT removal of uninvolved contralateral breast
B320	WITH removal of uninvolved contralateral breast
NOTE: A skin sparing mastectomy removes all breast tissue and the nipple areolar complex and preserves native breast skin. It is performed with and without sentinel node biopsy or ALND.	
B400	Nipple-sparing mastectomy
B410	WITHOUT removal of uninvolved contralateral breast
B420	WITH removal of uninvolved contralateral breast
NOTE: A nipple sparing mastectomy removes all breast tissue but preserves the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B500	Areolar-sparing mastectomy
B510	WITHOUT removal of uninvolved contralateral breast
B520	WITH removal of uninvolved contralateral breast
NOTE: An areolar sparing mastectomy removes all breast tissue and the nipple but preserves the areola and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B600	Total (simple) mastectomy
B610	WITHOUT removal of uninvolved contralateral breast
B620	WITH removal of uninvolved contralateral breast
NOTE: A total (simple) mastectomy removes all breast tissue, the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND. Use code 600, 610 or 620 if patient had a modified radical mastectomy.	
B700	Radical mastectomy, NOS
B710	WITHOUT removal of uninvolved contralateral breast
B720	WITH removal of uninvolved contralateral breast
NOTE: A radical mastectomy removes all breast tissue, the nipple areolar complex, breast skin, and pectoralis muscle. It is performed with level l-III ALND.	
B760	Bilateral mastectomy for a single tumor involving both breasts, as for bilateral inflammatory carcinoma
B800	Mastectomy, NOS (including extended radical mastectomy)
B900	Surgery, NOS
B990	Unknown if surgery was performed; death certificate ONLY

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Examples

Code	Reason
B000	Patient diagnosed 2022 by way of needle core biopsy but declined primary site breast resection.
B240	Patient diagnosed 2022 by way of needle core biopsy and left lumpectomy at reporting facility, margins undetermined. Two weeks later, patient returned to same surgery suite for re-excision of margins of left lumpectomy site to ensure negative margins and proceeded with proceeded with immediate reconstruction utilizing local advancement flap at reporting facility.
B510	Patient diagnosed 2022 on mammogram at the reporting facility. Right areola sparing mastectomy performed at outside facility. No procedure performed to uninvolved left breast.
B610	Patient diagnosed 2022 by way of needle core biopsy and had left lumpectomy at reporting facility, pathology revealed positive margins. Left total mastectomy with immediate placement of tissue expanders at outside facility. No procedure performed on uninvolved right breast.
B620	Patient diagnosed 2022 by way of needle core biopsy. Right modified radical mastectomy with removal of uninvolved left breast with immediate reconstruction with autologous tissue from abdomen at the reporting facility.
Leave Blank	Patient diagnosed 2021 by way of needle core biopsy and had mastectomy at the reporting facility during 2022.

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Rx Hosp-- Recon Breast

Item #	Length	Allowable Values	Required Status	Date Revised
10106	4	A000, A100-A640, A900-A980, A990, Alphanumeric, Blank	2022+	01/22, 01/23

Description

Records the reconstruction procedure immediately following resection performed **at this facility**. This data item is required beginning with diagnosis year 2022 and breast cases only.

Rationale

Breast reconstruction was previously collected within the breast surgery codes. CoC will collect these data items to support the Synoptic Operative Reports and allow for more descriptive reconstruction codes. This is being collected in anticipation for a Site Specific Disease Item.

Coding Instructions

- Code the breast reconstruction code for Breast primaries performed at this facility with diagnosis date ≥ 1/1/2022.
- Code only the ipsilateral breast reconstruction.
- Immediate reconstruction is defined as reconstruction performed during the same operative session as the operative procedure coded in Data item Rx Hosp—Surg Breast [Item # 10104]
- One surgeon can perform the surgical resection to primary site and another surgeon can perform the reconstruction during the same day procedure. As long as reconstruction was done during the same day as the surgical resection, an immediate reconstruction code should be assigned.
- Reconstruction performed on a different day than the breast primary definitive resection is not collected/coded.
- For Codes, A600-A900, information for this data item may be found in the Breast Plastic Reconstructive operative report.
- Oncoplastic surgery is typically coded by the surgeon but sometimes found in the plastics operative note. Oncoplastic surgery is defined as rebuilding the breast tissue after breast cancer resection and is a way to reconstruct and reshape the breast after a lumpectomy or mastectomy and involves rearrangement of breast tissue to correct a defect.
- Oncoplastic surgery and breast tissue rearrangement, mastopexy, batwing mastopexy, crescent mastopexy, donut mastopexy, mammaplasty, and breast reduction are interchangeable terms.
- Direct to implant placement is found in the operative report. This is when the surgeon places an implant and does not state placement of a tissue expander.
- Breast resection procedure at this facility should be coded in the Rx Hosp—Surg Breast [Item # 10104] data item.
- Leave this data item blank if primary site is not breast or breast primary diagnosed prior 2022.
- Leave this data item blank for:
    - Breast cases diagnosed prior year 2022
    - All other sites

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Codes and Code Definitions

A000	No Reconstruction
NOTE: Code A000 when no immediate reconstruction was performed at any facility.	
A100	Tissue expander placement
NOTE: Code A100 when tissue expanders were placed without implant or tissue placement.	
A200	Direct to implant placement
NOTE: Code A200 when a permanent implant is placed immediately following resection. **Example:** A mastectomy is performed by the breast surgeon and an implant is placed at the same time by a plastic surgeon (some general /breast surgeons may place implants, but most are placed by plastics).	
A300	Oncoplastic tissue rearrangement (not a formal mastopexy/reduction)
A400	Oncoplastic reduction and/or mastopexy
NOTE: Code A400 when patient has breast conserving resection and a breast reduction/lift is performed.	
A500	Oncoplastic reconstruction with regional tissue flaps
NOTE: Code A500 when patient has breast conserving resection and reconstruction is performed with skin flaps.	
A600	Mastectomy reconstruction with autologous tissue, source not specified
A610	WITH abdominal tissue
A620	WITH thigh tissue
A630	WITH gluteal tissue
A640	WITH back tissue
NOTE: Code A600 when patient's autologous tissue source is unknown or not specified.	
A900	Reconstruction performed, method unknown
NOTE: Code A900 when reconstruction is done, but the type of reconstruction is not known.	
A970	Implant based reconstruction, NOS
A980	Autologous tissue-based reconstruction, NOS
A990	Unknown if reconstruction performed
NOTE: Code A990 when it's unknown if immediate reconstruction was performed.	

Examples

Code	Reason
A000	Patient diagnosed 2022 by way of needle core biopsy. Left lumpectomy at reporting facility. Pathology revealed positive margins. Left total mastectomy with immediate placement of acellular dermal matrix and tissue expanders at outside facility. No procedure performed on the uninvolved right breast.
A500	Patient diagnosed 2022 by way of needle core biopsy and underwent a left lumpectomy at reporting facility, margins undetermined. Two weeks later, patient returned to same surgery suite for re-excision of margins of left lumpectomy site to ensure negative margins and proceeded with immediate reconstruction utilizing local advancement flap at the reporting facility.
A610	Patient diagnosed 2022 by way of needle core biopsy. Right modified radical mastectomy with removal of uninvolved left breast with immediate reconstruction with autologous tissue from abdomen at the reporting facility.
Leave Blank	Patient diagnosed 2021 by way of needle core biopsy and had total mastectomy with immediate reconstruction at the reporting facility during 2022. (Leave blank since diagnosis is before calendar year 2022)

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Rx Summ -- Recon Breast

Item #	Length	Allowable Values	Required Status	Date Revised
10107	4	A000, A100-A640, A900-A980, A990, Alphanumeric, Blank	2022+	01/22, 01/23

Description

Records the reconstruction procedure immediately following resection performed **at any facility**. This data item is required beginning with diagnosis year 2022 and breast cases only.

Rationale

Breast reconstruction was previously collected within the breast surgery codes. CoC will collect these data items to support the Synoptic Operative Reports and allow for more descriptive reconstruction codes. This is being collected in anticipation for a Site Specific Disease Item.

Coding Instructions

- Code the breast reconstruction code for Breast primaries performed at any facility with diagnosis date ≥ 1/1/2022.
- Code only the ipsilateral breast reconstruction.
- Immediate reconstruction is defined as reconstruction performed during same day the operative procedure coded in Data items RX Summ—Surg Breast [Item # 10105].
- One surgeon can perform the surgical resection to primary site and another surgeon can perform the reconstruction during the same day procedure. As long as reconstruction was done during the same day as the surgical resection, an immediate reconstruction code should be assigned.
- Reconstruction performed on a different day than the breast primary definitive resection is not collected/coded.
- For Codes, A600-A900, information for this data item may be found in the Breast Plastic Reconstructive operative report.
- Oncoplastic surgery is typically coded by the surgeon but sometimes found in the plastics operative note. Oncoplastic surgery is defined as rebuilding the breast tissue after breast cancer resection and is a way to reconstruct and reshape the breast after a lumpectomy or mastectomy and involves rearrangement of breast tissue to correct a defect.
- Oncoplastic surgery and breast tissue rearrangement, mastopexy, batwing mastopexy, crescent mastopexy, donut mastopexy, mammaplasty, and breast reduction are interchangeable terms.
- Direct to implant placement is found in the operative report. This is when the surgeon places an implant and does not state placement of a tissue expander.
- Breast resection procedure performed same day as definitive breast resection should be coded in the Rx Hosp—Surg Breast [Item # 10105] data item.
- Leave this data item blank if primary site is not breast or breast primary diagnosed prior 2022.
- Leave this data item blank for:
    - Breast cases diagnosed in any year prior 2022
    - All other sites

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Codes and Code Definitions

A000	No Reconstruction
NOTE: Code A000 when no immediate reconstruction was performed at any facility.	
A100	Tissue expander placement
NOTE: Code A100 when tissue expanders were placed without implant or tissue placement.	
A200	Direct to implant placement
NOTE: Code A200 when a permanent implant is placed immediately following resection. Example: A mastectomy is performed by the breast surgeon and an implant is placed at the same time by a plastic surgeon (some general /breast surgeons may place implants, but most are placed by plastics).	
A300	Oncoplastic tissue rearrangement (not a formal mastopexy/reduction)
A400	Oncoplastic reduction and/or mastopexy
NOTE: Code A400 when patient has breast conserving resection and a breast reduction/lift is performed.	
A500	Oncoplastic reconstruction with regional tissue flaps
NOTE: Code A500 when patient has breast conserving resection and reconstruction is performed with skin flaps.	
A600	Mastectomy reconstruction with autologous tissue, source not specified.
A610	WITH abdominal tissue
A620	WITH thigh tissue
A630	WITH gluteal tissue
A640	WITH back tissue
NOTE: Code A600 when patient's tissue autologous source is unknown or not specified.	
A900	Reconstruction performed, method unknown
NOTE: Code A900 when reconstruction is done, but the type of reconstruction is not known.	
A970	Implant based reconstruction, NOS
A980	Autologous tissue-based reconstruction, NOS
A990	Unknown if reconstruction performed
NOTE: Code A990 when it's unknown if immediate reconstruction was performed.	

Examples

Code	Reason
A100	Patient diagnosed 2022 by way of needle core biopsy. Left lumpectomy at the reporting facility. Pathology revealed positive margins. Left total mastectomy with immediate placement of acellular dermal matrix and tissue expanders at outside facility. There was no procedure performed on the uninvolved right breast.
A500	Patient diagnosed 2022 by way of needle core biopsy and underwent a left lumpectomy at the reporting facility, margins undetermined. Two weeks later, the patient returned to same surgery suite for a re-excision of left lumpectomy site to ensure negative margins and to proceed with immediate reconstruction using local advancement flap at the reporting facility.
A610	Patient diagnosed 2022 by way of needle core biopsy. The patient underwent a Right modified radical mastectomy with removal of the uninvolved left breast and immediate reconstruction with autologous tissue from abdomen at the reporting facility.
Leave Blank	Patient diagnosed 2021 by way of needle core biopsy and had total mastectomy with immediate reconstruction at the reporting facility during 2022. (Leave blank since diagnosis is before calendar year 2022)

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Approach - Surgery of the Primary Site at this Facility (RxHospSurgApp 2010)

Item #	Length	Allowable Values	Required Status	Date Revised
668	1	0-5, 9	2010+	05/10, 01/11, 01/13, 01/15, 02/21

Description

This item is used to describe the surgical method used to approach the primary site for patients undergoing surgery of the primary site at this facility.

Rationale

This item is used to monitor patterns and trends in the adoption and utilization of minimally-invasive surgical techniques.

Coding Instructions

- This item may be left blank for cases diagnosed prior to 2010.
- If the patient has multiple surgeries of the primary site, this item describes the approach used for the most invasive, definitive surgery.
- For ablation procedures, assign code 3.
- Assign code 2 or 4 if the surgery began as robotic assisted or endoscopic and was converted to open.
- If both robotic and minimally invasive (for example, endoscopic or laparoscopic) surgery are used, code to robotic (codes 1 or 2).
- This item should not be confused with the obsolete item published in Registry Operations and Data Standards (ROADS), Surgical Approach [1310].

Code	Label
0	No surgical procedure of primary site at this facility; Diagnosed at autopsy
1	Robotic assisted
2	Robotic converted to open
3	Minimally invasive (such as endoscopic or laparoscopic)
4	Minimally invasive (endoscopic or laparoscopic) converted to open.
5	Open or approach unspecified
9	When Rx Summ – Surg 2023 [1291] and Rx Hosp –Surg 2023 [671] is coded to A980; Unknown whether surgery was performed at this facility

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Examples

Code	Reason
0	Patient received radiation at this facility after having surgery elsewhere
3	Endoscopic surgery was performed
3	Patient treated with RFA of kidney
5	The surgical report described conventional open surgery, but did not use the term “open”

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Surgical Margins of the Primary Site

Item #	Length	Allowable Values	Required Status	Date Revised
1320	1	0-3, 7-9	All Years	08/02, 01/10, 02/10, 01/13, 02/21

Description

Records the final status of the surgical margins after resection of the primary tumor.

Rationale

This data item serves as a quality measure for pathology reports and is used for staging and may be a prognostic factor in recurrence.

Coding Instructions

- Record the margin status as it appears in the pathology report.
- Codes 0–3 are hierarchical; if two codes describe the margin status, use the numerically higher code.
- Code 7 if the pathology report indicates the margins could not be determined.
- If no surgery of the primary site was performed, code 8.
- Code 9 if the pathology report makes no mention of margins or no tissue was sent to pathology.
- Code 9 if the *Rx Summ – Surg 2023* (#1291) is coded to A980 (not applicable)
- Code 9 for:
    - Any cases coded to primary sites C420, C421, C423, C424, C760-C768, C770-C779,C809

Code	Label	Definition
0	No residual tumor	All margins are grossly and microscopically negative.
1	Residual tumor, NOS	Involvement is indicated, but not otherwise specified.
2	Microscopic residual tumor	Cannot be seen by the naked eye.
3	Macroscopic residual tumor	Gross tumor of the primary site which is visible to the naked eye.
7	Margins not evaluable	Cannot be assessed (indeterminate).
8	No primary site surgery	No surgical procedure of the primary site. Diagnosed at autopsy.
9	Unknown or not applicable	It is unknown whether a surgical procedure to the primary site was performed; death certificate-only; for lymphomas with a lymph node primary site; an unknown or ill-defined primary; or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease.

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Example

Code	Reason
3	(C18-Colon) The pathology report from a colon resection describes the proximal margin as grossly involved with tumor (code 3) and the distal margin as microscopically involved (code 2). Code macroscopic involvement (code 3).

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Scope of Regional Lymph Node Surgery

Item #	Length	Allowable Values	Required Status	Date Revised
1292	1	0-7, 9	All Years	01/04, 09/08, 02/10, 01/11, 01/12, 04/12, 01/13, 01/15, 02/21, 01/22, 1/23

Description

Identifies the removal, biopsy, or aspiration of regional lymph node(s) at the time of surgery of the primary site or during a separate surgical event.

Rationale

This data item can be used to compare and evaluate the extent of surgical treatment.

Coding Instructions

- The scope of regional lymph node surgery is collected for each surgical event even if surgery of the primary site was not performed.
- Record surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose or stage disease in this data item. Record the date of this surgical procedure in data item *Date of First Course of Treatment* [1270] and/or *Date of First Surgical Procedure* [1200] if applicable (excluding code 1).
- Record the date of this procedure in *Date of Sentinel Lymph Node Biopsy* [832] and/or *Date Regional Lymph Node Dissection* [682], if applicable.
- Codes 0–7 are hierarchical. If only one procedure can be recorded, code the procedure that is numerically higher.
- If two or more surgical procedures of regional lymph nodes are performed, the codes entered in the registry for each subsequent procedure must include the cumulative effect of all preceding procedures. For example, a sentinel lymph node biopsy followed by a regional lymph node dissection at a later time is coded 7. Do not rely on registry software to determine the cumulative code.
- Code 9 for:
    - Any Schema ID with primary site: C420, C421, C423, C424, C589, C700-C709, C710-C729, C751- C753, C761-C768, C770-C779, C809
- Do not code *distant* lymph nodes remove during surgery to the primary site for this data item. Distant nodes are coded in the data field *Surgical Procedure/Other Site* [1294].
- Refer to the current *AJCC Cancer Staging Manual* for site-specific identification of regional lymph nodes.
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms,

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to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care* [3270].

Note: One important use of registry data is the tracking of treatment patterns over time. In order to compare contemporary treatment with previously published treatment based on former codes, or to data unmodified from pre-1998 definitions, the ability to differentiate surgeries in which four or more regional lymph nodes are removed is desirable. However, it is *very important* to note that the distinction between codes 4 and 5 is made to permit comparison of current surgical procedures with procedures coded in the past when the removal of fewer than 4 lymph nodes was not reflected in surgery codes. *It is not intended to reflect clinical significance* when applied to a particular surgical procedure. It is important to *avoid inferring, by data presentation or other methods, that one category is preferable to another within the intent of these items*.

Codes and Labels

The following instructions should be applied to all surgically treated cases for all types of cancers. It is important to distinguish between sentinel lymph node biopsies (SLNBx) and more extensive dissection of regional lymph nodes.

Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
		Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx), or a more extensive dissection of regional lymph nodes, or a combination of both SLNBx and regional lymph node dissection. The operative report will designate the surgeon's planned procedure as well as a description of the procedure that was actually performed. The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and regional lymph node dissection or a combination of these two procedures. Do not use the number of lymph nodes removed and pathologically examined as the sole means of distinguishing between a SLNBx and a regional lymph node dissection.	Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx), an axillary lymph node dissection (ALND), or a combination of both SLNBx and ALND. The operative report will designate the surgeon's planned procedure as well as a description of the procedure that was actually performed. The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and ALND, or a combination of these two procedures. Do not use the number of lymph nodes removed and pathologically examined as the sole means of distinguishing between a SLNBx and an ALND.
0	No regional lymph node surgery	No regional lymph node surgery.	

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
1	Biopsy or aspiration of regional lymph node(s)	Review the operative report to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed, and it did not include the use of dye or tracer for a SLNBx procedure (code 2). If additional procedures were performed on the lymph nodes, use the appropriate code 2-7.	Excisional biopsy or aspiration of regional lymph nodes for breast cancer is uncommon. Review the operative report of to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed; it is highly possible that the procedure is a SLNBx (code 2) instead. If additional procedures were performed on the lymph nodes, such as axillary lymph node dissection, use the appropriate code 2-7.
2	Sentinel Lymph Node Biopsy	The operative report states that a SLNBx was performed. Code 2 SLNBx when the operative report describes a procedure using injection of a dye, radio label, or combination to identify a lymph node (possibly more than one) for removal/examination. When a SLNBx is performed, additional non-sentinel nodes can be taken during the same operative procedure. These additional non-sentinel nodes are palpably abnormal and selectively removed (or harvested) as part of the SLNBx procedure by the surgeon or may be discovered by the pathologist. Code this as a SLNBx (code 2). If review of the operative report confirms that a regional lymph node dissection followed the SLNBx, code these cases as 6.	If a relatively large number of lymph nodes, more than 5, are pathologically examined, review the operative report to confirm the procedure was limited to a SLNBx and did not include an axillary lymph node dissection (ALND). Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection) and no sentinel nodes are removed. Review the operative report to confirm that an axillary incision was made and a node exploration was conducted. Patients undergoing SLNBx who fail to map will often undergo ALND. Code these cases as 2 if no ALND was performed, or 6 when ALND was performed during the same operative event. Enter the appropriate number of nodes examined and positive in the data items Regional Lymph Nodes Examined [830] and Regional Lymph Nodes Positive [820].

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
Codes 3 -5 are used for regional lymph node dissection/removal; these do NOT include sentinel lymph node biopsy (SLNBx).			
3	Number of regional lymph nodes removed unknown or not stated; regional lymph nodes removed, NOS	The operative report states that a regional lymph node dissection was performed (a SLNBx was not done during this procedure or in a prior procedure). Code 3 (Number of regional lymph nodes removed unknown, not stated; regional lymph nodes removed, NOS). Check the operative report to ensure this procedure is not a SLNBx only (code 2), or a SLNBx with a regional lymph node dissection (code 6 or 7). Code 4 (1-3 regional lymph nodes removed) should be used infrequently. Review the operative report to ensure the procedure was not a SLNBx only. Code 5 (4 or more regional lymph nodes removed). If a relatively small number of nodes was examined pathologically, review the operative report to confirm the procedure was not a SLNBx only (code 2). If a relatively large number of nodes was examined pathologically, review the operative report to confirm that there was not a SLNBx in addition to a more extensive regional lymph node dissection during the same, or separate, procedure (code 6 or 7). Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection). When mapping fails, surgeons usually perform a more extensive dissection of regional lymph nodes. Code these cases as 2 if no further dissection of regional lymph nodes was undertaken, or 6 when regional lymph nodes were dissected during the same operative event.	Generally, ALND removes at least 7-9 nodes. However, it is possible for these procedures to remove or harvest fewer nodes. Review the operative report to confirm that there was not a SLNBx in addition to a more extensive regional lymph node dissection during the same procedure (code 6 or 7).
4	1-3 regional lymph nodes removed		
5	4 or more regional lymph nodes removed		

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
6	Sentinel node biopsy and code 3, 4, or 5 at same time, or timing not stated	SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known. Generally, look for a report to the Operating Room (OR) by the pathologist on the SLNBx results prior to the regional node dissection. If the SLNBx shows positive nodes, then a dissection may be done. If the nodes are negative, it is rare that a node dissection is performed. Generally, SLNBx followed by a regional lymph node completion will yield a relatively large number of nodes. However it is possible for these procedures to harvest only a few nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only. Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection.) When mapping fails, the surgeon usually performs a more extensive dissection of regional lymph nodes. Code these cases as 6.	SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known. Generally, look for a report to the Operating Room (OR) by the pathologist on the SLNBx results prior to the regional node dissection. If the SLNBx shows positive nodes, then a dissection may be done. If the nodes are negative, it is rare that a node dissection is performed. Generally, SLNBx followed by ALND will yield a minimum of 7-9 nodes. However it is possible for these procedures to harvest fewer (or more) nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx, or whether a SLNBx plus an ALND was performed.
7	Sentinel node biopsy and code 3, 4, or 5 at different times	SLNBx and regional lymph node dissection (code 3, 4, or 5) in separate surgical events. Generally, SLNBx followed by regional lymph node completion will yield a relatively large number of nodes. However, it is possible for these procedures to harvest only a few nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only.	Generally, SLNBx followed by ALND will yield a minimum of 7- 9 nodes. However, it is possible for these procedures to harvest fewer (or more) nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only, or whether a SLNBx plus an ALND was performed.

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
9	Unknown or not applicable	The status of regional lymph node evaluation should be known for surgically-treated cases (i.e., cases coded A190-A900 in the data item *Rx Summ – Surg 2023* [1291]. Review surgically treated cases coded 9 in *Scope of Regional Lymph Node Surgery* to confirm the code.	

Examples

Code	Reason
0	No effort was made to locate sentinel lymph nodes, and no nodes were found in pathologic analysis.
2	(C50.1-Breast) There was an attempt at sentinel lymph node dissection, but no lymph nodes were found in the pathological specimen.
1	(C14.0-Pharynx) Aspiration of regional lymph node to confirm histology of widely metastatic disease.
2	(C44.5-Skin of Back) Patient has melanoma of the back. A sentinel lymph node dissection was done with the removal of one lymph node. This node was negative for disease.
3	(C61.9-Prostate) Bilateral pelvic lymph node dissection for prostate cancer.
6	(C50.3-Breast) Sentinel lymph node biopsy (SLNBx) of right axilla, followed by right axillary lymph node dissection (ALND) during the same surgical event.
7	(50.4-Breast) Sentinel lymph node biopsy (SLNBx) of left axilla, followed in a second procedure 5 days later by a left axillary lymph node dissection (ALND).
9	(C34.9-Lung) Patient was admitted for radiation therapy following surgery for lung cancer. There is no documentation on the extent of lymph node surgery in patient record.

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Scope of Regional Lymph Node Surgery at this Facility

Item #	Length	Allowable Values	Required Status	Date Revised
672	1	0-7, 9	All Years	01/04, 09/08, 02/10, 01/12, 02/21,1/23

Description

Identifies the removal, biopsy, or aspiration of regional lymph node(s) at the time of surgery of the primary site or during a separate surgical event at this facility.

Rationale

This item can be used to compare and evaluate the extent of surgical treatment.

Coding Instructions

- The scope of regional lymph node surgery is collected for each surgical event even if surgery of the primary site was not performed.
- If a surgical procedure which aspirates, biopsies, or removes regional lymph nodes to diagnose or stage this cancer, record the scope of regional lymph nodes surgery in this data item. Record the date of this surgical procedure in data item *Date of First Course of Treatment* [1270] and/or *Date of First Surgical Procedure* [1200] as appropriate(excluding code1).
- Record the date of this procedure in *Date of Sentinel Lymph Node Biopsy* [832] and/or *Date Regional Lymph Node Dissection* [682], if applicable.
- Codes 0–7 are hierarchical. If only one procedure can be recorded, code the procedure that is numerically higher.
    - If two or more surgical procedures of regional lymph nodes are performed, the codes entered in the registry for each subsequent procedure must include the cumulative effect of all preceding procedures. For example, a sentinel lymph node biopsy followed by a regional lymph node dissection at a later time is coded 7. Do not rely on registry software to determine the cumulative code.
- Code 9 for:
    - Any Schema ID with primary site: C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, C809
- Do not code *distant* lymph nodes removed during surgery to the primary site for this data item. They are coded in the data field *Surgical Procedure/Other Site* [1294].
- Refer to the current *AJCC Cancer Staging Manual* for site-specific identification of regional lymph nodes.
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care at This Facility* [3280].

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Note: One important use of registry data is the tracking of treatment patterns over time. In order to compare contemporary treatment with previously published treatment based on former codes, or to data unmodified from pre-1998 definitions, the ability to differentiate surgeries in which four or more regional lymph nodes are removed is desirable. However, it is *very important* to note that the distinction between codes 4 and 5 is made to permit comparison of current surgical procedures with procedures coded in the past when the removal of fewer than 4 lymph nodes was not reflected in surgery codes. *It is not intended to reflect clinical significance* when applied to a particular surgical procedure. It is important to *avoid inferring, by data presentation or other methods, that one category is preferable to another within the intent of these items*.

Codes and Labels

The following instructions should be applied to all surgically treated cases for all types of cancers. It is important to distinguish between sentinel lymph node biopsies (SLNBx) and more extensive dissection of regional lymph nodes.

Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
		Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx), or a more extensive dissection of regional lymph nodes, or a combination of both SLNBx and regional lymph node dissection. The operative report will designate the surgeon's planned procedure as well as a description of the procedure that was actually performed. The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and regional lymph node dissection or a combination of these two procedures. Do not use the number of lymph nodes removed and pathologically examined as the sole means of distinguishing between a SLNBx and a regional lymph node dissection.	Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx), an axillary lymph node dissection (ALND), or a combination of both SLNBx and ALND. The operative report will designate the surgeon's planned procedure as well as a description of the procedure that was actually performed. The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and ALND, or a combination of these two procedures. Do not use the number of lymph nodes removed and pathologically examined as the sole means of distinguishing between a SLNBx and an ALND.
0	No regional lymph node surgery	No regional lymph node surgery.	

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
1	Biopsy or aspiration of regional lymph node(s)	Review the operative report to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed, and it did not include the use of dye or tracer for a SLNBx procedure (code 2). If additional procedures were performed on the lymph nodes, use the appropriate code 2-7.	Excisional biopsy or aspiration of regional lymph nodes for breast cancer is uncommon. Review the operative report of to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed; it is highly possible that the procedure is a SLNBx (code 2) instead. If additional procedures were performed on the lymph nodes, such as axillary lymph node dissection, use the appropriate code 2-7.
2	Sentinel Lymph Node Biopsy	The operative report states that a SLNBx was performed. Code 2 SLNBx when the operative report describes a procedure using injection of a dye, radio label, or combination to identify a lymph node (possibly more than one) for removal/examination. When a SLNBx is performed, additional non-sentinel nodes can be taken during the same operative procedure. These additional non-sentinel nodes are palpably abnormal and selectively removed (or harvested) as part of the SLNBx procedure by the surgeon or may be discovered by the pathologist. Code this as a SLNBx (code 2). If review of the operative report confirms that a regional lymph node dissection followed the SLNBx, code these cases as 6.	If a relatively large number of lymph nodes, more than 5, are pathologically examined, review the operative report to confirm the procedure was limited to a SLNBx and did not include an axillary lymph node dissection (ALND). Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection) and no sentinel nodes are removed. Review the operative report to confirm that an axillary incision was made and a node exploration was conducted. Patients undergoing SLNBx who fail to map will often undergo ALND. Code these cases as 2 if no ALND was performed, or 6 when ALND was performed during the same operative event. Enter the appropriate number of nodes examined and positive in the data items Regional Lymph Nodes Examined [830] and Regional Lymph Nodes Positive [820].

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
Codes 3 -5 are used for regional lymph node dissection/removal; these do NOT include sentinel lymph node biopsy (SLNBx).			
3	Number of regional lymph nodes removed unknown or not stated; regional lymph nodes removed, NOS	The operative report states that a regional lymph node dissection was performed (a SLNBx was not done during this procedure or in a prior procedure). Code 3 (Number of regional lymph nodes removed unknown, not stated; regional lymph nodes removed, NOS). Check the operative report to ensure this procedure is not a SLNBx only (code 2), or a SLNBx with a regional lymph node dissection (code 6 or 7). Code 4 (1-3 regional lymph nodes removed) should be used infrequently. Review the operative report to ensure the procedure was not a SLNBx only. Code 5 (4 or more regional lymph nodes removed). If a relatively small number of nodes was examined pathologically, review the operative report to confirm the procedure was not a SLNBx only (code 2). If a relatively large number of nodes was examined pathologically, review the operative report to confirm that there was not a SLNBx in addition to a more extensive regional lymph node dissection during the same, or separate, procedure (code 6 or 7). Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection). When mapping fails, surgeons usually perform a more extensive dissection of regional lymph nodes. Code these cases as 2 if no further dissection of regional lymph nodes was undertaken, or 6 when regional lymph nodes were dissected during the same operative event.	Generally, ALND removes at least 7-9 nodes. However, it is possible for these procedures to remove or harvest fewer nodes. Review the operative report to confirm that there was not a SLNBx in addition to a more extensive regional lymph node dissection during the same procedure (code 6 or 7).
4	1-3 regional lymph nodes removed		
5	4 or more regional lymph nodes removed		

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
6	Sentinel node biopsy and code 3, 4, or 5 at same time, or timing not stated	SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known. Generally, look for a report to the Operating Room (OR) by the pathologist on the SLNBx results prior to the regional node dissection. If the SLNBx shows positive nodes, then a dissection may be done. If the nodes are negative, it is rare that a node dissection is performed. Generally, SLNBx followed by a regional lymph node completion will yield a relatively large number of nodes. However it is possible for these procedures to harvest only a few nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only. Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection.) When mapping fails, the surgeon usually performs a more extensive dissection of regional lymph nodes. Code these cases as 6.	SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known. Generally, look for a report to the Operating Room (OR) by the pathologist on the SLNBx results prior to the regional node dissection. If the SLNBx shows positive nodes, then a dissection may be done. If the nodes are negative, it is rare that a node dissection is performed. Generally, SLNBx followed by ALND will yield a minimum of 7-9 nodes. However it is possible for these procedures to harvest fewer (or more) nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx, or whether a SLNBx plus an ALND was performed.
7	Sentinel node biopsy and code 3, 4, or 5 at different times	SLNBx and regional lymph node dissection (code 3, 4, or 5) in separate surgical events. Generally, SLNBx followed by regional lymph node completion will yield a relatively large number of nodes. However, it is possible for these procedures to harvest only a few nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only.	Generally, SLNBx followed by ALND will yield a minimum of 7- 9 nodes. However, it is possible for these procedures to harvest fewer (or more) nodes. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only, or whether a SLNBx plus an ALND was performed.

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Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
9	Unknown or not applicable	The status of regional lymph node evaluation should be known for surgically-treated cases (i.e., cases coded A190-A900 in the data item *Rx Summ – Surg 2023* [1291]. Review surgically treated cases coded 9 in *Scope of Regional Lymph Node Surgery* to confirm the code.	

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Surgical Procedure/Other Site

Item #	Length	Allowable Values	Required Status	Date Revised
1294	1	0-5, 9	All Years	01/04, 09/08, 01/10, 02/10, 01/12, 01/13, 02/21, 1/23

Description

Records the surgical removal of *distant lymph nodes* or other tissue(s) or organ(s) removed beyond the primary site.

Rationale

The removal of non-primary tissue documents the extent of surgical treatment and is useful in evaluating the extent of metastatic involvement.

Coding Instructions

- Assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code.
- If other tissue or organs are removed during primary site surgery that are not specifically defined by the site-specific Rx Hosp – Surg 2023 [1291] or Rx Summ-Surg 2023 [671] code, assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code. Assign the highest numbered code that describes the surgical resection of *distant lymph node(s).*
- Incidental removal of tissue or organs is not a "Surgical Procedure/Other Site."
- If multiple first course surgical procedures coded in this item are performed for a single primary, the code should represent the cumulative effect of those surgeries. Do not rely on registry software to perform this task for you.
- *Surgical Procedure/Other Site* is collected for each surgical event even if surgery of the primary site was not performed.
- Code 1 for:
    - Any case coded to primary site C420, C421, C423, C424, C760-C768, C770-C779, C809 Excluding cases coded to the Cervical Lymph Nodes and Unknown Primary 00060
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care* [3270].

Code	Label	Definition
0	None	No surgical procedure of non-primary site was performed. Diagnosed at autopsy.
1	Non-primary surgical procedure performed	Non-primary surgical resection to other site(s), unknown if whether the site(s) is regional or distant.
2	Non-primary surgical procedure to other regional sites	Resection of regional site.
3	Non-primary surgical procedure to *distant lymph node(s)*	Resection of *distant lymph node(s)*.

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4	Non-primary surgical procedure to distant site	Resection of distant site.
5	Combination of codes	Any combination of surgical procedures 2, 3, or 4.
9	Unknown	It is unknown whether any surgical procedure of a nonprimary site was performed. Death certificate only.

Examples

Code	Reason
0	(C18.1–Colon) The incidental removal of the appendix during a surgical procedure to remove a primary malignancy in the right colon.
1	Surgical removal of metastatic lesion from liver; unknown primary.
2	(C18.3–Colon) Surgical ablation of solitary liver metastasis, hepatic flexure primary.
4	(C34.9–Lung) Removal of solitary brain metastasis.
5	(C21.0–Anus) Excision of solitary liver metastasis and one large hilar lymph node.

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Surgical Procedure/Other Site at this Facility

Item #	Length	Allowable Values	Required Status	Date Revised
674	1	0-5, 9	All Years	01/04, 01/10, 02/10, 01/12, 02/21, 1/23

Description

Records the surgical removal of *distant lymph nodes* or other tissue(s)/organ(s) beyond the primary site at this facility.

Rationale

The removal of non-primary tissue documents the extent of surgical treatment and is useful in evaluating the extent of metastatic involvement.

Coding Instructions

- If other tissue or organs are removed during primary site surgery that are not specifically defined by the site-specific Rx Hosp – Surg 2023 [1291] or Rx Summ -Surg 2023[671] code, assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code.
- Assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code.
- Assign the highest numbered code that describes the surgical resection of *distant lymph node(s).*
- Incidental removal of tissue or organs is not a "Surgical Procedure/Other Site."
- If multiple first course surgical procedures coded in this item are performed for a single primary, the code should represent the cumulative effect of those surgeries. Do not rely on registry software to perform this task for you.
- *Surgical Procedure/Other Site* is collected for each surgical event even if surgery of the primary site was not performed.
- Code 1 for:
    - Any case coded to primary site C420, C421, C423, C424 C760-C768, C770-C779, C809 Excluding cases coded to the Cervical Lymph Nodes and Unknown Primary 00060
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care at This Facility* [3280].

Code	Label	Definition
0	None	No non-primary surgical site resection was performed. Diagnosed at autopsy.
1	Non-primary surgical procedure performed	Non-primary surgical resection to other site(s), unknown if whether the site(s) is regional or distant.
2	Non-primary surgical procedure to other regional sites	Resection of regional site.
3	Non-primary surgical procedure to *distant lymph node(s)*	Resection of *distant lymph node(s)*.

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4	Non-primary surgical procedure to distant site	Resection of distant site.
5	Combination of codes	Any combination of surgical procedures 2, 3, or 4.
9	Unknown	It is unknown whether any surgical procedure of a non-primary site was performed. Death certificate only.

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Date of Surgical Discharge

Item #	Length	Allowable Values	Required Status	Date Revised
3180	8	CCYYMMDD, Blank	2003+	01/10, 01/11, 01/23

Description

Records the date the patient was discharged following primary site surgery. The date corresponds to the event recorded in *Rx Summ – Surg 2023* [1291], and *Date of Most Definitive Surgical Resection* [3170].

Rationale

Length of stay is an important quality of care and financial measure among hospital administrations, those who fund public and private health care, and public health users. This date, in conjunction with the data item *Date of Most Definitive Surgical Resection* [3170], will allow for the calculation of a patient's length of hospitalization associated with primary site surgery.

Coding Instructions

- Record the date the patient was discharged from the hospital following the event recorded in *Rx Summ – Surg 2023* [1291].
- If the patient died following the event recorded in *Rx Summ – Surg 2023* [1291], but before being discharged from the treating facility, then the *Date of Surgical Discharge* is the same as the date recorded in the data item *Date of Last Contact or Death* [1750].
- If the patient received out-patient surgery, then the date of surgical discharge is the same as the date recorded in the data item *Date of Most Definitive Surgical Resection of the Primary Site* [3170].
- Blank is allowable.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of Surgical Discharge is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Surgical Discharge transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Readmission to the Same Hospital within 30 Days of Surgical Discharge

Item #	Length	Allowable Values	Required Status	Date Revised
3190	1	0-3, 9	2003+	06/15, 01/10, 01/18

Description

Records a readmission to the same hospital, for the same illness, within 30 days of discharge following hospitalization for surgical resection of the primary site.

Rationale

This data item provides information related to the quality of care. A patient may have a readmission related to the primary diagnosis on discharge if the length of stay was too short, and then he/she needed to return due to problems or complications. A patient may also need to be readmitted if discharge planning and/or follow-up instructions were ineffective. It is important to distinguish a planned from an unplanned readmission, since a planned readmission is not an indicator of quality of care problems.

Coding Instructions

- Consult patient record or information from the billing department to determine if a readmission to the same hospital occurred within 30 days of the date recorded in the item *Date of Surgical Discharge* [3180].
- Only record a readmission related to the treatment of this cancer.
- Review the treatment plan to determine whether the readmission was planned.
- If there was an unplanned admission following surgical discharge, check for an ICD-9-CM "E" code and record it, space allowing, as an additional *Comorbidities and Complications* [3110, 3120, 3130, 3140, 3150, 3160, 3161, 3162, 3163, 3124] for cases diagnosed between 2003 and 2017. For cases diagnosed January 1, 2018 and later, check for an ICD-10-CM "Y" codes and record it, space allowing, as an additional *Secondary Diagnosis 1-10* [3780, 3782, 3784, 3786, 3788, 3790, 3792, 3794, 3796, 3798].
- There may be times when the first course of treatment information is incomplete. Therefore, it is important to continue follow-up efforts to be certain the complete treatment information is collected.

Code	Label
0	No surgical procedure of the primary site was performed, or the patient was not readmitted to the same hospital within 30 days of discharge.
1	A patient was surgically treated and was readmitted to the same hospital within 30 days of being discharged. This readmission was unplanned.
2	A patient was surgically treated and was then readmitted to the same hospital within 30 days of being discharged. This readmission was planned (chemotherapy port insertion, revision of colostomy, etc.)
3	A patient was surgically treated and, within 30 days of being discharged, the patient had both a planned and an unplanned readmission to the same hospital.
9	It is unknown whether surgery of the primary site was recommended or performed. It is unknown whether the patient was readmitted to the same hospital within 30 days of discharge. Death certificate only.

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Examples

Code	Reason
0	A patient does not return to the hospital following a local excision for a Stage I breast cancer.
0	A patient was surgically treated and, upon discharge from acute hospital care, was admitted/transferred to an extended care ward of the hospital.
1	A patient is readmitted to the hospital three weeks (21 days) following a colon resection due to unexpected perirectal bleeding.
2	Following surgical resection the patient returns to the hospital for the insertion of a chemotherapy port.

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Reason for No Surgery of Primary Site

Item #	Length	Allowable Values	Required Status	Date Revised
1340	1	0-2, 5-9	2002+	01/04, 01/13, 02/21

Description

Records the reason that no surgery was performed on the primary site.

Rationale

This data item provides information related to the quality of care and describes why primary site surgery was not performed.

Coding Instructions

- If *Rx Summ – Surg 2023* [1291] is coded A000, then record the reason based on documentation in the patient record.
- Code 1 if the treatment plan offered multiple alternative treatment options and the patient selected treatment that did not include surgery of the primary site, or if the option of "no treatment" was accepted by the patient.
- Code 1 if *Rx Summ – Surg 2023* [1291] is coded A980.
- Any case coded to primary sites C420, C421, C423, C424, C760-C768, C809
- Code 7 if the patient refused recommended surgical treatment, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 8 if it is known that a physician recommended primary site surgery, but no further documentation is available yet to determine whether surgery was performed.
- Cases coded 8 should be followed and updated to a more definitive code as appropriate.
- Code 9 if the treatment plan offered multiple choices, but it is unknown which treatment, if any was provided.

Code	Label
0	Surgery of the primary site was performed.
1	Surgery of the primary site was not performed because it was not part of the planned first course treatment. Diagnosed at autopsy.
2	Surgery of the primary site was not recommended/performed because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned surgery etc.)
5	Surgery of the primary site was not performed because the patient died prior to planned or recommended surgery.
6	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was not performed as part of the first course of therapy. No reason was noted in patient record.
7	Surgery of the primary site was not performed; 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.

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Code	Label
8	Surgery of the primary site was recommended, but it is unknown if it was performed. Further follow-up is recommended.
9	It is unknown whether surgery of the primary site was recommended or performed. Death certificate only.

Examples

Code	Reason
2	A patient with a primary tumor of the liver is not recommended for surgery due to advanced cirrhosis.
8	A patient is referred to another facility for recommended surgical resection of a gastric carcinoma, but further information from the facility to which the patient was referred is not available.

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Radiation Data Items

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Date Radiation Started

Item #	Length	Allowable Values	Required Status	Date Revised
1210	8	CCYYMMDD, Blank	All Years	06/05, 01/10, 01/11, 01/23

Description

Records the date on which the first radiation therapy for this diagnosis began at any facility that is part of the first course of treatment.

Rationale

It is important to be able to sequence the use of multiple treatment modalities and to evaluate the time intervals between the treatments. For some diseases, the sequence of radiation and surgical therapy is important when determining the analytic utility of pathological stage information.

Coding Instructions

- If radiation therapy is the first or only treatment administered to the patient, then the date radiation started should be the same as the date entered into the item Date of First Course of Treatment [1270].
- The date when treatment started will typically be found in the radiation oncologist's summary letter for the first course of treatment.
- There may be times when the first course of treatment information is incomplete. Therefore, it is important to continue follow-up efforts to be certain the complete treatment information is collected.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Radiation Started is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Radiation Started transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

Examples

Code	Reason
20031215	A patient started external beam radiation on December 15, 2003.
20031012	A patient with a primary tumor of the brain undergoes stereotactic radiosurgery using Gamma Knife on October 12, 2003.
20030602	A patient enters the facility for interstitial radiation boost for prostate cancer that is performed on August 6, 2003. Just prior to this, the patient had external beam therapy to the lower pelvis that was started on June 2, 2003 at another facility.

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Location of Radiation Treatment

Item #	Length	Allowable Values	Required Status	Date Revised
1550	1	0-4, 8, 9	2003+	01/04, 01/12, 01/18, 02/21, 1/23

Description

Identifies the location of the facility where radiation therapy was administered during the first course of treatment.

Rationale

This data item provides information useful to understanding the referral patterns for radiation therapy services and for assessing the quality and outcome of radiation therapy by delivery site.

Coding Instructions

- Location of radiation treatment will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the location of radiation treatment may require assistance from the radiation oncologist for consistent coding.
- If the radiation treatment was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the radiation administered in the items Palliative Care [3270] and/or Palliative Care at This Facility [3280], as appropriate.
- In this context, "regional" is used to distinguish from "boost" or "cone down"; it does not refer to "regional" as used to identify stage or disease spread. In general, regional treatment will correspond to the phase in which the treatment fields had their largest dimension and usually includes draining lymph nodes. In most, but not all, cases this will be phase I.
- For cases diagnosed January 1, 2018 and later, the first phase (regional treatment) may be commonly referred to as an initial plan and a subsequent phase may be referred to as a boost or cone down, and would be recorded as Phase II, Phase III, etc. accordingly.

Code	Label	Definition
0	No radiation treatment	No radiation therapy was administered to the patient. Diagnosed at autopsy.
1	All radiation treatment at this facility	All radiation therapy was administered at the reporting facility.
2	Regional treatment at this facility, boost elsewhere	Regional treatment was administered at the reporting facility; a boost dose was administered elsewhere.
3	Boost radiation at this facility, regional elsewhere	Regional treatment was administered elsewhere; a boost dose was administered at the reporting facility.
4	All radiation treatment elsewhere	All radiation therapy was administered elsewhere.
8	Other	Radiation therapy was administered, but the pattern does not fit the above categories.

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Code	Label	Definition
9	Unknown	Radiation therapy was administered, but the location of the treatment facility is unknown or not stated in patient record; or it is unknown whether radiation therapy was administered, or diagnosis was by Death certificate only.

Examples

Code	Reason
2	A patient received radiation therapy to the entire head and neck region at the reporting facility and is then referred to another facility for a high-dose-rate (HDR) intracavitary boost.
3	A patient was diagnosed with breast cancer at another facility and received surgery and regional radiation therapy at that facility before being referred to the reporting facility for boost dose therapy.
8	Regional treatment was initiated at another facility and midway through treatment the patient was transferred to the reporting facility to complete the treatment regimen.
9	Patient is known to have received radiation therapy, but records do not define the facility or facilities where the treatment was administered.

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Phase I-II-III Radiation Primary Treatment Volume

Item #	Phase	Length	Allowable Values	Required Status	Date Revised
1504	I	2	00-07, 09-14, 20-26, 29-32, 39-42, 50-68, 70-73, 80-86, 88, 90-99, Blank	All Years	01/18, 02/21, 01/22, 01/23
1514	II	2	00-07, 09-14, 20-26, 29-32, 39-42, 50-68, 70-73, 80-86, 88, 90-99, Blank	All Years	01/18, 02/21, 01,22, 01/23
1524	III	2	00-07, 09-14, 20-26, 29-32, 39-42, 50-68, 70-73, 80-86, 88, 90-96, 98-99, Blank	2018+	01/18, 02/21, 01/23

Description

Identifies the primary treatment volume or primary anatomic target treated during phase I-II-III of radiation therapy during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

This data items provides information describing the anatomical structure targeted by radiation therapy during the phases of radiation treatment and can be used to determine whether the site of the primary disease was treated with radiation or if other regional or distant sites were targeted. This information is useful in evaluating the patterns of care within a facility and on a regional or national basis.

Coding Instructions

- Phase I [1504] data item should be used to indicate the primary target volume, which is typically the primary tumor or tumor bed. If the primary tumor or primary tumor bed was not targeted, record the other regional or distant site that was targeted.
- Subsequent phase may be referred to as a boost or cone down, and would be recorded in fields with subsequent phases recorded as Phase II [1514], Phase III [1524], etc. accordingly.
- Draining lymph nodes may also be concurrently targeted most commonly during the first phase. Whether draining lymph nodes were targeted and which ones were targeted will be identified in a separate data item Phase I-II-III Radiation to Draining Lymph Nodes [1505, 1515, 1525].
- When the primary volume is a lymph node region, draining lymph nodes are not targeted. Record code 88 in the Phase I-II-III Radiation to Draining Lymph Nodes [1505, 1515, 1525] when primary volume is a lymph node region. Use codes 01 to 09 only when the lymph nodes are the primary target, for example, in lymphomas.
- Note that for many of the treatment volumes, the same code should be used when the anatomic structure is targeted or when the surgical bed of the resected anatomical structure is targeted. For example, when prostate cancer is treated with radiation alone, code 64 will be the Primary Treatment Volume. Similarly, when prostate cancer is treated with radiation after radical prostatectomy, code 64 will be the Primary Treatment Volume. There is an exception to the rule for breast cancer. In patients with breast cancer, code 41 (Breast- partial) in patients who have had a lumpectomy and were treated with partial breast irradiation (sometimes called accelerated partial breast irradiation (APBI)), code 40 (Breast – whole) in patients who had a lumpectomy and whole breast radiation, and code 42 (chest wall) in patients who had a mastectomy and post-mastectomy radiation.

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- A new paradigm of treatment called on-line adaptive (or on-table adaptive) radiation may be a source of confusion when coding the Primary Treatment Volume. New linear accelerators may now be attached to such high-quality imaging devices that they can function as both simulation scanners for planning and radiation delivery systems. If a new radiation plan is created while the patient is on the radiation delivery table to take into account that day's anatomy, this is referred to "on-line" or "on- table" adaptive radiation. If a new radiation plan is created while the patient is not on the delivery table, then it is referred to as "off-line" (or "off-table" adaptive therapy. Off-line adaptive therapy treatments are relatively common, but MR-guided and CT-guided on-line adaptive therapy treatments are just emerging. In adaptive therapy, new radiation plans are created to account for changes in the position or shape of a target volume, but this does NOT mean that there has been a change in "phase". When the adaptive therapy paradigm is being used, a new phase should be documented only when there has been a change in the conceptual anatomic target volume (for example, a change from whole prostate to partial prostate) or if there has been a change in the draining lymph node target, dose per fraction, modality or planning technique.
- Code 00 if the tumor was diagnosed at autopsy.
- This data item, in conjunction with Phase I-II-III Radiation to Draining Lymph Nodes [1505, 1515, 1525], replaces the Radiation Treatment Volume [1540] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.
- If the patient received just one phase of treatment, code the phase II Radiation Treatment Volume to "00" (No treatment). All other phase II and phase III data fields should be left blank.
- If the patient received just two phases of treatment, code the phase III Radiation Treatment Volume to "00" and leave all other phase III data fields blank.

Code	Label	Definition
00	No radiation treatment	Radiation therapy was not administered to the patient. Diagnosed at autopsy.
01	Neck lymph node regions	The primary treatment is directed at lymph node regions of the neck. Example situations include treatment of lymphoma or lymph node recurrence (in the absence of primary site failure) following definitive surgery of the primary tumor. If radiation to the neck lymph nodes includes the supraclavicular region use code 03.
02	Thoracic lymph node regions	Radiation therapy is directed to one or some combination of hilar, mediastinal, and supraclavicular lymph node regions without concurrent treatment of a visceral organ site. Example situations include treatment of lymphatic recurrence after complete surgical excision of a thoracic primary. Note that the supraclavicular region may be part of a head and neck lymph node region. Use code 03 for treatments directed at neck nodes and supraclavicular nodes with a head and neck primary. Use code 04 if supraclavicular lymph nodes are part of breast treatment.

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Code	Label	Definition
03	Neck and thoracic lymph node regions	Treatment is directed to lymph nodes in the neck and thoracic region without concurrent treatment of a primary visceral tumor. This code might apply to treatments for lymphatic recurrences following definitive treatment for tumors of the head and neck or thoracic regions.
04	Breast/ Chest wall lymph node regions	Radiation is directed primarily to one or some combination of axillary, supraclavicular, and/or internal mammary lymph node regions WITHOUT concurrent treatment of the breast or chest wall. If the breast AND lymph nodes are being treated, then code the Primary Treatment Volume to Breast (codes 40 or 41) and Breast/chest wall lymph nodes (code 04) in Radiation to Draining Lymph Nodes.
05	Abdominal lymph nodes	Treatment is directed to one or some combination of the lymph nodes of the abdomen, including retro-crural, peri-gastric, peri-hepatic, portocaval and para-aortic node regions. Possible situations might include seminoma, lymphoma or lymph node recurrence following surgical resection of the prostate, bladder or uterus. If field or target is described as hockey stick, dog leg, and inverted Y then use code 07.
06	Pelvic lymph nodes	Treatment is directed to one or some combination of the lymph nodes of the pelvis, including the common, internal and external iliac, obturator, inguinal and peri-rectal lymph nodes. This might be done for lymphoma or lymph node recurrence following definitive surgery for a pelvic organ.
07	Abdominal and pelvic lymph nodes	Treatment is directed to a combination of lymph nodes in both the abdomen and pelvis. This code includes extended fields ("hockey stick", "dog-leg", "inverted Y", etc.) utilized to treat seminomas and lymphomas or recurrence of a solid tumor.
09	Lymph node region, NOS	This category should be used to code treatments directed at lymph node regions that are not adequately described by codes 01-07.
10	Eye/orbit/optic nerve	Treatment is directed at all or a portion of the eye, orbit and/or optic nerve.
11	Pituitary	Treatment is directed at the pituitary gland.
12	Brain	Treatment is directed at all the brain and its meninges ("Whole brain").
13	Brain (Limited)	Treatment is directed at one or more sub-sites of the brain but not the whole brain. Chart may describe "SRS", "Stereotactic Radiosurgery", "Gamma Knife®". Use code 13 when primary tumor volume is brain stem.
14	Spinal cord	Treatment is directed at all or a portion of the spinal cord or its meninges.
20	Nasopharynx	Treatment is directed at all or a portion of the nasopharynx.
21	Oral Cavity	Treatment is directed at all or a portion of the oral cavity, which may include the lips, gingiva, alveolus, buccal mucosa, retromolar trigone, hard palate, floor of mouth and/or oral tongue.
22	Oropharynx	Treatment is directed at all or a portion of the oropharynx, including the soft palate, tonsils, base of tongue and pharyngeal wall.
23	Larynx (glottis) or hypopharynx	Treatment is directed at all or a portion of the larynx and/or hypopharynx.

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Code	Label	Definition
24	Sinuses/Nasal tract	Treatment is directed at all or a portion of the sinuses and nasal tract, including the frontal, ethmoid, sphenoid and maxillary sinuses.
25	Parotid or other salivary glands	Treatment is directed at the parotid or other salivary glands, including the submandibular, sublingual and minor salivary glands.
26	Thyroid	Treatment is directed at all or a portion of the thyroid. Code 98 when the thyroid is treated with I-131 radioisotope.
29	Head and neck (NOS)	The treatment volume is directed at a primary tumor of the head and neck, but the primary sub-site is not a head and neck organ identified by codes 20-26 or it is an "unknown primary". Use code 29 when the Primary Tumor Volume is Paraganglioma of the jugular foramen in the middle ear.
30	Lung or bronchus	Treatment is directed at all or a portion of the lung or bronchus.
31	Mesothelium	Treatment is directed to all or a portion of the mesothelium. This code should be used for mesothelioma primaries, even if a portion of the lung is included in the radiation field.
32	Thymus	Treatment is directed to all or a portion of the thymus.
39	Chest/lung (NOS)	The treatment is directed at a primary tumor of the chest, but the primary sub-site is unknown or not identified in codes 30-32. For example, this code should be used for sarcomas arising from the mediastinum.
40	Breast - whole	Treatment is directed at all the intact breast. Intact breast includes breast tissue that either was not surgically treated or received a lumpectomy or partial mastectomy.
41	Breast - partial	Treatment is directed at a portion of the intact breast but not the whole breast. The chart may have terms such as "Mammosite", "interstitial (seed) implant)", or "(accelerated) partial breast irradiation". Consider the possibility of partial breast irradiation when "IMRT" is documented in the record.
42	Chest wall	Treatment encompasses the chest wall (following mastectomy).
50	Esophagus	Treatment is directed at all or a portion of the esophagus. Include tumors of the gastro-esophageal junction.
51	Stomach	Treatment is directed at all or a portion of the stomach.
52	Small bowel	Treatment is directed at all or a portion of the small bowel.
53	Colon	Treatment is directed at all or a portion of the colon.
54	Rectum	Treatment is directed at all or a portion of the rectum.
55	Anus	Treatment is directed at all or a portion of the anus.
56	Liver	Treatment is directed at all or a portion of the liver.
57	Biliary tree or gallbladder	Treatment is directed at all or a portion of the biliary tree or gallbladder.
58	Pancreas or hepatopancreatic ampulla	Treatment is directed at all or a portion of the pancreas or the hepatopancreatic ampulla. Hepatopancreatic ampulla tumors are sometimes referred to as periampullary tumors.
59	Abdomen (NOS)	The treatment volume is directed at a primary tumor of the abdomen, but the primary sub-site is not an abdominal organ defined by codes 50-58 or it is considered to be an "unknown primary". For example, this code should be used for sarcomas arising from the abdominal retroperitoneum.

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Code	Label	Definition
60	Bladder - whole	Treatment is directed at all the bladder.
61	Bladder - partial	Treatment is directed at a portion of the bladder but not the whole bladder.
62	Kidney	Treatment is directed at all or a portion of the kidney.
63	Ureter	Treatment is directed at all or a portion of the ureter.
64	Prostate - whole	Treatment is directed at all of the prostate with/without all or part of the seminal vesicles. Use this code even if seminal vesicles are not explicitly targeted.
65	Prostate - partial	Treatment is directed at a portion of the prostate but not the whole prostate.
66	Urethra	Treatment is directed at all or a portion of the urethra.
67	Penis	Treatment is directed at all or a portion of the penis. Treatments of urethral primaries should be coded as 'urethra' (code 66).
68	Testicle or scrotum	Treatment is directed at all or a portion of the testicle and/or scrotum.
70	Ovaries or fallopian tubes	Treatment is directed at all or a portion of the ovaries or fallopian tubes.
71	Uterus or Cervix	Treatment is directed at all or a portion of the uterus, endometrium, cervix or parametrium.
72	Vagina	Treatment is directed at all or a portion of the vagina. Treatments of urethral primaries should be coded as 'urethra' (code 66).
73	Vulva	Treatment is directed at all or a portion of the vulva. Treatments of urethral primaries should be coded as 'urethra' (code 66).
80	Skull	Treatment is directed at all or a portion of the bones of the skull. Any brain irradiation is a secondary consequence.
81	Spine/vertebral bodies	Treatment is directed at all or a portion of the bones of the spine/vertebral bodies, including the sacrum. Spinal cord malignancies should be coded using 'spinal cord' (code 14).
82	Shoulder	Treatment is directed to all or a portion of the proximal humerus, scapula, clavicle, or other components of the shoulder complex.
83	Ribs	Treatment is directed at all or a portion of one or more ribs.
84	Hip	Treatment is directed at all or a portion of the proximal femur or acetabulum.
85	Pelvic bones	Treatment is directed at all or a portion of the bones of the pelvis other than the hip or sacrum.
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 non-visceral soft tissues of the pelvis.
88	Extremity bone, NOS	Treatment is directed at all or a portion of the bones of the arms or legs. This excludes the proximal femur (Hip, code 84). This excludes the proximal humerus (Shoulder, code 82).

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Code	Label	Definition
90	Skin	Treatment is directed at all or a portion of the skin. The primary malignancy originates in the skin and the skin is the primary target. So- called skin metastases are usually subcutaneous and should be coded as a soft tissue site.
91	Soft tissue	This category should be used to code primary or metastatic soft tissue malignancies when localizing to a region of the body (e.g. pelvis) is not possible or when the case does not fit other categories.
92	Hemibody	A single treatment volume encompassing either all structures above the diaphragm, or all structures below the diaphragm. This is almost always administered for palliation of widespread bone metastasis in patients with prostate or breast cancer.
93	Whole body	Treatment is directed to the entire body included in a single treatment, for example as with total body irradiation (TBI).
94	Mantle, mini-mantle (obsolete after 2017)	For conversion of historical data only
95	Lower extended field (obsolete after 2017)	For conversion of historical data only
96	Inverted Y (obsolete after 2017)	For conversion of historical data only
97	Invalid historical FORDS value	Conversion to new STORE data item could not take place due to an invalid FORDS Volume code
98	Other	Radiation therapy administered; treatment volume other than those previously categorized by codes 01-93. For example, code 98 when the radioisotope I-131 is used in the treatment of thyroid cancer.
99	Unknown	This category should be used to code treatments for which there is no information available about the treatment volume, or it is unknown if radiation treatment was administered.

Examples

Code	Reason
00	An elderly man with mild fatigue is found to have an elevated lymphocyte count on CBC. Bone marrow biopsy in your facility confirms a diagnosis of chronic lymphocytic leukemia. Physician and patient agree that no treatment is indicated at this time. Record Phase I Radiation Primary Treatment Volume as 00 (No radiation treatment).
98	A man with a history of prostate cancer and prior radical prostatectomy is treated with SBRT to 3500cGy in five fractions to a recurrent tumor in a remnant right seminal vesicle. Record Phase I Radiation Primary Treatment Volume as 98 because there is no specific code for seminal vesicles.
93	A woman with advanced multiple myeloma is referred for total body irradiation and is treated twice daily for three consecutive days in a total body stand at extended distance with open rectangular photon fields, 200cGy to mid-body per treatment. Record Phase I Radiation Primary Treatment Volume as 93 (Whole body).

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Phase I-II-III Radiation to Draining Lymph Nodes

Item #	Length	Allowable Values	Required Status	Date Revised
1505	2	00-08, 88, 99, Blank	All Years	01/18, 02/21, 01/22
1515	2	00-08, 88, 99, Blank	All Years	01/18, 02/21
1525	2	00-08, 88, 99, Blank	2018+	01/18, 02/21

Description

Identifies the draining lymph nodes treated (if any) during the phase I-II-III of radiation therapy delivered to the patient during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

The first phase of radiation treatment commonly targets both the primary tumor (or tumor bed) and draining lymph nodes as a secondary site. This data item should be used to indicate the draining regional lymph nodes, if any, that were irradiated during the first phase of radiation to the primary site.

The second and third phase of radiation treatment commonly targets just the primary tumor (or tumor bed) but in some cases also target both the primary and draining lymph nodes as a secondary site. This data item should be used to indicate the draining regional lymph nodes, if any, that were irradiated during the second and third phase of radiation to the primary site.

Coding Instructions

- When the primary volume is lymph nodes, draining lymph nodes are not targeted. Record code 88 in the Phase I-II-III Radiation to Draining Lymph Nodes [1505,1515,1525]. Use codes 01 to 09 only when the lymph nodes are the primary target, for example, in lymphomas.
- Code 00 if the tumor was diagnosed at autopsy for all Phases Radiation to Draining Lymph Nodes.
- Phase I data item, in conjunction with Phase I Radiation Primary Treatment Volume [1504], replaces the Radiation Treatment Volume [1540] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.
- Phase II and III radiation treatment includes primary tumor or tumor bed in addition to the draining lymph node regions that are associated with the primary tumor or tumor bed. The primary tumor or tumor bed is recorded in the Phase II-III Radiation Primary Treatment Volume [1514, 1524].
- Note: When the Phase II Primary Treatment Volume is lymph nodes, draining lymph nodes are not targeted. Record code 88 in this data item.
- Blanks allowed only for Phase II or III if no radiation treatment administered.
- Phase II data item may include converted historical values. For conversion of historical values, this data item includes a mapped value of 99 when Rad--Boost RX Modality [3200] was administered. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

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Code	Label
00	No radiation treatment to draining lymph nodes. Diagnosed at autopsy.
01	Neck lymph node regions
02	Thoracic lymph node regions
03	Neck and thoracic lymph node regions
04	Breast/Chest wall 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; Phase I Radiation Primary Treatment Volume is lymph nodes
99	Unknown if any radiation treatment to draining lymph nodes; Unknown if radiation treatment administered

Examples

Code	Reason
04	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions. Axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record the Phase I Radiation to Draining Lymph Nodes as 04 (Breast/Chest wall lymph node regions).
88	A patient with a left supraclavicular metastasis from a gastric carcinoma received 6,000 cGy to the left supraclavicular region. Record the Phase I Radiation to Draining Lymph Nodes as 88 because Phase I Radiation Primary Treatment Volume is lymph nodes.
06	Prostate cancer patient declines surgery for management of his prostate cancer, and opts for EBRT. The treatment summary states that pelvis/prostate were targeted on phase 1 with 180 cGy X 25 fx= 45 Gy. Record Phase I Radiation to Draining Lymph Nodes as 06 because when the pelvis is specifically mentioned in the treatment summary, we can assume that regional lymph nodes were targeted.

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Phase I-II-III Radiation Treatment Modality

Item #	Length	Allowable Values	Required Status	Date Revised
1506	2	00-16, 98-99, Blank	All Years	01/18, 02/21, 01/23
1516	2	00-16, 98-99, Blank	All Years	01/18, 02/21, 01/23
1526	2	00-16, 98-99, Blank	2018+	01/18, 02/21, 01/23

Description

Identifies the radiation modality administered during phase I-II-III of radiation treatment delivered during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

Radiation modality reflects whether a treatment was external beam, brachytherapy, a radioisotope as well as their major subtypes, or a combination of modalities. These data items should be used to indicate the radiation modality administered during phase I-II-III of radiation.

Historically, the previously-named *Regional Treatment Modality* [1570] utilized codes that were not mutually exclusive. Rather, it included codes describing a mix of modalities, treatment planning techniques, and delivery techniques that are commonly utilized by radiation oncologists. However, every phase of radiation treatment will include a specified modality, planning technique, and delivery technique. The goal of the 2018 implementation of separate phase-specific data items for the recording of radiation modality and external beam radiation treatment planning techniques is to clarify this information and implement mutually exclusive categories. A separate data item for delivery technique has not been implemented because this information is not consistently reported in end of treatment summaries.

Coding Instructions

- Radiation treatment modality will typically be found in the radiation oncologist's treatment summary. Segregation of treatment components into Phases and determination of the respective treatment modality may require assistance from the radiation oncologist to ensure consistent coding.
- For purposes of this data item, photons, x-rays and gamma-rays are equivalent.
- Use code 13 - Radioisotopes, NOS for radioembolization procedures, e.g. intravascular Yttrium-90 for cases diagnosed January 1, 2018 or later. For cases diagnosed prior January 1, 2018, use code 07-Brachytherapy, NOS.
- This data item intentionally does not include reference to various MV energies because this is not a clinically important aspect of technique. A change in MV energy (e.g., 6MV to 12MV) is not clinically relevant and does not represent a change in treatment technique. It is rare for change in MV energy to occur during any phase of radiation therapy.
- If this data item is coded to any of the External beam codes (01-06 or 12), the planning technique must be recorded in the data item Phase I-II-III External Beam Radiation Planning Technique [1502, 1512, 1522].
- If Radiation Treatment Modality is coded to any of the Brachytherapy or Radioisotopes codes (07-16) the code of 88 must be recorded in the data item Phase I-II-III External Beam Radiation Planning Technique [1502, 1512, 1522].
- Note: Do not confuse a radioiodine scan with treatment. Only treatment is recorded in this item.

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- This data item, in conjunction with Phase I-II Radiation External Beam Planning Technique [1502, 1512], replaces the Rad--Regional RX Modality [1570], Rad--Boost RX Modality [3200] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.
- Phase I must be coded however blanks allowed for Phase II-III if no treatment administered.

Code	Label
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-223
15	Radioisotopes, Strontium-89
16	Radioisotopes, Strontium-90
98	Radiation treatment administered; modality unknown
99	Unknown if radiation treatment administered

Examples

Code	Reason
13	A patient with follicular carcinoma of the thyroid is treated with post-operative injection of radioiodine (I-131) for a total dose of 150 millicuries. Record Phase I Radiation Treatment Modality as 13 (Radioisotopes, NOS).
02	A woman with multiple myeloma is treated using locally opposed conformal 15Mv photons to a total dose of 2000cGy in 5 fractions. Record Phase I Radiation Treatment Modality as 02 (External beam, photons).

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Phase I-II-III External Beam Radiation Planning Technique

Item #	Length	Allowable Values	Required Status	Date Revised
1502	2	00-10, 88, 98, 99, Blank	All Years	01/18, 02/21, 01/22, 01/23
1512	2	00-10, 88, 98, 99, Blank	All Years	01/18, 02/21, 01/23
1522	2	00-10, 88, 98, 99, Blank	2018+	01/18, 02/21, 01/23

Description

Identifies the external beam radiation planning technique used to administer the first, second or third phase of radiation treatment during the first course of treatment. This data item is required for CoC accredited facilities as of 01/01/2018.

Rationale

External beam radiation is the most commonly used radiation modality in North America. In this data item we specified the planning technique for external beam treatment. Identifying the radiation technique is of interest for patterns of care and comparative effectiveness studies.

Historically, the previously named *Regional Treatment Modality* [1570] utilized codes that were not mutually exclusive. Rather, it included codes describing a mix of modalities, treatment planning techniques, and delivery techniques that are commonly utilized by radiation oncologists. However, every phase of radiation treatment will include a specified modality, planning technique, and delivery technique. The goal of the 2018 implementation of separate phase-specific data items for the recording of *Phase I-II-III Radiation Treatment Modality* [1506,1516,1526], and *Phase I-II-III External Beam Radiation Planning Technique* [1502,1512, 1522] is to clarify this information and implement mutually exclusive categories. Note that Planning Technique details are not being captured for non-External Beam modalities. A separate data item for delivery technique has not been implemented because this information is not consistently reported in end treatment summaries.

Coding Instructions

- A new paradigm of treatment called on-line adaptive (or on-table) adaptive radiation may be the source of confusion when coding External Beam Radiation Planning Technique. New linear accelerators are attached to such high-quality imaging devices that they can function as both simulation scanners for planning and radiation delivery systems. If a new radiation plan is created while the patient is on the radiation delivery table to take into account that day's anatomy, this is referred to "on-line" (or "on-table") adaptive radiation. If a new radiation plan is created while the patient is not on the delivery table, then it is referred to as "off-line" (or "off-table") adaptive therapy. Off-line adaptive therapy treatments are relatively common, but MR-guided and CT-guided online adaptive therapy treatments are just emerging. If treatment is described as both MR-guided (or CT-Guided) on-line adaptive as well as another external beam planning technique (e.g. IMRT, SBRT, etc) code as MR-guided (or CT-Guided) online adaptive therapy. On-line adaptive techniques are the most complex and usually include IMRT and/or SBRT techniques within them, so the on-line adaptive component is most important to capture.
- If a treatment is described as off-line adaptive then the on-line adaptive codes should NOT be used to describe the phase planning technique.
- Code 00, no radiation treatment, when diagnosed at autopsy.
- Code 05 for Intensity Modulated Therapy (IMT) or Intensity Modulated Radiation Therapy (IMRT).
- Code 04 for Conformal or 3-D Conformal Therapy whenever either is explicitly mentioned.

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- This data item, in conjunction with Phase I-II Radiation Treatment Modality [1506, 1516], replaces the Rad--Regional RX Modality [1570] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.
- Phase I must be coded however blanks are allowed for Phase II-III.

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 treatment is described as stereotactic radiotherapy or radiosurgery with online re-optimization/re-planning, then it should be categorized as online re-optimization or re-planning.

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Code	Label	Definition
07	Stereotactic radiotherapy or radiosurgery, robotic.	Treatment planning using stereotactic radiotherapy/radiosurgery techniques which is specifically described as robotic (e.g. Cyberknife®).
08	Stereotactic radiotherapy or radiosurgery, Gamma Knife®	Treatment planning using stereotactic radiotherapy/radiosurgery techniques which uses a Cobalt-60 gamma ray source and is specifically described as Gamma Knife®. This is most commonly used for treatments in the brain.
09	CT-guided online adaptive therapy	An external beam technique in which the treatment plan is adapted over the course of radiation to reflect changes in the patient's tumor or normal anatomy radiation using a CT or cone beam CT (CBCT) scan obtained at the treatment machine (online). These approaches are sometimes described as CT-guided online re- optimization or online re-planning. If a treatment technique is described as both CT-guided online adaptive therapy as well as another external beam technique (IMRT, SBRT, etc.), then it should be categorized as CT-guided online adaptive therapy. If a treatment is described as "adaptive" but does not include the descriptor "online", this code should not be used. Clinic notes may refer to the brand name of a linear accelerator called Ethos.
10	MR-guided online adaptive therapy	An external beam technique in which the treatment plan is adapted over the course of radiation to reflect changes in the patient's tumor or normal anatomy radiation using an MRI scan obtained at the treatment machine (online). These approaches are sometimes described as MR-guided online re-optimization or online re-planning. If a treatment technique is described as both MR-guided online adaptive therapy as well as another external beam technique (IMRT, SBRT, etc.), then it should be categorized as MR-guided online adaptive therapy. If a treatment is described as "adaptive" but does not include the descriptor "online", this code should not be used. Clinic notes may refer to an MR-Linac or the brand name of an MR-Linac called MRIidian or Unity.
88	Not Applicable	Treatment not by external beam.
98	Other, NOS	Other radiation, NOS; Radiation therapy administered, but the treatment planning technique is not specified or is unknown.
99	Unknown	It is unknown whether radiation therapy was administered.

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Examples

Code	Reason
04	A man with prostate cancer is initially treated with whole pelvis RT using a four-field approach, all fields shaped conformally to pelvic anatomy. He then was treated with an IMRT boost. Record the Phase I External Beam Radiation Planning Technique as 04 (Conformal or 3-D conformal therapy)
03	A woman with advanced multiple myeloma is referred for total body irradiation and is treated twice daily for three consecutive days in a total body stand at extended distance with open rectangular photon fields, 200cGy to mid-body per treatment. Record the Phase I External Beam Radiation Planning Technique as 03 (2-D therapy)
88	Record 88 as the Phase I External Beam Radiation Planning Technique for any phase uses radioisotopes or brachytherapy (e.g. I-131 radioiodine for thyroid cancer, brachytherapy for prostate cancer).

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Phase I-II-III Dose per Fraction

Item #	Length	Allowable Values	Required Status	Date Revised
1501	5	00000-99999, Blank	All Years	01/18, 02/21, 01/22, 01/23
1511	5	00000-99999, Blank	All Years	01/18, 02/21, 01/23
1521	5	00000-99999, Blank	2018+	01/18, 02/21, 01/23

Description

Records the dose per fraction (treatment session) delivered to the patient in the first phase, second or third phase of radiation during the first course of treatment. The unit of measure is centi-Gray (cGy). This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

Radiation therapy is delivered in one or more phases with identified dose per fraction. It is necessary to capture information describing the dose per fraction to evaluate patterns of radiation oncology care.

Coding Instructions

- In general, (Phase Dose per Fraction x Phase Number of Fractions = Phase Total Dose). But, there may be inconsistencies in rounding of dose or the way the dose is automatically measured in a treatment which will result in slight inconsistencies in the math. That is, in some radiation treatment summaries, Phase Dose per Fraction x Phase Number of Fractions ≈ Phase Total Dose.
- For proton treatment, dosage may occasionally be specified as in CGe units (Cobalt Gray Equivalent) rather than Gy or cGy. 1 CGE = 1 Gy = 100 cGy. For a Phase Total Dose, you would need to multiply dose in CGE by 100 to get dose in cGy.
- Note that dose is still occasionally specified in “rads”. One (1) rad = 1cGy.
- If dose is documented in the medical record includes a fraction of a cGy (e.g. 180.3), round to the nearest cGy. For example, 180.5 cGy should be rounded up to 181 cGy and 180.4 cGy should be rounded down to 180cGy.
- Code 99998 when radioisotopes were administered to the patient (codes 13-16) for Phase I-I-III Radiation Treatment Modality [1506, 1516, 1526].
- Code the actual cGy if available when brachytherapy was administered to the patient (codes 07-12 for Phase I-II-III Treatment Modality [1506, 1516, 1526]). If the dose is not available/provided in cGy for a brachytherapy procedure, code 99999.
- Record the actual dose delivered (NOT the initially prescribed dose) as documented in thetreatment summary.
- This data item replaces the Rad--Regional Dose: cGy [1510] and Rad--Boost Dose cGy [3210] and may include mapped historical values. 1-1 mapping took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

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Code	Label
00000	No radiation treatment
00001-99997	Record the actual Phase I dose delivered in cGy
99998	Not applicable, radioisotopes administered to the patient
99999	Regional radiation therapy was administered but dose is unknown; Unknown whether radiation therapy was administered; Death Certificate only

Examples

Code	Reason
00200	A patient with Stage III prostate carcinoma received pelvic irradiation to 5,000 cGy over 25 fractions followed by a Phase II (boost) prostate irradiation to 7,000 cGy. Record the Phase I dose per fraction as 00200 (5000/25).
00150	A patient with a left supraclavicular metastasis from a gastric carcinoma received 6,000 cGy to the left supraclavicular region over 40 fractions. The dose is calculated at the prescribed depth of 3cm. A secondary calculation shows a Dmax dose of 6,450 cGy. Record the Phase I dose per fraction as 00150 (6000/40). Note that deposited radiation dose in the body is 3 dimensional and will vary slightly at any point in the body. Unfortunately, we can't capture this complexity, so we attempt to capture the nominal prescription dose as indicative of the 3 dimensional dose.
00180	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions, but axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record phase I dose per fraction as 00180 (4500/25). See a detailed discussion of this example in the "CTR Guide to Coding Radiation Therapy Treatment in the STORE"

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Phase I-II-III Number of Fractions

Item #	Length	Allowable Values	Required Status	Date Revised
1503	3	000-999, Blank	All Years	01/18, 02/21, 01/22, 01/23
1513	3	000-999, Blank	All Years	01/18, 02/21, 01/23
1523	3	000-999, Blank	2018+	01/18, 02/21, 01/23

Description

Records the total number of fractions (treatment sessions) delivered to the patient in the first, second, and third phase of radiation during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

Radiation therapy is delivered in one or more phases with each phase spread out over a number of fractions (treatment sessions). It is necessary to capture information describing the number of fraction(s) to evaluate patterns of radiation oncology care.

Coding instructions

- A fraction is a session during which radiation was delivered. The number of beams is independent from the number of fractions. If several beam positions were delivered in a session, it is still only considered one fraction (session).
- Multiple fractions may be delivered in a single day. This may be documented as BID treatment or twice daily treatment. Usually, multiple fractions in a single day are separated by at least 4 hours.
- Count each separate administration of brachytherapy, implant or radioisotope as a single fraction or treatment.
- Record the actual number of fractions delivered (NOT initially prescribed), as documented in the treatment summary.
- Code 999 for Death Certificate Only (DCO) cases.
- Phase I data item replaced the *Rad--No of Treatment Vol* [1520] and includes mapped values for historical cases. Phase II data item includes a mapped value of 999 when Rad--Boost RX Modality [3200] was administered. 1-1 mapping took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.
- Phase I must be coded however blanks allowed for Phase II-III if no radiation treatment administered.

Code	Label
000	No radiation treatment
001-998	Number of fractions administered to the patient during the first phase of radiation therapy
999	Phase I Radiation therapy was administered, but the number of fractions is unknown; It is unknown whether radiation therapy was administered

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Examples

Code	Reason
050	A patient with advanced head and neck cancer was treated using "hyper-fractionation." Three fields were delivered in each session; two sessions were given each day, six hours apart, with each session delivering a total dose of 150 cGy. Treatment was given for a total of 25 days. The total course dose was 7500cGy. Record 50 fractions as 050.
010	The patient was given Mammosite® brachytherapy, repeated in 10 separate sessions. Record 10 fractions as 010.
001	Prostate cancer patient treated with a single administration of seeds. Record 1 fraction as 001.

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Phase I-II-III Total Dose

Item #	Length	Allowable Values	Required Status	Date Revised
1507	6	000000-999999, Blank	All Years	01/18, 02/21, 1/22, 01/23
1517	6	000000-999999, Blank	All years	01/18, 02/21, 01/23
1527	6	000000-999999, Blank	2018+	01/18, 02/21, 01/23

Description

Identifies the total radiation dose delivered to the patient during phase I-II-III of radiation treatment during the first course of treatment. Each phase is meant to reflect the delivered radiation prescription. The unit of dose is centi-Gray (cGy). This data item is required for CoC-accredited facilities for cases diagnosed as of 01/01/2018.

Rationale

To evaluate the patterns of radiation care, it is necessary to capture information describing the maximum delivered dose of Phase I-II-III radiation to the patient during the first course of treatment.

Coding instructions

- Record the actual total dose delivered (NOT initially prescribed), as documented in the radiation treatment summary. The value recorded for this data item should NOT be auto-calculated within the registry abstraction software. In general, (Phase Dose per Fraction x Phase Number of Fractions = Phase Total Dose). But, there may be inconsistencies in rounding of dose or the way the dose is automatically measured in a treatment which will result in slight inconsistencies in the math. That is, in some radiation treatment summaries, Phase Dose per Fraction x Phase Number of Fractions ≈ Phase Total Dose.
- For proton treatment, dosage may occasionally be specified as in CGe units (Cobalt Gray Equivalent) rather than Gy or cGy. 1 CGE = 1 Gy = 100 cGy. For a Phase Total Dose, you would need to multiply dose in CGE by 100 to get dose in cGy.
- Note that dose is still occasionally specified in “rads”. One (1) rad = 1cGy.
- If dose is documented in the medical record includes a fraction of a cGy (e.g. 180.3), round to the nearest cGy. For example, 180.5 cGy should be rounded up to 181 cGy and 180.4 cGy should be rounded down to 180cGy. Code 99998 when radioisotopes were administered to the patient (codes 13-16 for Phase I-II-III Treatment Modality [1506, 1516, 1526]).
- Code 000000, radiation therapy not administered, when diagnosed at autopsy.
- Code 999998 when radioisotopes are administered to the patient (codes 13-16 recorded in the Phase I-II-III Treatment Modality [1506, 1516, 1526]).
- Code the actual cGy if available when brachytherapy was administered to the patient (codes 07-12 for Phase I-II-III Treatment Modality [1506, 1516, 1526]). If only one fraction of brachytherapy was delivered, then then the Phase I Dose per Fraction and the Phase I Total Dose will be the same.
- Code 999999 for Death Certificate Only (DCO) cases.
- Phase I data item is an all new data item in 2018 includes mapped values for historical cases. Mapping took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year. Phase II data item may include mapped values for historical cases. This data item includes a mapped value of 999999 when Rad--Boost RX Modality [3200] was administered.

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- Phase I must be coded however blanks are allowed for Phase II-III if no radiation treatment was administered.

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
999999	Radiation therapy was administered, but the total dose is unknown; it is unknown whether radiation therapy was administered, or diagnosed by Death Certificate Only

Examples

Code	Reason
005000	A patient with Stage III prostate carcinoma received pelvic irradiation of 5,000 cGy in 25 fractions during Phase I Radiation Treatment. Record the Phase I Total Dose of 5,000 cGy as 005000.
006000	A patient with a left supraclavicular metastasis from a gastric carcinoma received 6,000 cGy to the left supraclavicular region. Record the Phase I Total Dose of 6,000 cGy as 006000.
004500	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions, but axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record the Phase I Total Dose of 4500 cGy as 004500. See a detailed discussion of this example in the "CTR Guide to Coding Radiation Therapy Treatment in the STORE".

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Number of Phases of Radiation Treatment

Item #	Length	Allowable Values	Required Status	Date Revised
1532	2	00-98, 99	2018+	01/18

Description

A course of radiation is made up of one or more phases and each phase reflects a distinct delivered prescription. STORE has fields for up to 3 phases of a radiation course to be documented. This field identifies the actual number of distinct radiation phases in a course so that it is clear when only a portion of the course is being captured in the phase summary sections.

Rationale

The number of phases of radiation treatment is used to flag cases where only a subset of phase data is being captured.

Coding Instructions

Code	Label
00	No radiation treatment
01-98	Record the actual number of phases in the radiation course
99	Unknown number of phases; Unknown if radiation therapy administered.

Examples

Code	Reason
00	Radiation therapy was not administered.
01	A patient with advanced head and neck cancer was treated using “hyper-fractionation.” Three fields were delivered in each session; two sessions were given each day, six hours apart, with each session delivering a total fractional dose of 150 cGy. Treatment was given for a total of 25 days. The total course dose was 7500cGy. Record the Number of Phases of Radiation Treatment as 01.
03	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions, but axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record 03 as the Number of Phases of Radiation Treatment. See a detailed discussion of this example in the “CTR Guide to Coding Radiation Therapy Treatment in the STORE”

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Radiation Treatment Discontinued Early

Item #	Length	Allowable Values	Required Status	Date Revised
1531	2	00-07, 99	2018+	01/18

Description

This field is used to identify patients/tumors whose radiation treatment course was discontinued earlier than initially planned. That is, the patients/tumors received fewer treatment fractions (sessions) than originally intended by the treating physician. This data item is required for CoC-accredited facilities for cases diagnosed 01/01/2018 and later.

Rationale

Currently, the total dose of radiation reflects what was actually delivered rather than what was intended. When a patient does not complete a radiation course as initially intended this is typically commented on within the radiation treatment summary. By flagging these patients within the cancer registry database, these patients can be excluded from analyses attempting to describe adherence to radiation treatment guidelines or patterns of care analyses.

Coding Instructions

- Use code 01 when there is no indication in the record that radiation therapy was discontinued or completed early.
- Use code 02-07 when there is an indication in the record that the radiation therapy discontinued or was completed early.
- Use code 99 when radiation therapy was administered, but it is not clear if the treatment course was discontinued early, or if it is unknown whether radiation therapy was administered, or it is a death certificate only case.

Code	Label
00	No radiation treatment
01	Radiation treatment completed as prescribed
02	Radiation treatment discontinued early - toxicity
03	Radiation treatment discontinued early - contraindicated due to other patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned radiation etc.)
04	Radiation treatment discontinued early - patient decision
05	Radiation discontinued early - family decision
06	Radiation discontinued early - patient expired
07	Radiation discontinued early - reason not documented
99	Unknown if radiation treatment discontinued; Unknown whether radiation therapy administered. Death Certificate only.

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Examples

Code	Reason
01	A patient with Stage III prostate carcinoma received pelvic irradiation to 5,000 cGy over 25 fractions followed by a Phase II (boost) prostate irradiation to 7,000 cGy. Record Radiation Treatment Discontinued Early field as 01.
03	A patient with a metastasis from a gastric carcinoma at the L1 vertebral body was planned to receive 3000 cGy over 10 fractions. However, after 5 fractions, the patient developed cord compression symptoms and imaging evidence of compression and was taken for urgent surgical resection of the mass at L1. He did not resume radiotherapy. Record Radiation Treatment Discontinued Early field as 03 because there was clear evidence of progression.
02	A patient with muscle-invasive bladder cancer was being treated with radiation to the whole bladder. The initial plan was to treat the whole bladder to 6480cGy in 36 fractions but after 23 fractions he developed severe radiation enteritis and unrelenting diarrhea requiring a prolonged hospital admission. He discontinued treatment early after a total dose of 4140cGy. Record Radiation Treatment Discontinued Early field as 02 because treatment was stopped early due to treatment toxicity.

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Radiation Course Total Dose

Item #	Length	Allowable Values	Required Status	Date Revised
1533	6	000000-999999	2018+	01/18, 01/23

Description

Identifies the total cumulative radiation dose administered to the patient across all phases during the first course of treatment to the same body site. The unit of measure is centi-Gray (cGy). This data item is required for CoC-accredited facilities for cases diagnosed 01/01/2018 and later.

Rationale

To evaluate the patterns of radiation care, it is necessary to capture information describing the total delivered prescribed total dose of radiation during the first course of treatment. Outcomes are strongly related to the dose delivered.

Coding Instructions

- If the total dose for the course is not documented, then add the dose from each of the sequential phases (I, II, III, or IV or more) that target the same body site and document the total cumulative dose. Note when calculating the Radiation Course Total Dose, all of the phases should be used, not just the first three.
- Doses should ONLY be summed across phases to create a Total Dose when all of the phases were delivered *sequentially* to the *same body site.* If phases were delivered to multiple body sites (e.g. simultaneous treatment to multiple metastatic sites), then code the Radiation Course Total Dose as the dose to the body site that received the highest dose. Examples are provided in the "CTR Guide to Coding Radiation Therapy Treatment in the STORE".
- Doses should ONLY be summed across phases to create a Total Dose when all of the phases were delivered *using the same major modality type (External Beam, Brachytherapy, or Radioisotopes*. If phases were delivered using two or more major different modalities (e.g. external beam and brachytherapy to the same body site), then code 999998, Not applicable.
- Doses *can* be summed across phases even if the fraction size of phases is different. That is, if phase I to the whole prostate and seminal vesicles is 180 cGy x 28 =5040 cGy, Phase II to a partial prostate volume is 200 cGy x 15 = 3000cGy, and these phases are delivered sequentially, then record 8040 cGy as the Radiation Course Total Dose.
- For proton treatment, dosage may occasionally be specified as in CGe units (Cobalt Gray Equivalent) rather than Gy or cGy. 1 CGE = 1 Gy = 100 cGy. For a Radiation Course Total Dose, you would need to multiply dose in CGE by 100 to get dose in cGy.
- Note that dose is still occasionally specified in "rads". One (1) rad = 1cGy.
- If dose is documented in the medical record includes a fraction of a cGy (e.g. 180.3), round to the nearest cGy. For example, 180.5 cGy should be rounded up to 181 cGy and 180.4 cGy should be rounded down to 180cGy. A dose of Code 999998 when radioisotopes were administered to the patient (codes 13-16 for *Phase I Treatment Modality* [1506]).
- Code 999998 when radioisotopes are administered to the patient (codes 13-16 recorded in the Phase I, Phase II, or Phase III Treatment Modality [1506, 1516, 1526] data items).
- Code the actual cGy if available when brachytherapy was administered to the patient (codes 07-12 for Phase I Treatment Modality [1506]).

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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 the patient was treated with a mixed modalities (e.g. external beam and brachytherapy).
999999	Radiation therapy was administered, but the total dose is unknown; it is unknown whether radiation therapy was administered

Examples

Code	Reason
006040	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions. Axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record the Phase I Total Dose as 004500. Record the Phase II Total Dose as 000540. Record the Phase III Total Dose as 001000. Record the Radiation Course Total Dose as 006040.
008040	A patient with Stage III prostate carcinoma received 5,040 cGy to his pelvic nodes, prostate and seminal vesicles over 28 fractions using IMRT followed by a Phase II (boost) of 3000 cGy in 30 fractions using proton therapy. Record the Phase I Total Dose as 005040. Record the Phase II Total Dose as 003000. Record the Radiation Course Total Dose as 008040.
999998	A patient with Stage III prostate carcinoma received 4600cGy to his pelvic nodes, prostate and seminal vesicles over 23 fractions using IMRT followed by a Phase II (boost) of 11500 cGy using a low dose rate (LDR) brachytherapy implant. Record the Phase I Total Dose as 004600. Record the Phase II Total Dose as 011500. Record the Radiation Course Total Dose as 999998 because it is a mixed modality course.

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Radiation/Surgery Sequence

Item #	Length	Allowable Values	Required Status	Date Revised
1380	1	0, 2-7, 9	2003+	01/04, 01/10, 01/11, 01/12, 02/21, 01/23

Description

Records the sequencing of radiation and surgical procedures given as part of the first course of treatment.

Rationale

The sequence of radiation and surgical procedures given as part of the first course of treatment cannot always be determined using the date on which each modality was started or performed. This data item can be used to more precisely evaluate the timing of delivery of treatment to the patient.

Coding Instructions

- For the purpose of coding the data item Radiation Sequence with Surgery, 'Surgery' is defined as a Surgical Procedure of Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 2- 7) or Surgical Procedure of Other Site (codes 1-5).

- Surgical procedures include *Rx Summ – Surg 2023* [1291]; *Scope of Regional Lymph Node Surgery* [1292] (excluding code 1); *Surgical Procedure/Other Site* [1294]. If all these procedures are coded 0, or it is not known whether the patient received both surgery and radiation, then this item should be coded 0.

- If the patient received both radiation therapy and any one or a combination of the following surgical procedures: *Surgical Procedure of Primary Site, Regional Lymph Node Surgery* (excluding code 1) *,* or *Surgical Procedure/Other Site*, then code this item 2–9, as appropriate. Assign codes 2-9 when first course of therapy includes both cancer-directed surgery and radiation therapy.

- If multiple first course treatment episodes were given such that both codes 4 and 7 seem to apply, use the code that defines the first sequence that applies. Assign code 4 when there are at least two courses, episodes, or fractions of radiation therapy given before and at least two more after surgery to the primary site, scope of regional lymph node surgery (excluding code 1), surgery to other regional site(s), distant site(s), or distant lymph node(s).

Code	Label	Definition
0	No radiation therapy and/or surgical procedures	No radiation therapy given or unknown if radiation therapy given; and/or no surgery of the primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node(s) or it is unknown whether any surgery given.
2	Radiation therapy before surgery	Radiation therapy given before surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s).

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Code	Label	Definition
3	Radiation therapy after surgery	Radiation therapy given after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s).
4	Radiation therapy both before and after surgery	At least two phases of radiation therapy are given before and at least two more after surgery to the primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s).
5	Intraoperative radiation therapy	Intraoperative therapy given during surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s).
6	Intraoperative radiation therapy with other therapy administered before or after surgery	Intraoperative radiation therapy given during surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s) with other radiation therapy administered before or after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s).
7	Surgery both before and after radiation	Radiation was administered between two separate surgical procedures to the primary site; regional lymph nodes; surgery to other regional site(s), distant site(s), or distant lymph node(s).
9	Sequence unknown	Administration of radiation therapy and surgery to primary site, scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed and the sequence of the treatment is not stated in the patient record.

Examples

Code	Reason
0	Due to other medical conditions surgery was not performed. The patient received palliative radiation therapy to alleviate pain.
2	A large lung lesion received radiation therapy prior to resection.
3	A patient received a wedge resection of a right breast mass with axillary lymph node dissection followed by radiation to right breast.
4	Preoperative radiation therapy was given to a large, bulky vulvar lesion and was followed by a lymph node dissection. This was then followed by radiation therapy to treat positive lymph nodes.
5	In the same procedure, a cone biopsy of the cervix was followed by intracavitary implant for IIIB cervical carcinoma.
6	Stage IV vaginal carcinoma was treated with 5,000 cGy to the pelvis followed by a lymph node dissection and 2,500 cGy of intracavitary brachytherapy.
9	An unknown primary of the head and neck was treated with surgery and radiation prior to admission, but the sequence is unknown. The patient enters for chemotherapy.

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Date Radiation Ended

Item #	Length	Allowable Values	Required Status	Date Revised
3220	8	CCYYMMDD, Blank	2003+	06/05, 01/10, 01/11, 01/12

Description

The date on which the patient completes or receives the last radiation treatment at any facility.

Rationale

The length of time over which radiation therapy is administered to a patient is a factor in tumor control and treatment morbidity. It is useful to evaluate the quality of care and the success of patient support programs designed to maintain continuity of treatment.

Coding Instructions

- Date radiation ended will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the date radiation ended may require assistance from the radiation oncologist for consistent coding.
- For brachytherapy if the treatment is applied only once, this date will be the same as Date Radiation Started [1210].
- There may be times when the first course of treatment information is incomplete. Therefore, it is important to continue follow-up efforts to be certain the complete treatment information is collected.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Radiation Ended is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Radiation Ended transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

Examples

Code	Reason
20050104	A patient starts IMRT radiation treatment on December 15, 2004 and treatment continues until January 4, 2005.
20091002	A patient receives one radiation treatment on October 2, 2009, then refuses further treatments.
20060404	A patient with a primary tumor of the brain undergoes stereotactic radiosurgery using a Gamma Knife on April 4, 2006.

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Reason for No Radiation

Item #	Length	Allowable Values	Required Status	Date Revised
1430	1	0-2, 5-9	2003+	09/04, 01/13

Description

Records the reason that no regional radiation therapy was administered to the patient.

Rationale

When evaluating the quality of care, it is useful to know the reason that various methods of therapy were not used, and whether the failure to provide a given type of therapy was due to the physician's failure to recommend that treatment, or due to the refusal of the patient, a family member, or the patient's guardian.

Coding Instructions

- If *Number of Phases of Radiation Treatment to this Volume* [1532] is coded 00, *Phase I Radiation Primary Treatment Volume* [1504] is coded 00, *Radiation Treatment Discontinued Early* [1531] is coded 00, and *Total Dose* [1533] is coded 000000, then record the reason based on documentation in patient record.
- Code 1 if the treatment plan offered multiple alternative treatment options and the patient selected treatment that did not include radiation therapy.
- Code 7 if the patient refused recommended radiation therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 8 if it is known that a physician recommended radiation treatment, but no further documentation is available yet to confirm its administration.
- Code 8 to indicate referral to a radiation oncologist was made and the registry should follow to determine whether radiation was administered. If follow-up to the specialist or facility determines the patient was never there and no other documentation can be found, code 1.
- Cases coded 8 should be followed and updated to a more definitive code as appropriate.
- Code 9 if the treatment plan offered radiation or multiple alternative treatment options including radiation, but it is unknown which treatment, if any, was provided. Death Certificate only.

Code	Label
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.

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Code	Label
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.

Examples

Code	Reason
1	A patient with Stage I prostate cancer is offered either surgery or brachytherapy to treat his disease. The patient elects to be surgically treated.

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Systemic Therapy Data Items

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Date Systemic Therapy Started

Item #	Length	Allowable Values	Required Status	Date Revised
3230	8	CCYYMMDD, Blank	2003+	01/10, 01/11

Description

Records the date of initiation for systemic therapy that is part of the first course of treatment. Systemic therapy includes the administration of chemotherapy agents, hormonal agents, biological response modifiers, bone marrow transplants, stem cell harvests, and surgical and/or radiation endocrine therapy.

Rationale

Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Coding Instructions

- Record the first or earliest date on which systemic therapy was administered. Systemic therapy includes *Chemotherapy* [1390], *Hormone Therapy* [1400], *Immunotherapy* [1410], and *Hematologic Transplant and Endocrine Procedures* [3250].
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Systemic Therapy Started is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Systemic Therapy Started transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

Examples

Code	Reason
20031215	A patient with breast cancer begins her regimen of chemotherapy on December 15, 2003, and is subsequently given Tamoxifen on January 20, 2004.
20030602	A patient with Stage IV prostate cancer has an orchiectomy on June 2, 2003. He is then started on a regime of hormonal agents on June 9, 2003.

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Chemotherapy

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Date Chemotherapy Started

Item #	Length	Allowable Values	Required Status	Date Revised
1220	8	CCYYYMMDD, Blank	1996-2002, 2010+	01/11, 01/23

Description

Records the date of initiation of chemotherapy that is part of the first course of treatment.

Rationale

Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Coding Instructions

- Record the first or earliest date on which chemotherapy was administered by any facility. This date corresponds to administration of the agents coded in *Chemotherapy* [1390].
- This item was required in the past but discontinued in FORDS as a required item in 2003. If the date was not collected between 2003 and 2009, this field may be left blank. However, if it was collected for cases diagnosed in those years, it should be retained in this field.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Chemotherapy Started is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Chemotherapy Started transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Chemotherapy

Item #	Length	Allowable Values	Required Status	Date Revised
1390	2	00-03, 82, 85-88, 99	All Years	06/05, 09/08, 01/10, 01/15

Description

Records the type of chemotherapy administered as first course treatment at this and all other facilities. If chemotherapy was not administered, then this item records the reason it was not administered to the patient. Chemotherapy consists of a group of anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis.

Rationale

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of chemotherapeutic agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if chemotherapy was not administered.

Coding Instructions

- Code 00 if chemotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer. Diagnosed at autopsy.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include chemotherapy or if the option of “no treatment” was accepted by the patient.
- If it is known that chemotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended chemotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended the patient receive chemotherapy but no further documentation is available yet to confirm its administration
- Code 88 to indicate referral was made to a medical oncologist and the registry must follow to determine whether it was given. If follow-up with the specialist or facility indicates the patient was never there, code 00.
- Cases coded 88 must be followed to determine what kind of chemotherapy was administered or why it was not.
- Code 99 if it is not known whether chemotherapy is usually administered for this type and stage of cancer and there is no mention in the patient record whether it was recommended or administered. Death Certificate only.
- Code chemoembolization as 01, 02, or 03 depending on the number of chemotherapeutic agents involved.
- If the managing physician changes one of the agents in a combination regimen, and the replacement agent belongs to a different group (chemotherapeutic agents are grouped as alkylating agents, antimetabolites, natural products, or other miscellaneous) than the original agent, the new regimen

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represents the start of subsequent therapy, and *only the original agent or regimen is recorded as first course therapy*.

- Refer to the *SEER*Rx Interactive Drug Database (https://seer.cancer.gov/tools/seerrx/)* for a list of chemotherapeutic agents.
- If chemotherapy was provided as a radiosensitizer or radioprotectant DO NOT code as chemotherapy treatment. When chemotherapy is given for radiosensitization or radioprotection it is given in low doses that do not affect the cancer.
- If chemotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the chemotherapy administered in the item Palliative Care [3270].
- **Important information affecting classification of some systemic therapies**. The six drugs listed in the table below were previously classified as Chemotherapy and are now classified as BRM/Immunotherapy. **This change is effective for cases diagnosed January 1, 2013, and forward.** For cases diagnosed prior to January 1, 2013, registrars have been instructed to continue coding these drugs as Chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in *SEER*Rx Interactive Drug Database*.

Drug Name(s)	Category Prior to 2013	Category 2013 +
Alemtuzumab/Campath	Chemotherapy	BRM/Immunotherapy
Bevacizumab/Avastin	Chemotherapy	BRM/Immunotherapy
Rituximab	Chemotherapy	BRM/Immunotherapy
Trastuzumab/Herceptin	Chemotherapy	BRM/Immunotherapy
Pertuzumab/Perjeta	Chemotherapy	BRM/Immunotherapy
Cetuxumab/Erbitux	Chemotherapy	BRM/Immunotherapy

Code	Label
00	None, chemotherapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Chemotherapy administered as first course therapy, but the type and number of agents is not documented in patient record.
02	Single-agent chemotherapy administered as first course therapy.
03	Multiagent chemotherapy administered as first course therapy.
82	Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age progression of tumor prior to administration, etc.).
85	Chemotherapy was not administered because the patient died prior to planned or recommended therapy.
86	Chemotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Chemotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Chemotherapy was recommended, but it is unknown if it was administered.

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Code	Label
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

Examples

Code	Reason
01	A patient with primary liver cancer is known to have received chemotherapy; however, the name(s) of agent(s) administered is not stated in patient record.
02	A patient with Stage III colon cancer is treated with a combination of fluorouracil and levamisole. Code the administration of fluorouracil as single agent chemotherapy, and levamisole as an immunotherapeutic agent.
02	A patient with non-Hodgkin's lymphoma is treated with fludarabine.
03	A patient with early stage breast cancer receives chemotherapy. The patient chart indicates that a regimen containing doxorubicin is to be administered.
86	After surgical resection of an ovarian mass the following physician recommends chemotherapy. The patient record states that chemotherapy was not subsequently administered to the patient, but the reason why chemotherapy was not administered is not given.

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Chemotherapy at this Facility

Item #	Length	Allowable Values	Required Status	Date Revised
700	2	00-03, 82, 85-88, 99	All Years	06/05, 09/08, 01/10, 01/12, 01/13, 01/15

Description

Records the type of chemotherapy administered as first course treatment at this facility. If chemotherapy was not administered, then this item records the reason it was not administered to the patient. Chemotherapy consists of a group of anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis.

Rationale

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of chemotherapeutic agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if chemotherapy was not administered.

Coding Instructions

- Record only chemotherapy received at this facility. Do not record agents administered at other facilities.
- Code 00 if chemotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer. Diagnosed at autopsy.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include chemotherapy or if the option of “no treatment” was accepted by the patient.
- If it is known that chemotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended chemotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended the patient receive chemotherapy, but no further documentation is available yet to confirm its administration
- Cases coded 88 must be followed to determine what kind of chemotherapy was administered or why it was not.
- Code 99 if it is not known whether chemotherapy is usually administered for this type and stage of cancer and there is no mention in the patient record whether it was recommended or administered. Death Certificate only.
- Code chemoembolization as 01, 02, or 03 depending on the number of chemotherapeutic agents involved.
- If the managing physician changes one of the agents in a combination regimen, and the replacement agent belongs to a different group (chemotherapeutic agents are grouped as alkylating agents, antimetabolites, natural products, or other miscellaneous) than the original agent, the new regimen represents the start of subsequent therapy, and only the original agent or regimen is recorded as first course therapy.

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- Refer to the SEER*Rx Interactive Drug Database (*https://seer.cancer.gov/tools/seerrx/*) for a list of chemotherapeutic agents.
- If chemotherapy was provided as a radiosensitizer or radioprotectant DO NOT code as chemotherapy treatment. When chemotherapy is given for radiosensitization or radioprotection it is given in low doses that do not affect the cancer.
- If chemotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the chemotherapy administered in the item Palliative Care at This Facility [3280].

Important information affecting classification of some systemic therapies. The six drugs listed in the table below were previously classified as Chemotherapy and are now classified as BRM/Immunotherapy. **This change is effective for cases diagnosed January 1, 2013, and forward.** For cases diagnosed prior to January 1, 2013, registrars have been instructed to continue coding these drugs as Chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in *SEER*Rx Interactive Drug Database*.

Drug Name(s)	Category Prior to 2013	Category 2013 +
Alemtuzumab/Campath	Chemotherapy	BRM/Immunotherapy
Bevacizumab/Avastin	Chemotherapy	BRM/Immunotherapy
Rituximab	Chemotherapy	BRM/Immunotherapy
Trastuzumab/Herceptin	Chemotherapy	BRM/Immunotherapy
Pertuzumab/Perjeta	Chemotherapy	BRM/Immunotherapy
Cetuxumab/Erbitux	Chemotherapy	BRM/Immunotherapy

Code	Label
00	None, chemotherapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Chemotherapy administered as first course therapy; but the type and number of agents is not documented in patient record.
02	Single-agent chemotherapy administered as first course therapy.
03	Multiagent chemotherapy administered as first course therapy
82	Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to planned administration).
85	Chemotherapy was not administered because the patient died prior to planned or recommended therapy.
86	Chemotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Chemotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Chemotherapy was recommended, but it is unknown if it was administered.
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

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Hormone Therapy

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Date Hormone Therapy Started

Item #	Length	Allowable Values	Required Status	Date Revised
1230	8	CCYYMMDD, Blank	1996-2002, 2010+	01/11, 01/12, 1/23

Description

Records the date of initiation of hormone therapy that is part of the first course of treatment.

Rationale

Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Coding Instructions

- Record the first or earliest date on which hormone therapy was administered by any facility. This date corresponds to administration of the agents coded in *Hormone Therapy* [1400].
- This item was required in the past but discontinued in FORDS as a required item in 2003. If the date was not collected between 2003 and 2009, this field may be left blank. However, if it was collected for cases diagnosed in those years, it should be retained in this field.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Hormone Therapy Started is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Hormone Therapy Started transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Hormone Therapy (Hormone/Steroid Therapy)

Item #	Length	Allowable Values	Required Status	Date Revised
1400	2	00, 01, 82, 85-88, 99	All Years	06/05, 09/08, 01/10, 01/13

Description

Records the type of hormone therapy administered as first course treatment at this and all other facilities. If hormone therapy was not administered, then this item records the reason it was not administered to the patient. Hormone therapy consists of a group of drugs that may affect the long-term control of a cancer's growth. It is not usually used as a curative measure.

Rationale

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of hormonal agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if hormone therapy was not administered.

Coding Instructions

- Record prednisone as hormonal therapy when administered in combination with chemotherapy, such as MOPP (mechlorethamine, vincristine, procarbazine, prednisone) or COPP (cyclophosphamide, vincristine, procarbazine, prednisone).
- Do not code prednisone as hormone therapy when it is administered for reasons other than chemotherapeutic treatment.
- Tumor involvement or treatment may destroy hormone-producing tissue. Hormone replacement therapy will be given if the hormone is necessary to maintain normal metabolism and body function. Do not code hormone replacement therapy as part of first course therapy.
- Code 00 if hormone therapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer. Diagnosed at autopsy.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include hormone therapy or if the option of "no treatment" was accepted by the patient.
- Code 01 for thyroid replacement therapy which inhibits TSH (thyroid-stimulating hormone). TSH is a product of the pituitary gland that can stimulate tumor growth.
- If it is known that hormone therapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended hormone therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended hormone therapy, but no further documentation is available yet to confirm its administration.
- Code 88 to indicate the patient was referred to a medical oncologist and the registry should follow the case for hormone therapy. If follow-up with the specified specialist or facility indicates the patient was never there, code 00.

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- Cases coded 88 should be followed to determine whether they received hormone therapy or why not.
- Code 99 if it is not known whether hormone therapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered. Death certificate only.
- Refer to the *SEER*Rx Interactive Drug Database* (*https://seer.cancer.gov/tools/seerrx/*) for a list of hormonal agents.
- If hormone therapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hormone therapy administered in the item *Palliative Care* [3270].

Code	Label
00	None, hormone therapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Hormone therapy administered as first course therapy.
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to administration, etc.).
85	Hormone therapy was not administered because the patient died prior to planned or recommended therapy.
86	Hormone therapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Hormone therapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Hormone therapy was recommended, but it is unknown if it was administered.
99	It is unknown whether a hormonal agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

Examples

Code	Reason
00	A patient has advanced lung cancer with multiple metastases to the brain. The physician orders Decadron to reduce the edema in the brain and relieve the neurological symptoms. Decadron is not coded as hormonal therapy.
00	A patient with breast cancer may be treated with aminoglutethimide (Cytadren, Elipten), which suppresses the production of glucocorticoids and mineralocorticoids. This patient must take glucocorticoid (hydrocortisone) and may also need a mineralocorticoid (Florinef) as a replacement therapy.
00	A patient with advanced disease is given prednisone to stimulate the appetite and improve nutritional status. Prednisone is not coded as hormone therapy.
01	A patient with metastatic prostate cancer is administered flutamide (an antiestrogen).
87	A patient with metastatic prostate cancer declines the administration of Megace (a progestational agent) and the refusal is noted in the patient record.

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Hormone Therapy at this Facility (Hormone/Steroid Therapy)

Item #	Length	Allowable Values	Required Status	Date Revised
710	2	00, 01, 82, 85-88, 99	All Years	06/05, 09/08, 01/10, 01/13

Description

Records the type of hormone therapy administered as first course treatment at this facility. If hormone therapy was not administered, then this item records the reason it was not administered to the patient. Hormone therapy consists of a group of drugs that may affect the long-term control of a cancer's growth. It is not usually used as a curative measure.

Rationale

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of hormonal agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if hormone therapy was not administered.

Coding Instructions

- Record only hormone therapy received at this facility. Do not record procedures done at other facilities.
- Record prednisone as hormonal therapy when administered in combination with chemotherapy, such as MOPP (mechlorethamine, vincristine, procarbazine, prednisone) or COPP (cyclophosphamide, vincristine, procarbazine, prednisone).
- Do not code prednisone as hormone therapy when it is administered for reasons other than chemotherapeutic treatment.
- Tumor involvement or treatment may destroy hormone-producing tissue. Hormone replacement therapy will be given if the hormone is necessary to maintain normal metabolism and body function. Do not code hormone replacement therapy as part of first course therapy.
- Code 00 if hormone therapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer. Diagnosed at autopsy.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include hormone therapy or if the option of "no treatment" was accepted by the patient.
- Code 01 for thyroid replacement therapy which inhibits TSH (thyroid-stimulating hormone). TSH is a product of the pituitary gland that can stimulate tumor growth.
- If it is known that hormone therapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended hormone therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended hormone therapy, but no further documentation is available yet to confirm its administration.

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- Cases coded 88 should be followed to determine whether they received hormone therapy or why not.
- Code 99 if it is not known whether hormone therapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered. Death certificate only.
- Refer to the *SEER*Rx Interactive Drug Database (https://seer.cancer.gov/tools/seerrx/)* for a list of hormonal agents.
- If hormone therapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hormone therapy administered in the item *Palliative Care* [3270].

Code	Label
00	None, hormone therapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Hormone therapy administered as first course therapy.
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to administration, etc.).
85	Hormone therapy was not administered because the patient died prior to planned or recommended therapy.
86	Hormone therapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Hormone therapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Hormone therapy was recommended, but it is unknown if it was administered.
99	It is unknown whether a hormonal agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

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Immunotherapy

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Date Immunotherapy Started

Item #	Length	Allowable Values	Required Status	Date Revised
1240	8	CCYYMMDD, Blank	1996-2002, 2010+	01/11, 01/23

Description

Records the date of initiation of immunotherapy or a biologic response modifier (BRM) that is part of the first course of treatment.

Rationale

Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Coding Instructions

- Record the first or earliest date on which immunotherapy or a biologic response modifier was administered by any facility. This date corresponds to administration of the agents coded in *Immunotherapy* [1410].
- This item was required in the past but discontinued in FORDS as a required item in 2003. If the date was not collected between 2003 and 2009, this field may be left blank. However, if it was collected for cases diagnosed in those years, it should be retained in this field.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Immunotherapy Started is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Immunotherapy Started transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Immunotherapy

Item #	Length	Allowable Values	Required Status	Date Revised
1410	2	00, 01, 82, 85-88, 99	All Years	06/05, 09/08, 01/10, 01/13, 01/15

Description

Records the type of immunotherapy administered as first course treatment at this and all other facilities. If immunotherapy was not administered, then this item records the reason it was not administered to the patient. Immunotherapy consists of biological or chemical agents that alter the immune system or change the host's response to tumor cells.

Rationale

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of immunotherapeutic agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if immunotherapy was not administered.

Coding Instructions

- Code 00 if immunotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include immunotherapy or if the option of "no treatment" was accepted by the patient.
- If it is known that immunotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended immunotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended immunotherapy but no further documentation is available yet to confirm its administration.
- Code 88 to indicate a referral was made to a medical oncologist about immunotherapy and the registry should follow the case to determine whether it was given or why not. If follow-up to the specialist or facility determines the patient was never there, code 00.
- Cases coded 88 should be followed and the code updated as appropriate. Code 99 if it is not known whether immunotherapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.
- Refer to the SEER*Rx Interactive Drug Database (*https://seer.cancer.gov/tools/seerrx/*) for immunotherapeutic agents.
- If immunotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the immunotherapy administered in the item Palliative Care [3270].

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Important information affecting classification of some systemic therapies. The six drugs listed in the table below were previously classified as Chemotherapy and are now classified as BRM/Immunotherapy. **This change is effective for cases diagnosed January 1, 2013, and forward.** For cases diagnosed prior to January

1, 2013, registrars have been instructed to continue coding these drugs as Chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in *SEER*Rx Interactive Drug Database*.

Drug Name(s)	Category Prior to 2013	Category 2013 +
Alemtuzumab/Campath	Chemotherapy	BRM/Immunotherapy
Bevacizumab/Avastin	Chemotherapy	BRM/Immunotherapy
Rituximab	Chemotherapy	BRM/Immunotherapy
Trastuzumab/Herceptin	Chemotherapy	BRM/Immunotherapy
Pertuzumab/Perjeta	Chemotherapy	BRM/Immunotherapy
Cetuxumab/Erbitux	Chemotherapy	BRM/Immunotherapy

Code	Label
00	None, immunotherapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Immunotherapy administered as first course therapy.
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to administration, etc.).
85	Immunotherapy was not administered because the patient died prior to planned or recommended therapy.
86	Immunotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Immunotherapy was recommended, but it is unknown if it was administered.
99	It is unknown whether an immunotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

Examples

Code	Reason
01	A patient with malignant melanoma is treated with interferon.
85	Before recommended immunotherapy could be administered, the patient died from cancer.

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Immunotherapy at this Facility

Item #	Length	Allowable Values	Required Status	Date Revised
720	2	00, 01, 82, 85-88, 99	All Years	06/05, 09/08, 01/10, 01/13, 01/15

Description

Records the type of immunotherapy administered as first course treatment at this facility. If immunotherapy was not administered, then this item records the reason it was not administered to the patient. Immunotherapy consists of biological or chemical agents that alter the immune system or change the host's response to tumor cells.

Rationale

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of immunotherapeutic agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason immunotherapy was not administered.

Coding Instructions

- Record only immunotherapy received at this facility. Do not record agents administered at other facilities.
- Code 00 if immunotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include immunotherapy or if the option of "no treatment" was accepted by the patient.
- If it is known that immunotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended immunotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended the patient receive immunotherapy but no further documentation is available yet to confirm its administration.
- Code 88 to indicate a referral was made to a medical oncologist about immunotherapy and the registry should follow the case to determine whether it was given or why not. If follow-up to the specialist or facility determines the patient was never there, code 00.
- Cases coded 88 should be followed to determine whether they received immunotherapy or why not.
- Code 99 if it is not known whether immunotherapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.
- Refer to the *SEER*Rx Interactive Drug Database (https://seer.cancer.gov/tools/seerrx/)* for a list of immunotherapeutic agents.
- If immunotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the immunotherapy administered in the item *Palliative Care at This Facility* [3280].

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Important information affecting classification of some systemic therapies. The six drugs listed in the table below were previously classified as Chemotherapy and are now classified as BRM/Immunotherapy. **This change is effective for cases diagnosed January 1, 2013, and forward.** For cases diagnosed prior to January 1, 2013, registrars have been instructed to continue coding these drugs as Chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in *SEER*Rx Interactive Drug Database*.

Drug Name(s)	Category Prior to 2013	Category 2013 +
Alemtuzumab/Campath	Chemotherapy	BRM/Immunotherapy
Bevacizumab/Avastin	Chemotherapy	BRM/Immunotherapy
Rituximab	Chemotherapy	BRM/Immunotherapy
Trastuzumab/Herceptin	Chemotherapy	BRM/Immunotherapy
Pertuzumab/Perjeta	Chemotherapy	BRM/Immunotherapy
Cetuxumab/Erbitux	Chemotherapy	BRM/Immunotherapy

Code	Label
00	None, immunotherapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Immunotherapy administered as first course therapy.
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age).
85	Immunotherapy was not administered because the patient died prior to planned or recommended therapy.
86	Immunotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Immunotherapy was recommended, but it is unknown if it was administered.
99	It is unknown whether an immunotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

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Hematologic Transplant and Endocrine Procedures

Item #	Length	Allowable Values	Required Status	Date Revised
3250	2	00, 10-12, 20, 30, 40, 82, 85-88, 99	All Years	06/05, 01/10, 01/12, 01/13

Description

Identifies systemic therapeutic *procedures* administered as part of the first course of treatment at this and all other facilities. If none of these *procedures* were administered, then this item records the reason they were not performed. These include bone marrow transplants, stem cell harvests, surgical and/or radiation endocrine therapy.

Rationale

This data item allows the evaluation of patterns of treatment which involve the alteration of the immune system or change the patient's response to tumor cells but does not involve the administration of antineoplastic agents. In addition, when evaluating the quality of care, it is useful to know the reason if these *procedures* were not performed.

Coding Instructions

- Bone marrow transplants should be coded as either autologous (bone marrow originally taken from the patient) or allogeneic (bone marrow donated by a person other than the patient). For cases in which the bone marrow transplant was syngeneic (transplanted marrow from an identical twin), the item is coded as allogeneic.
- Stem cell harvests involve the collection of immature blood cells from the patient and the reintroduction by transfusion of the harvested cells following chemotherapy or radiation therapy.
- Endocrine irradiation and/or endocrine surgery are procedures which suppress the naturally occurring hormonal activity of the patient and thus alter or affect the long-term control of the
- cancer's growth. These procedures must be bilateral to qualify as endocrine surgery or endocrine radiation. If only one gland is intact at the start of treatment, surgery and/or radiation to that remaining gland qualifies as endocrine surgery or endocrine radiation.
- Code 00 if a transplant or endocrine procedure was not administered to the patient, and it is known that these procedures are not usually administered for this type and stage of cancer. Diagnosed at autopsy.
- Code 00 if the treatment plan offered multiple alternative treatment options and the patient selected treatment that did not include a transplant or endocrine procedure or if the option of "no treatment" was accepted by the patient.
- If it is known that a transplant or endocrine procedure is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused a recommended transplant or endocrine procedure, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended a hematologic transplant or endocrine procedure, but no further documentation is available yet to confirm its administration.
- Code 88 to indicate referral to a specialist for hematologic transplant or endocrine procedures and the registry should follow the case. If follow-up to the specified specialist or facility determines the patient was never there, code 00.
- Use code 88 if a bone marrow or stem cell harvest was undertaken, but was not followed by a rescue or re-infusion as part of first course treatment.

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- Cases coded 88 should be followed to determine whether they were given a hematologic transplant or endocrine procedure or why not.
- Code 99 if it is not known whether a transplant or endocrine procedure is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered. Death certificate only.
- If the hematologic transplant or endocrine procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hematologic transplant or endocrine procedure provided in the items *Palliative Care* [3270] and/or *Palliative Care at This Facility* [3280], as appropriate.

Code	Label
00	No transplant procedure or endocrine therapy was administered as part of first course therapy. Diagnosed at autopsy.
10	A bone marrow transplant procedure was administered, but the type was not specified.
11	Bone marrow transplant–autologous.
12	Bone marrow transplant–allogeneic.
20	Stem cell harvest and infusion. Umbilical cord stem cell transplant, with blood from one or multiple umbilical cords
30	Endocrine surgery and/or endocrine radiation therapy.
40	Combination of endocrine surgery and/or radiation with a transplant procedure. (Combination of codes 30 and 10, 11, 12, or 20.)
82	Hematologic transplant and/or endocrine surgery/radiation was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of disease prior to administration, etc.).
85	Hematologic transplant and/or endocrine surgery/radiation was not administered because the patient died prior to planned or recommended therapy.
86	Hematologic transplant and/or endocrine surgery/radiation was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.
87	Hematologic transplant and/or endocrine surgery/radiation was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record.
88	Hematologic transplant and/or endocrine surgery/radiation was recommended, but it is unknown if it was administered.
99	It is unknown whether hematologic transplant and/or endocrine surgery/radiation was recommended or administered because it is not stated in patient record. Death certificate only.

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Systemic/Surgery Sequence

Item #	Length	Allowable Values	Required Status	Date Revised
1639	1	0, 2-7, 9	2006+	01/10, 01/11, 01/12, 02/21

Description

Records the sequencing of systemic therapy and surgical procedures given as part of the first course of treatment.

Rationale

The sequence of systemic therapy and surgical procedures given as part of the first course of treatment cannot always be determined using the date on which each modality was started or performed. This data item can be used to more precisely evaluate the timing of delivery of treatment to the patient.

Coding Instructions

- For the purpose of coding the data item Systemic Sequence with Surgery, 'Surgery' is defined as a Surgical Procedure of Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 2-7) or Surgical Procedure of Other Site (codes 1-5).
- *Systemic/Surgery Sequence* is to be used for patients diagnosed on or after January 1, 2006.
- Code the administration of systemic therapy in sequence with the first surgery performed, described in the item *Date of First Surgical Procedure* [1200].
- If none of the following surgical procedures were performed: *Rx Summ – Surg 2023* [1291]*, Scope of Regional Lymph Node Surgery* [1292] (excluding code 1) , *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: *Rx Summ – Surg 2023* [1291], *Scope of Regional Lymph Node Surgery* [1292] (excluding code 1) , or *Surgical Procedure/Other Site* [1294], then code this item 2-9, as appropriate.
- If multiple first course treatment episodes were given such that both codes 4 and 7 seem to apply, use the code that defines the first sequence that applies. For example: the sequence, chemo then surgery then hormone therapy then surgery is coded 4 for "chemo then surgery then hormone".

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Code	Label	Definition
0	No systemic therapy and/or surgical procedures	No systemic therapy was given; and/or no surgical procedure of primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node(s); or no reconstructive surgery was performed. It is unknown whether both surgery and systemic treatment were provided.
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.
3	Systemic therapy after surgery	Systemic therapy was given 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.
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.
5	Intraoperative systemic therapy	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).
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.
7	Surgery both before and after systemic therapy	Systemic therapy was administered between two separate surgical procedures to the primary site; regional lymph nodes; surgery to other regional site(s), distant site(s), or distant lymph node(s).
9	Sequence unknown	Both surgery and systemic therapy were provided, but the sequence is unknown.

Examples

Code	Reason
0	Due to other medical conditions surgery was not performed. The patient received palliative radiation therapy to alleviate pain.
2	Patient with prostate cancer received hormone therapy prior to a radical prostatectomy.
3	Patient underwent a colon resection followed by a 5-FU based chemotherapy regimen.
4	Patient with breast cancer receives pre-operative chemotherapy followed by post-operative Tamoxifen.
5	Patient with an intracranial primary undergoes surgery at which time a glial wafer is implanted into the resected cavity.
6	Patient with metastatic colon cancer receives intraoperative chemotherapy to the liver.
9	An unknown primary of the head and neck was treated with surgery and chemotherapy prior to admission, but the sequence is unknown. The patient enters for radiation therapy.

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Other Treatment

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Date Other Treatment Started

Item #	Length	Allowable Values	Required Status	Date Revised
1250	8	CCYYMMDD, Blank	All Years	01/10, 01/11

Description

Records the date on which other treatment began at any facility.

Rationale

Collecting dates for each treatment modality allows for the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Coding Instructions

- Record the date on which the care coded as *Other Treatment* [1420] was initiated.
- If other treatment is the first or only treatment administered to the patient, then the date other treatment started should be the same as the *Date of First Course of Treatment* [1270].
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date Other Treatment Started is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date Other Treatment Started transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

Examples

Code	Reason
20100316	A patient with metastatic disease was started on an experimental therapy on March 16, 2010.
20090801	Alcohol was used as an embolizing agent for a patient on August 1, 2009
20080917	A polycythemia vera patient was given several phlebotomies, the first being on September 17, 2008

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Other Treatment

Item #	Length	Allowable Values	Required Status	Date Revised
1420	1	0-3, 6-9	All Years	06/05, 09/08, 01/10, 01/11, 01/12, 01/15

Description

Identifies other treatment that cannot be defined as surgery, radiation, or systemic therapy according to the defined data items in this manual.

Rationale

Information on other therapy is used to describe and evaluate the quality of care and treatment practices.

Coding Instructions

- The principal treatment for certain reportable hematopoietic diseases could be supportive care that does not meet the usual definition of treatment that "modifies, controls, removes, or destroys" proliferating cancer tissue.
- Supportive care may include phlebotomy, transfusion, or aspirin. In order to report the hematopoietic cases in which the patient received supportive care, SEER and the Commission on Cancer have agreed to record treatments such as phlebotomy, transfusion, or aspirin as "Other Treatment" (Code 1) for certain hematopoietic diseases ONLY. Consult the most recent version of the **Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual** for instructions for coding care of specific hematopoietic neoplasms in this item
- Code 1 for embolization using alcohol as an embolizing agent.
- Code 1 for embolization to a site other than the liver where the embolizing agent is unknown.
- Code 1 for PUVA (psoralen and long-wave ultraviolet radiation)
- Do not code presurgical embolization that given for a purpose to shrink the tumor.
- A complete description of the treatment plan should be recorded in the text field for "Other Treatment" on the abstract.
- If other treatment was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the other treatment administered in the item *Palliative Care* [3270].
- Code 8 if it is known that a physician recommended treatment coded as Other Treatment, and no further documentation is available yet to confirm its administration
- Code 8 to indicate referral to a specialist for Other Treatment and the registry should follow. If follow-up with the specialist or facility determines the patient was never there, code 0.
- Code 0 when diagnosed at autopsy.
- Code 9 for Death Certificate Only (DCO) cases.

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Code	Label	Definition
0	None	All cancer treatment was coded in other treatment fields (surgery, radiation, systemic therapy). Patient received no cancer treatment. Diagnosed at autopsy.
1	Other	Cancer treatment that cannot be appropriately assigned to specified treatment data items (surgery, radiation, systemic therapy).
2	Other–Experimental	This code is not defined. It may be used to record participation in institution-based clinical trials.
3	Other–Double Blind	A patient is involved in a double-blind clinical trial. Code the treatment actually administered when the double-blind trial code is broken.
6	Other–Unproven	Cancer treatments administered by nonmedical personnel.
7	Refusal	Other treatment was not administered. It was recommended by the patient's physician, but this treatment (which would have been coded 1, 2, or 3) was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
8	Recommended; unknown if administered	Other treatment was recommended, but it is unknown whether it was administered.
9	Unknown	It is unknown whether other treatment was recommended or administered, and there is no information in the medical record to confirm the recommendation or administration of other treatment. Death certificate only.

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Other Treatment at this Facility

Item #	Length	Allowable Values	Required Status	Date Revised
730	1	0-3, 6-9	All Years	01/04, 09/08, 01/10, 01/12, 01/15

Description

Identifies other treatment given at this facility that cannot be defined as surgery, radiation, or systemic therapy according to the defined data items in this manual.

Rationale

Information on other therapy is used to describe and evaluate the quality of care and treatment practices.

Coding Instructions

- The principal treatment for certain reportable hematopoietic diseases could be supportive care that does not meet the usual definition of treatment that "modifies, controls, removes, or destroys' proliferating cancer tissue.
- Supportive care may include phlebotomy, transfusion, or aspirin. In order to report the hematopoietic cases in which the patient received supportive care, SEER and the Commission on Cancer have agreed to record treatments such as phlebotomy, transfusion, or aspirin as "Other Treatment" (Code 1) for certain hematopoietic diseases ONLY. Consult the most recent version of the **Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual** for instructions for coding care of specific hematopoietic neoplasms in this item
- Code 1 for embolization using alcohol as an embolizing agent.
- Code 1 for embolization to a site other than the liver where the embolizing agent is unknown.
- Code 1 for PUVA (psoralen and long-wave ultraviolet radiation)
- Do not code presurgical embolization that given for a purpose to shrink the tumor.
- A complete description of the treatment plan should be recorded in the text field for "Other Treatment" on the abstract.
- If other treatment was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the other treatment administered in the item *Palliative Care at This Facility* [3280].
- Code 8 if it is known that a physician recommended the patient receive treatment coded as Other Treatment, but no further documentation is available yet to confirm its administration.
- Code 0 when diagnosed at autopsy.
- Code 9 for Death Certificate Only (DCO) cases.

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Code	Label	Definition
0	None	All cancer treatment was coded in other treatment fields (surgery, radiation, systemic therapy). Patient received no cancer treatment. Diagnosed at autopsy.
1	Other	Cancer treatment that cannot be appropriately assigned to specified treatment data items (surgery, radiation, systemic therapy). Use this code for treatment unique to hematopoietic diseases.
2	Other–Experimental	This code is not defined. It may be used to record participation in institution-based clinical trials.
3	Other–Double Blind	A patient is involved in a double-blind clinical trial. Code the treatment actually administered when the double-blind trial code is broken.
6	Other–Unproven	Cancer treatments administered by nonmedical personnel.
7	Refusal	Other treatment was not administered. It was recommended by the patient's physician, but this treatment (which would have been coded 1, 2, or 3) was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
8	Recommended; unknown if administered	Other treatment was recommended, but it is unknown whether it was administered.
9	Unknown	It is unknown whether other treatment was recommended or administered, and there is no information in the medical record to confirm the recommendation or administration of other treatment. Death certificate only.

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Palliative Care (Palliative Procedure)

Item #	Length	Allowable Values	Required Status	Date Revised
3270	1	0-7, 9	All Years	01/04, 01/10

Description

Identifies any care provided in an effort to palliate or alleviate symptoms. Palliative care is performed to relieve symptoms and may include surgery, radiation therapy, systemic therapy (chemotherapy, hormone therapy, or other systemic drugs), and/or other pain management therapy.

Rationale

This data item allows reporting facilities to track care that is considered palliative rather than diagnostic or curative in intent.

Coding Instructions

- Record the type of palliative care provided.
- Surgical procedures, radiation therapy, or systemic therapy provided to prolong the patient's life by controlling symptoms, to alleviate pain, or to make the patient comfortable should be coded palliative care and as first course therapy if that procedure removes or modifies either primary or metastatic malignant tissue.
- Palliative care is not used to diagnose or stage the primary tumor.
- Do not code routine pain management following surgery or other treatment; do code first course pain management for persistent pain.

Code	Label
0	No palliative care provided. Diagnosed at autopsy.
1	Surgery (which may involve a bypass procedure) to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
2	Radiation therapy to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
3	Chemotherapy, hormone therapy, or other systemic drugs to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
4	Patient received or was referred for pain management therapy with no other palliative care.
5	Any combination of codes 1, 2, and/or 3 without code 4.
6	Any combination of codes 1, 2, and/or 3 with code 4.
7	Palliative care was performed or referred, but no information on the type of procedure is available in the patient record. Palliative care was provided that does not fit the descriptions for codes 1–6.
9	It is unknown if palliative care was performed or referred; not stated in patient record.

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Examples

Code	Reason
0	No palliative care was given.
1	A patient undergoes palliative surgical removal of brain metastasis. [Surgery recorded in *Surgical Procedure/Other Site* [1294]
1	A patient with unresectable pancreatic carcinoma (no surgical procedure of the primary site is performed) receives bypass surgery to alleviate jaundice and pain.
2	A patient is diagnosed with Stage IV prostate cancer. His only symptoms are painful bony metastases in his right hip and lower spine. XRT is given to those areas. (Record all radiotherapy items also).
2	A patient with lung cancer with a primary tumor extending into the spine is treated with XRT to shrink tumor away from spine/nerves to provide pain relief. (Record all radiotherapy items also).
3	A patient is given palliative chemotherapy for Stage IIIB lung cancer. (Record all chemotherapy items also).
4	A 93-year old patient is diagnosed with multiple myeloma and enters a pain management clinic to treat symptoms. No other therapy is planned due to other medical problems.
5	A patient is diagnosed with widely disseminated small cell lung cancer. A palliative resection of a solitary brain metastasis is performed followed by XRT to the lower spine for painful bony metastasis. There is no known pain management. (Record all surgery and radiotherapy items also).
6	A patient diagnosed with colon cancer receives bypass surgery to alleviate symptoms and XRT to the liver for metastasis, and then enters a pain management clinic for treatment for unremitting abdominal pain. (Record all radiotherapy items also).
7	A patient enters the facility with a clinical diagnosis of unresectable carcinoma of the pancreas. A stent was inserted into the bile duct to relieve obstruction and improve the bile duct flow.

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Palliative Care at this Facility (Palliative Procedure at this Facility)

Item #	Length	Allowable Values	Required Status	Date Revised
3280	1	0-7, 9	All Years	01/04, 01/10

Description

Identifies care provided at this facility in an effort to palliate or alleviate symptoms. Palliative care is performed to relieve symptoms and may include surgery, radiation therapy, systemic therapy (chemotherapy, hormone therapy, or other systemic drugs), and/or other pain management therapy.

Rationale

This data item allows reporting facilities to track care that is considered palliative rather than diagnostic or curative in intent.

Coding Instructions

- Record only the type of palliative care at this facility.
- Surgical procedures, radiation therapy, or systemic therapy provided to prolong the patient's life by controlling symptoms, to alleviate pain, or to make the patient comfortable at this facility should be coded as palliative care and as first course therapy if that procedure removes or modifies either primary or secondary malignant tissue.
- Palliative care is not used to diagnose or stage the primary tumor.
- Do not code routine pain management following surgery or other treatment; do code first course pain management for persistent pain.

Code	Label
0	No palliative care provided. Diagnosed at autopsy.
1	Surgery (which may involve a bypass procedure) to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
2	Radiation therapy to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
3	Chemotherapy, hormone therapy, or other systemic drugs to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made.
4	Patient received or was referred for pain management therapy with no other palliative care.
5	Any combination of codes 1, 2, and/or 3 without code 4.
6	Any combination of codes 1, 2, and/or 3 with code 4.
7	Palliative care was performed or referred, but no information on the type of procedure is available in the patient record. Palliative care was provided that does not fit the descriptions for codes 1–6.
9	It is unknown if palliative care was performed or referred; not stated in patient record.

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Outcomes

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Date of First Recurrence

Item #	Length	Allowable Values	Required Status	Date Revised
1860	8	CCYYMMDD, Blank	All Years	06/05, 01/10, 01/11, 01/12, 01/23

Description

Records the date of the first recurrence.

Rationale

This data item is used to measure the efficacy of the first course of treatment.

Coding Instructions

- Record the date the physician diagnoses the first progression, metastasis, or recurrence of disease after a disease-free period.
- Blank is allowable.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of First Recurrence is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of First Recurrence transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Type of First Recurrence

Item #	Length	Allowable Values	Required Status	Date Revised
1880	2	00, 04, 06, 10, 13-17, 20-22, 25-27, 30, 36, 40, 46, 51-59, 60, 62, 70, 88, 99	All Years	06/05, 01/10, 01/11, 01/13, 01/15, 01/18

Description

Identifies the type of first recurrence after a period of documented disease-free intermission or remission.

Rationale

This item is used to evaluate treatment efficacy and as a long-term prognostic factor.

Coding Instructions

- Code the type of first recurrence. First recurrence may occur well after completion of the first course of treatment or after subsequent treatment.
- Check the SEER *Multiple Primary and Histology Coding Rules Manual* or the 2018 Solid Tumor Rules to determine which subsequent tumors should be coded as recurrences.
- If the patient has never been disease-free (code 70), continue to track for disease-free status which may occur after subsequent treatment has been completed.
- If the patient is disease-free (code 00), continue to track until a recurrence occurs. First recurrence may occur well after completion of the first course of treatment.
- Once a recurrence has been recorded (code 04-62 or 88), subsequent recurrences are NOT to be recorded.
- Codes 00 through 70 are hierarchical; record the highest-numbered applicable response, with the following limits. The first time a patient converts from disease status (70) to disease-free, change the code to 00. Then the first time a patient converts from 00 to a recurrence, then record the proper code for the recurrence. No further changes (other than corrections) should be made.
- If the tumor was originally diagnosed as in situ, code recurrence to 06, 16, 17, 26, 27, 36, or 46 only. Do not use those codes for any other tumors. Codes 00, 88, or 99 may apply to any tumor.
- Codes 51–59 (organ or organ system of distant recurrence) apply only if all first occurrences were in a single category. There may be multiple metastases (or “seeding”) within the distant location.
- Code lymphomas or leukemias that are in remission 00. If the patient relapses, then code recurrence as 59. If one of these is controlled by drugs (for example, Gleevec for CML), the patient is in remission.
- If there is more than one primary tumor and the physician is unable to decide which has recurred, code the recurrent disease for each tumor. If the recurrent primary is identified later, revise the codes appropriately.

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Code	Label
00	Patient became disease-free after treatment and has not had a recurrence.
04	In situ recurrence of an invasive tumor.
06	In situ recurrence of an in situ tumor.
10	Local recurrence, and there is insufficient information available to code to 13–17. Local recurrence includes recurrence confined to the remnant of the organ of origin, to the organ of origin, to the anastomosis, or to scar tissue where the organ previously existed.
13	Local recurrence of an invasive tumor.
14	Trocar recurrence of an invasive tumor. Includes recurrence in the trocar path or entrance site following prior surgery.
15	Both local and trocar recurrence of an invasive tumor (both 13 and 14).
16	Local recurrence of an in situ tumor, NOS
17	Both local and trocar recurrence of an in situ tumor.
20	Regional recurrence, and there is insufficient information available to code to 21–27.
21	Recurrence of an invasive tumor in adjacent tissue or organ(s) only.
22	Recurrence of an invasive tumor in regional lymph nodes only.
25	Recurrence of an invasive tumor in adjacent tissue or organ(s) and in regional lymph nodes (both 21 and 22) at the same time.
26	Regional recurrence of an in situ tumor, NOS.
27	Recurrence of an in situ tumor in adjacent tissue or organ(s) and in regional lymph nodes at the same time.
30	Both regional recurrence of an invasive tumor in adjacent tissue or organs(s) and/or regional lymph nodes (20–25) and local and/or trocar recurrence (10, 13, 14, or 15).
36	Both regional recurrence of an in situ tumor in adjacent tissue or organ(s) and/or regional lymph nodes (26 or 27) and local and/or trocar recurrence (16 or 17).
40	Distant recurrence, to a site not listed in 46-62 or there is insufficient information available to code to 46–62.
46	Distant recurrence of an in situ tumor.
51	Distant recurrence of an invasive tumor in the peritoneum only. Peritoneum includes peritoneal surfaces of all structures within the abdominal cavity and/or positive ascitic fluid.
52	Distant recurrence of an invasive tumor in the lung only. Lung includes the visceral pleura.
53	Distant recurrence of an invasive tumor in the pleura only. Pleura includes the pleural surface of all structures within the thoracic cavity and/or positive pleural fluid.
54	Distant recurrence of an invasive tumor in the liver only.
55	Distant recurrence of an invasive tumor in bone only. This includes bones other than the primary site.
56	Distant recurrence of an invasive tumor in the CNS only. This includes the brain and spinal cord, but not the external eye.
57	Distant recurrence of an invasive tumor in the skin only. This includes skin other than the primary site.

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Code	Label
58	Distant recurrence of an invasive tumor in lymph node only. Refer to the staging scheme for a description of lymph nodes that are distant for a particular site.
59	Distant systemic recurrence of an invasive tumor only. This includes lymphoma, leukemia, bone marrow metastasis, carcinomatosis, generalized disease.
60	Distant recurrence of an invasive tumor in a single distant site (51–58) and local, trocar and/or regional recurrence (10–15, 20–25, or 30).
62	Distant recurrence of an invasive tumor in multiple sites (recurrences that can be coded to more than one category 51–59).
70	Since diagnosis, patient has never been disease-free. This includes cases with distant metastasis at diagnosis, systemic disease, unknown primary, or minimal disease that is not treated.
88	Disease has recurred, but the type of recurrence is unknown.
99	It is unknown whether the disease has recurred or if the patient was ever disease-free.

Examples

Code	Reason
52	Distant recurrence in the lung.
62	Recurrence in liver, lung, and bone

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Date of Last Cancer (tumor) Status

Item #	Length	Allowable Values	Required Status	Date Revised
1772	8	CCYYMMDD, Blank	2018+	01/18, 01/23

Description

This data item documents the date of last cancer (tumor status) of the patient's malignant or non-malignant tumor. Record in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable. This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018 and later.

Rationale

This information is used for patient follow-up and outcomes studies.

Coding Instructions

- Record the last date on which the patient's cancer status (Cancer Status [1770)] was known to be updated.
- Cancer Status is based on information from the patient's physician or other official source such as a
- death certificate.
- The patient's Cancer Status should be changed **only** if new information is received from the patient's physician or other official source. If information is obtained from the patient, a family member, or other non-physician, then Cancer Status is not updated.
- Cancer Status changes if the patient has a recurrence or relapse.
- Blank is allowed.
- This data item differs from the Date of Last Contact or Death [1750] as it is a tumor-level data item. If a patient has multiple primaries, each primary could have a different Date of Last Cancer (tumor) Status [1772].

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Cancer Status

Item #	Length	Allowable Values	Required Status	Date Revised
1770	1	1, 2, 9	All Years	01/04, 01/18

Description

Records the presence or absence of clinical evidence of the patient's malignant or non-malignant tumor as of the *Date of Last Cancer (tumor) Status* [1772].

Rationale

This information is used for patient follow-up and outcomes studies.

Coding Instructions

- *Cancer Status* is based on information from the patient's physician or other official source such as a
- death certificate.
- The patient's *Cancer Status* should be changed **only** if new information is received from the patient's physician or other official source. If information is obtained from the patient, a family member, or other non-physician, then cancer status is not updated.
- *Cancer Status* changes if the patient has a recurrence or relapse.
- If a patient has multiple primaries, each primary could have a different cancer status.

Code	Label
1	No evidence of this tumor
2	Evidence of this tumor
9	Unknown, indeterminate whether this tumor is present; not stated in patient record

Examples

Code	Reason
1	Patient with hematopoietic disease who is in remission.
1	A patient is seen by the physician on February 2, 2004 with no evidence of this tumor. The patient did not return to the physician. The patient was then called by the registry on August 29, 2005. The *Date of Last Contact or Death* [1750) is updated, but the cancer status is not.
2	A patient with prostate cancer is diagnosed with bone metastasis in April 2003. The registrar finds an obituary documenting the patient's death in a nursing home in June 2003.

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Date of Last Contact or Death

Item #	Length	Allowable Values	Required Status	Date Revised
1750	8	CCYYMMDD	All Years	06/05, 01/10, 01/11, 01/15, 01/23

Description

Records the date of last contact with the patient or the date of death.

Rationale

This information is used for patient follow-up and outcomes studies.

Coding Instructions

- Record the last date on which the patient was known to be alive or the date of death.
- Note that failure to find a patient on a list of deceased individuals does not constitute evidence that the patient is alive. *Vital Status* is not changed, but neither is the *Date of Last Contact or Death* changed. Unless more information is located, follow up of this patient has failed.
- If a patient has multiple primaries, all records should have the same date of last contact.
- As of January 1, 2006, the CoC does not require *Class of Case* 00 cases to be followed.
- Blanks are not allowed.
- Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems. The traditional format for Date of Last Contact or Death is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date. The interoperable form of Date of Last Contact or Death transmits in CCYYMMDD form, where blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

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Vital Status

Item #	Length	Allowable Values	Required Status	Date Revised
1760	1	0, 1	All Years	01/15

Description

Records the vital status of the patient as of the date entered in *Date of Last Contact or Death* [1750].

Rationale

This information is used for patient follow-up and outcomes studies.

Coding Instructions

- This item is collected during the follow-up process with *Date of Last Contact or Death* [1750].
- Note that failure to find a patient on a list of deceased individuals does not constitute evidence that the patient is alive. *Vital Status* is not changed, but neither is the *Date of Last Contact or Death* changed. Unless more information is located, follow up of this patient has failed.
- If a patient has multiple primaries, all records should have the same vital status.

Code	Label
0	Dead
1	Alive

Examples

Code	Reason
0	Death clearance information obtained from a state central registry confirms the death of the patient within the past year.
1	In response to a follow-up letter to a patient's following physician, it is learned the patient is alive.

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Follow-Up Source

Item #	Length	Allowable Values	Required Status	Date Revised
1790	1	0-5, 7-9	All Years	

Description

Records the source from which the latest follow-up information was obtained.

Rationale

This data item is used by registries to identify the most recent follow-up source.

Coding Instructions

Code	Label	Definition
0	Reported hospitalization	Hospitalization at another institution/hospital or first admission to the reporting facility.
1	Readmission	Hospitalization or outpatient visit at the reporting facility.
2	Physician	Information from a physician.
3	Patient	Direct contact with the patient.
4	Department of Motor Vehicles	The Department of Motor Vehicles confirmed the patient has a current license.
5	Medicare/Medicaid file	The Medicare or Medicaid office confirmed the patient is alive.
7	Death certificate	Information from the death certificate only.
8	Other	Friends, relatives, employers, other registries, or any sources not covered by other codes.
9	Unknown; not stated in patient record	The follow-up source is unknown or not stated in patient record.

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Next Follow-Up Source (Next Follow-Up Method)

Item #	Length	Allowable Values	Required Status	Date Revised
1800	1	0-5, 8, 9	All Years	01/10

Description

Identifies the method planned for the next follow-up.

Rationale

This data item is used by registries to identify the method planned for the next follow-up.

Coding Instructions

- Registries in CoC-accredited cancer programs are not required to follow foreign residents.
- As of January 1, 2006, the CoC does not require Class of Case 00 cases to be followed.

Code	Label
0	Chart requisition
1	Physician letter
2	Contact letter
3	Phone call
4	Other hospital contact
5	Other, NOS
8	Foreign residents (not followed)
9	Not followed. Other cases for which follow-up is not required.

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Case Administration

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Abstracted By

Item #	Length	Allowable Values	Required Status	Date Revised
570	3	Alphanumeric	1996+	

Description

Records the initials or assigned code of the individual abstracting the case.

Rationale

This item can be used for quality control and management in multi-staffed registries.

Coding Instructions

- Code the initials of the abstractor.

Code	Label
(fill spaces)	Initials or code of abstractor.

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Facility Identification Number (FIN)

Item #	Length	Allowable Values	Required Status	Date Revised
540	10	10 digits	All Years	09/08, 01/12

Description

Identifies the facility reporting the case.

Rationale

Each facility's identification number (FIN) is unique. The number is essential to the National Cancer Database (NCDB) for monitoring data submissions, ensuring the accuracy of data, and for identifying areas for special studies.

Coding Instructions

- Facility Identification Number is automatically coded by the software provider.
- For facilities with seven-digit FINs in the range of 6020009–6953290 that were assigned by the CoC before January 1, 2001, the coded FIN will consist of three leading zeros followed by the full seven- digit number.
- For facilities with eight-digit FINs greater than or equal to 10000000 that were assigned by the CoC after January 1, 2001, the coded FIN will consist of two leading zeros followed by the full eight-digit number.
- Facilities that are part of an Integrated Network Cancer Program (INCP) must use the hospital-specific FIN in their data for submission to the National Cancer Database.
- Facilities that merge are legally a single hospital. Consult NCDB for instructions for recording the FIN for newly-merged programs.

Examples

Code	Reason
0006439999	6439999, General Hospital, Anytown, Illinois
0010000099	10000099, Anytown Medical Center, Anytown, Illinois

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NPI–Reporting Facility

Item #	Length	Allowable Values	Required Status	Date Revised
545	10	10 digits, Blank	2008+	04/07, 09/08, 01/10, 01/12

Description

Identifies the facility whose data are in the record.

Rationale

Each facility's NPI is unique. The number is essential to the National Cancer Database (NCDB) for monitoring data submissions, ensuring the accuracy of data, and for identifying areas for special studies.

NPI–Reporting Facility is the NPI equivalent of *Facility Identification Number* [540]. Both are required during a period of transition.

Coding Instructions

- NPI–Reporting Facility is automatically coded by the software provider.
- NPI should be recorded as available for cases diagnosed during 2007, and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- The facility's NPI can be obtained from the billing or accounting department, or searched at https://nppes.cms.hhs.gov/#/.
- If the facility has more than one NPI number assigned, use the "umbrella" number that applies to the entire facility.
- Facilities that are part of an Integrated Network Cancer Program (INCP) must use the hospital-specific NPI number in their data for submission to the National Cancer Database.
- Facilities that merge are legally a single hospital. Use the NPI number for the merged hospital.
- NPI may be blank for cases diagnosed on or before December 31, 2007.

Examples

Code	Reason
(fill spaces)	10-digit NPI number for the facility.
(leave blank)	NPI for the facility is unknown or not available.

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Archive FIN

Item #	Length	Allowable Values	Required Status	Date Revised
3100	10	10 digits	2003+	01/10, 01/12

Description

Identifies the facility that originally abstracted the case.

Rationale

It is essential for hospital registries to have the ability to distinguish cases originally accessioned by each registry of the merged unit. This enables the CoC to manage the receipt of historical data and to appropriately attribute these data.

Coding Instructions

- Archive FIN is automatically coded by the software provider.
- This data item never changes and must be included as part of the patient record when data are submitted to the NCDB.
- For facilities that have not merged, the Archive FIN and FIN [540] will be the same.
- If facilities merged after January 1, 2003, a new FIN was assigned to represent the merged facility. This new FIN was assigned to all cases in the merged registry, but the Archive FIN for cases from each registry prior to the merger does not change.
- If a merged program continues to operate multiple campuses, the Archive FIN is the historic FIN for the respective facilities that are now separate campuses of the same hospital.
- Facilities that are part of an Integrated Network Cancer Program (INCP) must use the hospital-specific FIN for the Archive FIN in their data for submission to the National Cancer Database.
- Programs that are not part of a merged facility or an INCP will use their hospital's FIN as the Archive FIN.
- For facilities with seven-digit FINs in the range of 6020009–6953290 that were assigned by the CoC before January 1, 2001, the coded FIN will consist of three leading zeros followed by the full seven- digit number. The Archive FIN must be recorded similarly.
- For facilities with eight-digit FINs greater than or equal to 10000000 that were assigned by the CoC after January 1, 2001, the coded FIN will consist of two leading zeros followed by the full eight-digit number. The Archive FIN must be recorded similarly.

Examples

Code	Reason
0006439999	General Hospital, Anytown, Illinois (FIN: 6439999). Original diagnosis was made at this facility; both the FIN and the Archive FIN are the same.
0006439999 or 0006430000	General Hospital (FIN: 6439999) and Anytown Medical Center (FIN: 6430000) in Anytown IL merged; the two cancer registries were combined and now report as Anytown Medical Center. The new FIN for this reporting facility is 10000099. All cases from the merged General Hospital and Anytown Medical Center registry have the new FIN (0010000099) assigned to them. In addition, either the General Hospital Archive FIN (0006439999) or the Anytown Medical Center Archive FIN (0006430000) is retained in each record depending on which registry originally accessioned the case.

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NPI–Archive FIN

Item #	Length	Allowable Values	Required Status	Date Revised
3105	10	10 digits, Blank	2008+	01/10, 01/12

Description

Identifies the facility that originally abstracted the case.

Rationale

It is essential for hospital registries to have the ability to distinguish cases originally accessioned by each registry of the merged unit. This enables the CoC to manage the receipt of historical data and to appropriately attribute these data.

NPI–Archive FIN is the NPI equivalent of *Archive FIN* [3100]. Both are required during a period of transition.

Coding Instructions

- NPI–Archive FIN is automatically coded by the software provider.
- This data item never changes and must be included as part of the patient record when data are submitted to the NCDB.
- The facility's NPI can be obtained from the billing or accounting department, or searched at https://nppes.cms.hhs.gov/#/.
- For facilities that have not merged, the NPI–Archive FIN and the NPI–Reporting Facility [545] will be the same. Facilities that are part of an Integrated Network Cancer Program (INCP) must use the hospital-specific NPI number for the NPI-Archive FIN in their data for submission to the National Cancer Database.
- If the facility has more than one NPI number assigned, use the "umbrella" number that applies to the entire facility.
- NPI should be recorded as available for cases diagnosed during 2007, and is required to be recorded for all cases diagnosed January 1, 2008, and later.
- NPI may be blank for cases diagnosed on or before December 31, 2007.

Examples

Code	Reason
(fill spaces)	10-digit NPI number for the facility.
(leave blank)	NPI for the facility is unknown or not available.

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Date Case Completed – CoC

Item #	Length	Allowable Values	Required Status	Date Revised
2092	8	CCYYMMDD	≥2010	01/12

Description

This data item identifies the date that specified items are completed, based on the *Class of Case*, and those items pass the relevant edits. Follow-up information, including delayed treatment received elsewhere, may be coded after the *Date Case Completed–CoC*. This item should be autocoded by the registry software. The CoC specifications will not necessarily be the same as those used for *Date Case Completed* [NAACCR Item #2090], which CoC does not require.

Rationale

This item was created to measure abstracting timeliness of information that should be available when the facility's main involvement in the patient's first course care is completed, based on *Class of Case*, This may also be used as part of CoC Standard 6.1 Cancer Registry Quality Control for timeliness determined by the program.

Coding Instructions

- This item may be left blank for cases diagnosed prior to 2010.
- Follow-up information, information about delayed treatment received elsewhere, and information about multiple tumors diagnosed later may be coded after the *Date Case Completed – CoC*.
- Corrections and updates may be made after the *Date Case Completed – CoC*.
- Information can be found on the NCDB Call for Data Webpage under Layouts, NAACCR current version Record Layout and Items to Be Submitted.
- After all required items identified below for the patient's *Class of Case* have been abstracted, the registrar should run the current NAACCR edit set "Hosp: CoC Required - All" using the registry software. The registry software will record the *Date Case Completed – CoC* when those items are abstracted and the case passes all edits in that set.

Class of Case	Description	Items that Must Be Completed by Date Case Completed - CoC
00-22	All analytic cases	Identification, demographic, diagnostic
10-22	Patient received part or all first course treatment from facility	Staging, hospital-specific treatment
10, 12, 14, 20, 22	Patient received all first course treatment from facility, or unspecified whether all or part	Summary treatment (treatment at any facility)
00	Patient diagnosed at facility, received all treatment elsewhere	NPI number for the facility the patient was referred to or a treating physician
20-22	Patient diagnosed elsewhere, received part or all of treatment from facility	NPI number for the facility the patient was referred to or from OR the physician who diagnosed or treated the patient

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Override Site/TNM-Stage Group

Item #	Length	Allowable Values	Required Status	Date Revised
1989	1	1, Blank	All Years	09/04, 09/08, 01/10, 01/12

Description

Used with the EDITS software to override the edits of the type *Primary Site, AJCC Stage Group*, for AJCC staging editions 6 and later.

Rationale

This override flag allows identification of pediatric cancers that were staged according to a system other than the **AJCC** staging manual (which is predominantly directed toward adult staging) if they are not also **AJCC**-staged. In that situation an otherwise-stageable case may be coded 88 (not applicable) for all **AJCC** items.

EDITS Use

Edits of the type, *Primary Site, AJCC Stage Group*, check that the pathological and clinical AJCC stage group codes are valid for the site and histology group according to the applicable *AJCC Cancer Staging Manual*, using the codes described for the items *Clinical Stage Group* [970] and *Pathological Stage Group* [910]. Combinations of site and histology not represented in any AJCC schema must be coded 88. Unknown codes must be coded 99. Blanks are not permitted.

Since pediatric cancers whose sites and histologies have an AJCC scheme may be coded according to a pediatric scheme instead, use *Override Site/TNM-Stage Group* to indicate the case was coded according to a pediatric staging system if it was not also coded according to the AJCC manual. Pediatric stage groups should *not* be recorded in the *Clinical Stage Group* or *Pathological Stage Group* items. When neither clinical nor pathological AJCC staging is used for pediatric cases, code all AJCC items 88. When any AJCC component is used to stage a pediatric case, follow the instructions for coding AJCC items and leave *Override Site/TNM-Stage Group* blank.

Coding Instructions

- Leave blank if the EDITS program does not generate an error message for the edits of the type, Primary Site, AJCC Stage Group.
- Leave blank and correct any errors for the case if an item is discovered to be incorrect.
- Code 1 if the case is confirmed to be a pediatric case that was coded using a pediatric coding system.

Code	Label
(Leave blank)	Not reviewed; or reviewed and corrected.
1	Reviewed and confirmed as reported.

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Override Site/Type

Item #	Length	Allowable Values	Required Status	Date Revised
2030	1	1, Blank	All Years	09/06, 09/08, 01/10

Description

Used with the EDITS software to override edits of the type *Primary Site, Morphology-Type and Primary Site, Morphology-Type, Behavior ICDO3*.

Rationale

Some edits in the EDITS software package check for code combinations that are possible, but quite rare. If the code combination generates an error message and review of the case indicates that the codes are correct for the case, then the override flag is used to skip the edit on future runs of the EDITS package.

EDITS Use

There are multiple versions of edits of the type, *Primary Site, Morphology-Type*, which check for "usual" combinations of site and ICD-O-2 or ICD-O-3 histology. The SEER version of the edit is more restrictive than the CoC edit, and thus uses a different override flag. The CoC version of the edit will accept *Override CoC-Site/Type* or *Override Site/Type* as equivalent.

The Site/Histology Validation List (available on the SEER website) contains those histologies commonly found in the specified primary site. Histologies that occur only rarely or never are not be included. These edits require review of all combinations not listed.

Since basal and squamous cell carcinomas of non-genital skin sites are not reportable to SEER, these site/histology combinations do not appear on the SEER validation list. For the CoC version of the edit, if Primary Site [400] is in the range C440-C449 (skin), and the ICD-O-3 histology is in the range 8000- 8005 (neoplasms, malignant, NOS), 8010-8046 (epithelial carcinomas), 8050-8084 (papillary and squamous cell carcinomas), or 8090-8110 (basal cell carcinomas), no further editing is done. No override is necessary for these cases in the CoC version of the edit.

Review of these cases requires investigating whether the combination is biologically implausible or there are cancer registry coding conventions that would dictate different codes for the diagnosis (See *Cancer Identification* in Section I). Review of these rare combinations often results in changes to the primary site and/or morphology, rather than a decision that the combination is correct.

Coding Instructions

- Leave blank if the EDITS program does not generate an error message for edits of the type Primary Site, Morphology-Type.
- Leave blank and correct any errors for the case if an item is discovered to be incorrect.
- Code 1 if review of all items in the error or warning message confirms that all are correct.

Code	Label
(Leave blank)	Not reviewed; or reviewed and corrected.
1	Reviewed, confirmed as reported.

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TNM Edition Number

Item #	Length	Allowable Values	Required Status	Date Revised
1060	1	00–08, 88, 99	1996+	01/04, 01/10, 01/18

Description

Identifies the edition of the *AJCC Cancer Staging Manual* used to stage the case.

Rationale

AJCC stage and component T, N, and M codes and rules have changed over time. This item enables the analysis of cases grouped by edition number.

Coding Instructions

- This item is auto-coded by the software provider.

Code	Label
00	Not staged (cases that have an AJCC staging scheme and staging was not done).
01	First Edition
02	Second Edition
03	Third Edition
04	Fourth Edition
05	Fifth Edition
06	Sixth Edition
07	Seventh Edition
08	Eighth Edition
09	Ninth Edition
88	Not applicable (cases that do not have an AJCC staging scheme)
99	Staged, but the edition is unknown

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APPENDIX A: Current Site-Specific Surgery Codes for 2023+ Coding of Data Items Rx Hosp – Surg 2023 [671] and Rx Summ- Surg 2023 [1291]

Do not re-assign codes previously coded for diagnosis years 2022 and prior for data items # 670 and 1290.

For diagnosis years 2003 – 2022, Surgical Procedure of Primary Site at this Facility [NAACCR data item #670] and Surgical Procedure of Primary Site [NAACCR data item #1290] should be coded utilizing the STORE manual based on the year of diagnosis.

All 2023 site specific surgery codes begin with a letter A except for skin which start with a letter B to Indicate a significate change in coding.

NOTE TO VENDORS/RESEARCHERS:
RX Hosp--Surg Prim Site [670] was changed to RX Hosp—Surg Prim Site 03-2022 [670]
RX Summ--Surg Prim Site [1290] was changed to RX Summ--Surg Prim Site 03- 2022 [1290]

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ORAL CAVITY

Lip C00.0–C00.9, Base of Tongue C01.9, Other Parts of Tongue C02.0–C02.9, Gum C03.0–C03.9, Floor of Mouth C04.0–C04.9, Palate C05.0–C05.9, Other Parts of Mouth C06.0–C06.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser

No specimen sent to pathology from surgical events A100–A140.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy

Any combination of A200 or A260–A270 WITH
- A210 Photodynamic therapy (PDT)
- A220 Electrocautery
- A230 Cryosurgery
- A240 Laser ablation

A250 Laser excision

A300 Wide excision, NOS

Code A300 includes:
- Hemiglossectomy
- Partial glossectomy

A400 Radical excision of tumor, NOS
- A410 Radical excision of tumor ONLY
- A420 Combination of A410 WITH resection in continuity with mandible (marginal, segmental, hemi-, or total resection)
- A430 Combination of A410 WITH resection in continuity with maxilla (partial, subtotal, or total resection)

Codes A400–A430 include:
- Total glossectomy
- Radical glossectomy

Specimen sent to pathology from surgical events A200–A430.

A900 Surgery, NOS

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A990 Unknown if surgery performed; death certificate ONLY

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PAROTID AND OTHER UNSPECIFIED GLANDS

Parotid Gland C07.9, Major Salivary Glands C08.0–C08.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser

No specimen sent to pathology from surgical events A100–A140.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
- A250 Laser excision

A300 Less than total parotidectomy, NOS; less than total removal of major salivary gland, NOS
- A310 Facial nerve spared
- A320 Facial nerve sacrificed
- A330 Superficial lobe ONLY
  - A340 Facial nerve spared
  - A350 Facial nerve sacrificed
- A360 Deep lobe (Total)
  - A370 Facial nerve spared
  - A380 Facial nerve sacrificed

A400 Total parotidectomy, NOS; total removal of major salivary gland, NOS
- A410 Facial nerve spared
- A420 Facial nerve sacrificed

A500 Radical parotidectomy, NOS; radical removal of major salivary gland, NOS
- A510 WITHOUT removal of temporal bone
- A520 WITH removal of temporal bone
- A530 WITH removal of overlying skin (requires graft or flap coverage)

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A800 Parotidectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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PHARYNX

Tonsil C09.0–C09.9, Oropharynx C10.0–C10.9, Nasopharynx C11.0–C11.9

Pyriform Sinus C12.9, Hypopharynx C13.0–C13.9, Pharynx C14.0

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Stripping

No specimen sent to pathology from surgical events A100–A150.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
  - A250 Laser excision
  - A280 Stripping

A300 Pharyngectomy, NOS
- A310 Limited/partial pharyngectomy; tonsillectomy, bilateral tonsillectomy
- A320 Total pharyngectomy

A400 Pharyngectomy WITH laryngectomy OR removal of contiguous bone tissue, NOS (does NOT include total mandibular resection)
- A410 WITH Laryngectomy (laryngopharyngectomy)
- A420 WITH bone
- A430 WITH both A410 and A420

A500 Radical pharyngectomy (includes total mandibular resection), NOS
- A510 WITHOUT laryngectomy
- A520 WITH laryngectomy

Specimen sent to pathology from surgical events A200–A520.

A900 Surgery, NOS

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A990 Unknown if surgery performed; death certificate ONLY

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ESOPHAGUS

C15.0–C15.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser

No specimen sent to pathology from surgical events A100–A140.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
  - A250 Laser excision

A300 Partial esophagectomy

A400 Total esophagectomy, NOS

A500 Esophagectomy, NOS WITH laryngectomy and/or gastrectomy, NOS
- A510 WITH laryngectomy
- A520 WITH gastrectomy, NOS
- A530 Partial gastrectomy
- A540 Total gastrectomy
- A550 Combination of A510 WITH any of A520–A540

A800 Esophagectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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STOMACH

C16.0–C16.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser

No specimen sent to pathology from surgical events A100–A140.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
  - A250 Laser excision

A300 Gastrectomy, NOS (partial, subtotal, hemi-)
- A310 Antrectomy, lower (distal-less than 40% of stomach)***
- A320 Lower (distal) gastrectomy (partial, subtotal, hemi-)
- A330 Upper (proximal) gastrectomy (partial, subtotal, hemi-)

Code A300 includes:

Partial gastrectomy, including a sleeve resection of the stomach
Billroth I: anastomosis to duodenum (duodenostomy)
Billroth II: anastomosis to jejunum (jejunostomy)

A400 Near-total or total gastrectomy, NOS
- A410 Near-total gastrectomy
- A420 Total gastrectomy

A total gastrectomy may follow a previous partial resection of the stomach.

A500 Gastrectomy, NOS WITH removal of a portion of esophagus
- A510 Partial or subtotal gastrectomy
- A520 Near total or total gastrectomy

Codes A500–A520 are used for gastrectomy resection when only portions of esophagus are included in procedure.

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A600 Gastrectomy with a resection in continuity with the resection of other organs, NOS***
A610 Partial or subtotal gastrectomy, in continuity with the resection of other organs***
A620 Near total or total gastrectomy, in continuity with the resection of other organs***
A630 Radical gastrectomy, in continuity with the resection of other organs***
Codes A600–A630 are used for gastrectomy resections with organs other than esophagus. Portions of esophagus may or may not be included in the resection.

A800 Gastrectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

*** Incidental splenectomy NOT included

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COLON

C18.0–C18.9

Code removal/surgical ablation of single or multiple liver metastases under the data item *Surgical Procedure/Other Site* (NAACCR Item #1294).

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS

A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)

No specimen sent to pathology from surgical events A100–A120.

A200 Local tumor excision, NOS
- A260 Polypectomy, NOS
- A270 Excisional biopsy
- A280 Polypectomy-endoscopic
- A290 Polypectomy-surgical excision
- Any combination of A200 or A260-A290 WITH
  - A220 Electrocautery

A300 Partial colectomy, segmental resection
- A320 Plus resection of contiguous organ; example: small bowel, bladder

A400 Subtotal colectomy/hemicolectomy (total right or left colon and a portion of transverse colon)
- A410 Plus resection of contiguous organ; example: small bowel, bladder

A500 Total colectomy (removal of colon from cecum to the rectosigmoid junction; may include a portion of the rectum)
- A510 Plus resection of contiguous organ; example: small bowel, bladder

A600 Total proctocolectomy (removal of colon from cecum to the rectosigmoid junction, including the entire rectum)
- A610 Plus resection of contiguous organ; example: small bowel, bladder

A700 Colectomy or coloproctotectomy with resection of contiguous organ(s), NOS (when there is not enough information to code A320, A410, A510, or A610)

Code A700 includes: Any colectomy (partial, hemicolectomy, or total) WITH a resection of any other organs in continuity with the primary site. Other organs may be partially or totally removed. Other organs may include, but are not limited to, oophorectomy, partial proctectomy, rectal mucosectomy, or pelvic exenteration.

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A800 Colectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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RECTOSIGMOID

C19.9

Code removal/surgical ablation of single or multiple liver metastases under the data item *Surgical Procedure/Other Site* (NAACCR Item #1294).

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)

No specimen sent to pathology from surgical events A100–A120.

A200 Local tumor excision, NOS
A260 Polypectomy, NOS
A270 Excisional biopsy
Any combination of A200 or A260-A270 WITH
A220 Electrocautery

A300 Segmental resection; partial proctosigmoidectomy, NOS
A310 Plus resection of contiguous organs; example: small bowel, bladder

Procedures coded A300 include, but are not limited to:
Anterior resection
Hartmann's operation
Low anterior resection (LAR)
Partial colectomy, NOS
Rectosigmoidectomy, NOS
Sigmoidectomy

A400 Pull through WITH sphincter preservation (colo-anal anastomosis)

A500 Total proctectomy

A510 Total colectomy

A550 Total colectomy WITH ileostomy, NOS
A560 Ileorectal reconstruction
A570 Total colectomy WITH other pouch; example: Koch pouch

A600 Total proctocolectomy, NOS
A650 Total proctocolectomy WITH ileostomy, NOS
A660 Total proctocolectomy WITH ileostomy and pouch

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Removal of the colon from cecum to the rectosigmoid or a portion of the rectum.

A700 Colectomy or proctocolectomy resection in continuity with other organs; pelvic exenteration

A800 Colectomy, NOS; Proctectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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RECTUM

C20.9

Code removal/surgical ablation of single or multiple liver metastases under the data item *Surgical Procedure/Other Site* (NAACCR Item #1294).

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)

No specimen sent to pathology from surgical events A100-A120

A200 Local tumor excision, NOS
A260 Polypectomy
A270 Excisional biopsy
Any combination of A200 or A260–A270 WITH
A220 Electrocautery
A280 Curette and fulguration

A300 Segmental resection; partial proctectomy, NOS

Procedures coded A300 include, but are not limited to:

Anterior resection
Hartmann's operation
Low anterior resection (LAR)
Transsacral rectosigmoidectomy

A400 Pull through WITH sphincter preservation (coloanal anastomosis)

A500 Total proctectomy

Procedure coded A500 includes, but is not limited to:

Abdominoperineal resection

A600 Total proctocolectomy, NOS

A700 Proctectomy or proctocolectomy with resection in continuity with other organs; pelvic exenteration

A800 Proctectomy, NOS
Specimen sent to pathology from surgical events A200–A800.

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A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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ANUS

C21.0–C21.8

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
A150 Thermal Ablation

No specimen sent to pathology from surgical events A100, A120 and A150.

A200 Local tumor excision, NOS
A260 Polypectomy
A270 Excisional biopsy
Any combination of A200 or A260–A270 WITH
A220 Electrocautery

A600 Abdominal perineal resection, NOS (APR)
A610 APR and sentinel node excision
A620 APR and unilateral inguinal lymph node dissection
A630 APR and bilateral inguinal lymph node dissection

The lymph node dissection should also be coded under *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) or *Scope of Regional Lymph Node Surgery at This Facility* (NAACCR Item #672).

Specimen sent to pathology from surgical events A200–A630.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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LIVER AND INTRAHEPATIC BILE DUCTS

C22.0–C22.1

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Alcohol (Percutaneous Ethanol Injection-PEI)
- A160 Heat-Radio-frequency ablation (RFA)
- A170 Other (ultrasound, acetic acid)

No specimen sent to pathology from surgical events A100–A170.

A200 Wedge or segmental resection, NOS
A210 Wedge resection
A220 Segmental resection, NOS
- A230 One
- A240Two
- A250 Three
- A260 Segmental resection AND local tumor destruction

A300 Lobectomy, NOS
- A360 Right lobectomy
- A370 Left lobectomy
- A380 Lobectomy AND local tumor destruction

A500 Extended lobectomy, NOS (extended: resection of a single lobe plus a segment of another lobe)
- A510 Right lobectomy
- A520 Left lobectomy
- A590 Extended lobectomy AND local tumor destruction

A600 Hepatectomy, NOS
- A610 Total hepatectomy and transplant

A650 Excision of a bile duct (for an intra-hepatic bile duct primary only)
- A660 Excision of an intrahepatic bile duct PLUS partial hepatectomy

A750 Extrahepatic bile duct and hepatectomy WITH transplant

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Specimen sent to pathology from surgical events A200–A750.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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PANCREAS

C25.0–C25.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A250 Local excision of tumor, NOS

A300 Partial pancreatectomy, NOS; example: distal

A350 Local or partial pancreatectomy and duodenectomy
A360 WITHOUT distal/partial gastrectomy
A370 WITH partial gastrectomy (Whipple)

A400 Total pancreatectomy

A600 Total pancreatectomy and subtotal gastrectomy or duodenectomy

A700 Extended pancreatoduodenectomy

A800 Pancreatectomy, NOS

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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LARYNX

C32.0–C32.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Stripping

No specimen sent to pathology from surgical events A100–A150.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
  - A250 Laser excision
  - A280 Stripping

A300 Partial excision of the primary site, NOS; subtotal/partial laryngectomy NOS; hemilaryngectomy NOS
- A310 Vertical laryngectomy
- A320 Anterior commissure laryngectomy
- A330 Supraglottic laryngectomy

A400 Total or radical laryngectomy, NOS
- A410 Total laryngectomy ONLY
- A420 Radical laryngectomy ONLY

A500 Pharyngolaryngectomy

A800 Laryngectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

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A990 Unknown if surgery performed; death certificate ONLY

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LUNG

C34.0–C34.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A190 Local tumor destruction or excision, NOS

Unknown whether a specimen was sent to pathology for surgical events coded A190 (principally for cases diagnosed prior to January 1, 2003).

A150 Local tumor destruction, NOS

A120 Laser ablation or cryosurgery

A130 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)

No specimen sent to pathology from surgical events A120–A130 and A150.

A200 Excision or resection of less than one lobe, NOS

A230 Excision, NOS

A240 Laser excision

A250 Bronchial sleeve resection ONLY

A210 Wedge resection

A220 Segmental resection, including lingulectomy

A300 Resection of lobe or bilobectomy, but less than the whole lung (partial pneumonectomy, NOS)

A330 Lobectomy WITH mediastinal lymph node dissection

The lymph node dissection should also be coded under *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) or *Scope of Regional Lymph Node Surgery at This Facility* (NAACCR Item #672).

A450 Lobe or bilobectomy extended, NOS

A460 WITH chest wall

A470 WITH pericardium

A480 WITH diaphragm

A550 Pneumonectomy, NOS

A560 WITH mediastinal lymph node dissection (radical pneumonectomy)

The lymph node dissection should also be coded under *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) or *Scope of Regional Lymph Node Surgery at This Facility* (NAACCR Item #672).

A650 Extended pneumonectomy

A660 Extended pneumonectomy plus pleura or diaphragm

A700 Extended radical pneumonectomy

The lymph node dissection should also be coded under *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) or *Scope of Regional Lymph Node Surgery at This Facility* (NAACCR Item #672).

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A800 Resection of lung, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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HEMATOPOIETIC/RETICULOENDOTHELIAL/

IMMUNOPROLIFERATIVE/MYELOPROLIFERATIVE DISEASE

C42.0, C42.1, C42.3, C42.4 (with any histology)

Code

A980 All hematopoietic/reticuloendothelial/immunoproliferative/myeloproliferative disease sites and/or histologies, WITH or WITHOUT surgical treatment.

Surgical procedures for hematopoietic/reticuloendothelial/immunoproliferative/ myeloproliferative primaries are to be recorded using the data item *Surgical Procedure/Other Site* (NAACCR Item #1294) or *Surgical Procedure/Other Site at This Facility* (NAACCR Item #674).

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BONES, JOINTS, AND ARTICULAR CARTILAGE

C40.0–C41.9

PERIPHERAL NERVES AND AUTONOMIC NERVOUS SYSTEM

C47.0–C47.9

CONNECTIVE, SUBCUTANEOUS, AND OTHER SOFT TISSUES

C49.0–C49.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A190 Local tumor destruction or excision, NOS
Unknown whether a specimen was sent to pathology for surgical events coded A190 (principally for cases diagnosed prior to January 1, 2003).

A150 Local tumor destruction
No specimen sent to pathology from surgical event A150.

A250 Local excision

A260 Partial resection

A300 Radical excision or resection of lesion WITH limb salvage

A400 Amputation of limb
- A410 Partial amputation of limb
- A420 Total amputation of limb

A500 Major amputation, NOS
- A510 Forequarter, including scapula
- A520 Hindquarter, including ilium/hip bone
- A530 Hemipelvectomy, NOS
- A540 Internal hemipelvectomy

Specimen sent to pathology from surgical events A250–A540.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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SPLEEN

C42.2

Codes

A000 None; no surgery of primary site; autopsy ONLY

A190 Local tumor destruction or excision, NOS

Unknown whether a specimen was sent to pathology for surgical events coded A190 (principally for cases diagnosed prior to January 1, 2003).

A210 Partial splenectomy

A220 Total splenectomy

A800 Splenectomy, NOS

Specimen sent to pathology for surgical events A210-A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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SKIN

C44.0–C44.9

All 2023 site specific surgery codes begin with a letter A except for skin which start with a letter B to indicate a significate change in coding.

The priority order for sources used to assign surgery codes is:
Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure.

Do not code based on margin status documented in the pathology report.

B000 None; no surgery of primary site; autopsy ONLY

B100 Local tumor destruction, NOS
- B110 Photodynamic therapy (PDT)
- B120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- B130 Cryosurgery
- B140 Laser

B200 Local tumor excision, NOS; Excisional biopsy, NOS
- B220-Shave Biopsy, NOS
- B230-Punch Biopsy, NOS
- B240-Elliptical Biopsy (aka fusiform)

B300 Mohs Surgery NOS
- B310 Mohs surgery performed on the same day (all Mohs procedures performed during the same day).
- B320 Mohs surgery performed on different days (slow Mohs)(each Mohs procedure performed on different day)

B500 Biopsy (NOS) of primary tumor followed wide excision of the lesion; Wide Excision NOS, Re-excision
- B510-Incisional Biopsy followed by wide excision
- B520-Shave Biopsy followed by wide excision
- B530-Punch Biopsy followed by wide excision
- B540-Elliptical Biopsy (aka fusiform) followed by wide excision

Note: An incisional biopsy would be a needle or core biopsy of the primary tumor. An incisional biopsy would be coded as a Diagnostic Staging Procedure (NAACCR Item 1350).

B600 Major Amputation

B900 Surgery, NOS

B990 Unknown if surgery performed; Death certificate ONLY

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BREAST

C50.0–C50.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A190 Local tumor destruction, NOS

No specimen was sent to pathology for surgical events coded A190 (principally for cases diagnosed prior to January 1, 2003).

A200 Partial mastectomy, NOS; less than total mastectomy, NOS
- A210 Partial mastectomy WITH nipple resection
- A220 Lumpectomy or excisional biopsy
- A230 Reexcision of the biopsy site for gross or microscopic residual disease
- A240 Segmental mastectomy (including wedge resection, quadrantectomy, tylectomy)

Procedures coded A200–A240 remove the gross primary tumor and some of the breast tissue (breast-conserving or preserving). There may be microscopic residual tumor.

A300 Subcutaneous mastectomy

A subcutaneous mastectomy, also called a nipple sparing mastectomy, is the removal of breast tissue without the nipple and areolar complex or overlying skin. It is performed to facilitate immediate breast reconstruction. Cases coded A300 may be considered to have undergone breast reconstruction.

A400 Total (simple) mastectomy
- A410 WITHOUT removal of uninvolved contralateral breast
  - A430 With reconstruction NOS
    - A440 Tissue
    - A450 Implant
    - A460 Combined (Tissue and Implant)
- A420 WITH removal of uninvolved contralateral breast
  - A470 With reconstruction NOS
    - A480 Tissue
    - A490 Implant
    - A750 Combined (Tissue and Implant)

A total (simple) mastectomy removes all breast tissue, the nipple, and areolar complex. An axillary dissection is not done, but sentinel lymph nodes may be removed.

For single primaries, involving both breasts use code A760.

If the contralateral breast reveals a second primary, each breast is abstracted separately. The surgical procedure is coded A410 for the first primary. The surgical code for the contralateral breast is coded to the procedure performed on that site.

Reconstruction that is planned as part of first course treatment is coded A430-A490 or A750, whether it is done at the time of mastectomy or later.

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A760 Bilateral mastectomy for a single tumor involving both breasts, as for bilateral inflammatory carcinoma.

A500 Modified radical mastectomy
- A510 WITHOUT removal of uninvolved contralateral breast
  - A530 Reconstruction, NOS
  - A540 Tissue
  - A550 Implant
  - A560 Combined (Tissue and Implant)
- A520 WITH removal of uninvolved contralateral breast
  - A570 Reconstruction, NOS
  - A580 Tissue
  - A590 Implant
  - A630 Combined (Tissue and Implant)

Removal of all breast tissue, the nipple, the areolar complex, and variable amounts of breast skin in continuity with the axilla. The specimen may or may not include a portion of the pectoralis major muscle

If contralateral breast reveals a second primary, it is abstracted separately. The surgical procedure is coded A510 for the first primary. The surgical code for the contralateral breast is coded to the procedure performed on that site.

For single primaries only, code removal of contralateral breast under the data item Surgical Procedure/Other Site (NAACCR Item #1294) or Surgical Procedure/Other Site at This Facility (NAACCR Item #674).

A600 Radical mastectomy, NOS
- A610 WITHOUT removal of uninvolved contralateral breast
  - A640 Reconstruction, NOS
    - A650 Tissue
    - A660 Implant
    - A670 Combined (Tissue and Implant)
- A620 WITH removal of uninvolved contralateral breast
  - A680 Reconstruction, NOS
    - A690 Tissue
    - A730 Implant
    - A740 Combined (Tissue and Implant)

A700 Extended radical mastectomy
- A710 WITHOUT removal of uninvolved contralateral breast
- A720 WITH removal of uninvolved contralateral breast

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A800 Mastectomy, NOS

Specimen sent to pathology for surgical events coded A200-A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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CERVIX UTERI

C53.0–C53.9

For invasive cancers, dilation and curettage is coded as an incisional biopsy (02) under the data item *Surgical Diagnostic and Staging Procedure* (NAACCR Item #1350).

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Loop Electrocautery Excision Procedure (LEEP)
- A160 Laser ablation
- A170 Thermal ablation

No specimen sent to pathology from surgical events A100–A170.

A200 Local tumor excision, NOS
- A260 Excisional biopsy, NOS
- A270 Cone biopsy
- A240 Cone biopsy WITH gross excision of lesion
- A290 Trachelectomy; removal of cervical stump; cervicectomy
- Any combination of A200, A240, A260, A270 or A290 WITH
  - A210 Electrocautery
  - A220 Cryosurgery
  - A230 Laser ablation or excision
- A250 Dilatation and curettage; endocervical curettage (for in situ only)
- A280 Loop electrocautery excision procedure (LEEP)

A300 Total hysterectomy (simple, pan-) WITHOUT removal of tubes and ovaries

Total hysterectomy removes both the corpus and cervix uteri and may also include a portion of vaginal cuff.

A400 Total hysterectomy (simple, pan-) WITH removal of tubes and/or ovary

Total hysterectomy removes both the corpus and cervix uteri and may also include a portion of vaginal cuff.

A500 Modified radical or extended hysterectomy; radical hysterectomy; extended radical hysterectomy
- A510 Modified radical hysterectomy
- A520 Extended hysterectomy

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A530 Radical hysterectomy; Wertheim procedure
A540 Extended radical hysterectomy

A600 Hysterectomy, NOS, WITH or WITHOUT removal of tubes and ovaries
A610 WITHOUT removal of tubes and ovaries
A620 WITH removal of tubes and ovaries

A700 Pelvic exenteration
A710 Anterior exenteration
Includes bladder, distal ureters, and genital organs WITH their ligamentous attachments and pelvic lymph nodes.

A720 Posterior exenteration
Includes rectum and rectosigmoid WITH ligamentous attachments and pelvic lymph nodes.

A730 Total exenteration
Includes removal of all pelvic contents and pelvic lymph nodes.

A740 Extended exenteration
Includes pelvic blood vessels or bony pelvis.

Specimen sent to pathology from surgical events A200–A740.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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CORPUS UTERI

C54.0–C55.9

For invasive cancers, dilation and curettage is coded as an incisional biopsy (02) under the data item *Surgical Diagnostic and Staging Procedure* (NAACCR Item #1350).

Codes

A000 None; no surgery of primary site; autopsy ONLY

A190 Local tumor destruction or excision, NOS

Unknown whether a specimen was sent to pathology for surgical events coded A190 (principally for cases diagnosed prior to January 1, 2003).

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Loop Electrocautery Excision Procedure (LEEP)
- A160 Thermal ablation

No specimen sent to pathology from surgical events A100–A160.

A200 Local tumor excision, NOS; simple excision, NOS
- A240 Excisional biopsy
- A250 Polypectomy
- A260 Myomectomy
- Any combination of A200 or A240–A260 WITH
  - A210 Electrocautery
  - A220 Cryosurgery
  - A230 Laser ablation or excision

A300 Subtotal hysterectomy/supracervical hysterectomy/fundectomy WITH or WITHOUT removal of tube(s) and ovary(ies).
- A310 WITHOUT tube(s) and ovary(ies)
- A320 WITH tube(s) and ovary(ies)

A400 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.

A500 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.

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A600 Modified radical or extended hysterectomy; radical hysterectomy; extended radical hysterectomy
- A610 Modified radical hysterectomy
- A620 Extended hysterectomy
- A630 Radical hysterectomy; Wertheim procedure
- A640 Extended radical hysterectomy

A650 Hysterectomy, NOS, WITH or WITHOUT removal of tube(s) and ovary(ies)
- A660 WITHOUT removal of tube(s) and ovary(ies)
- A670 WITH removal of tube(s) and ovary(ies)

A750 Pelvic exenteration
- A760 Anterior exenteration
  Includes bladder, distal ureters, and genital organs WITH their ligamentous attachments and pelvic lymph nodes.

- A770 Posterior exenteration
  Includes rectum and rectosigmoid WITH ligamentous attachments and pelvic lymph nodes.

- A780 Total exenteration
  Includes removal of all pelvic contents and pelvic lymph nodes.

- A790 Extended exenteration
  Includes pelvic blood vessels or bony pelvis.

Specimen sent to pathology from surgical events A200–A790.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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OVARY

C56.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A170 Local tumor destruction, NOS

No specimen sent to pathology from surgical event 17.

A250 Total removal of tumor or (single) ovary, NOS
- A260 Resection of ovary (wedge, subtotal, or partial) ONLY, NOS; unknown if hysterectomy done
- A270 WITHOUT hysterectomy
- A280 WITH hysterectomy

A350 Unilateral (salpingo-)oophorectomy; unknown if hysterectomy done
- A360 WITHOUT hysterectomy
- A370 WITH hysterectomy

A500 Bilateral (salpingo-)oophorectomy; unknown if hysterectomy done
- A510 WITHOUT hysterectomy
- A520 WITH hysterectomy

A550 Unilateral or bilateral (salpingo-)oophorectomy WITH OMENTECTOMY, NOS; partial or total; unknown if hysterectomy done
- A560 WITHOUT hysterectomy
- A570 WITH hysterectomy

A600 Debulking; cytoreductive surgery, NOS
- A610 WITH colon (including appendix) and/or small intestine resection (not incidental)
- A620 WITH partial resection of urinary tract (not incidental)
- A630 Combination of A610 and A620

Debulking is a partial or total removal of the tumor mass and can involve the removal of multiple organ sites. It may include removal of ovaries and/or the uterus (a hysterectomy). The pathology report may or may not identify ovarian tissue. A debulking is usually followed by another treatment modality such as chemotherapy.

A700 Pelvic exenteration, NOS
- A710 Anterior exenteration

Includes bladder, distal ureters, and genital organs WITH their ligamentous attachments and pelvic lymph nodes.

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A720 Posterior exenteration
Includes rectum and rectosigmoid WITH ligamentous attachments and pelvic lymph nodes.

A730 Total exenteration
Includes removal of all pelvic contents and pelvic lymph nodes.

A740 Extended exenteration
Includes pelvic blood vessels or bony pelvis.

A800 (Salpingo-)oophorectomy, NOS

Specimen sent to pathology from surgical events A250–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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PROSTATE

C61.9

Do not code an orchiectomy in this field. For prostate primaries, orchiectomies are coded in the data item *Hematologic Transplant and Endocrine Procedures* (NAACCR Item #3250).

Codes

A000 None; no surgery of primary site; autopsy ONLY

A180 Local tumor destruction or excision, NOS

A190 Transurethral resection (TURP), NOS, and no specimen sent to pathology or unknown if sent

Unknown whether a specimen was sent to pathology for surgical events coded A180 or A190 (principally for cases diagnosed prior to January 1, 2003).

A100 Local tumor destruction, NOS
- A140 Cryoprostatectomy
- A150 Laser ablation
- A160 Hyperthermia
- A170 Other method of local tumor destruction

No specimen sent to pathology from surgical events A100–A170.

A200 Local tumor excision, NOS
- A210 Transurethral resection (TURP), NOS, with specimen sent to pathology
- A220 TURP–cancer is incidental finding during surgery for benign disease
- A230 TURP–patient has suspected/known cancer
- Any combination of A200–A230 WITH
  - A240 Cryosurgery
  - A250 Laser
  - A260 Hyperthermia

A300 Subtotal, segmental, or simple prostatectomy, which may leave all or part of the capsule intact

A500 Radical prostatectomy, NOS; total prostatectomy, NOS

Excised prostate, prostatic capsule, ejaculatory ducts, seminal vesicle(s) and may include a narrow cuff of bladder neck.

A700 Prostatectomy WITH resection in continuity with other organs; pelvic exenteration

Surgeries coded 70 are any prostatectomy WITH resection in continuity with any other organs. The other organs may be partially or totally removed. Procedures may include, but are not limited to, cystoprostatectomy, radical cystectomy, and prostatectomy.

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A800 Prostatectomy, NOS

Specimen sent to pathology from surgical events 20–80.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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TESTIS

C62.0–C62.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A120 Local tumor destruction, NOS

No specimen sent to pathology from surgical event A120.

A200 Local or partial excision of testicle

A300 Excision of testicle WITHOUT cord

A400 Excision of testicle WITH cord or cord not mentioned (radical orchiectomy)

A800 Orchiectomy, NOS (unspecified whether partial or total testicle removed)

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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KIDNEY, RENAL PELVIS, AND URETER

Kidney C64.9, Renal Pelvis C65.9, Ureter C66.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Thermal ablation

No specimen sent to pathology from this surgical event A100–A150.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
- A250 Laser excision

A300 Partial or subtotal nephrectomy (kidney or renal pelvis) or partial ureterectomy (ureter)

Procedures coded A300 include, but are not limited to:
- Segmental resection
- Wedge resection

A400 Complete/total/simple nephrectomy–for kidney parenchyma
Nephroureterectomy
Includes bladder cuff for renal pelvis or ureter.

A500 Radical nephrectomy
May include removal of a portion of vena cava, adrenal gland(s), Gerota's fascia, perinephric fat, or partial/total ureter.

A700 Any nephrectomy (simple, subtotal, complete, partial, simple, total, radical) in continuity with the resection of other organ(s) (colon, bladder)
The other organs, such as colon or bladder, may be partially or totally removed.

A800 Nephrectomy, NOS

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Ureterectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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BLADDER

C67.0–C67.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A111 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser
- A150 Intravesical therapy
- A160 Bacillus Calmette-Guerin (BCG) or other immunotherapy

Also code the introduction of immunotherapy in the immunotherapy items. If immunotherapy is followed by surgery of the type coded A200-A800 code that surgery instead and code the immunotherapy only as immunotherapy.

No specimen sent to pathology from surgical events A100–A160.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Combination of A200 or A260-A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
- A250 Laser excision

A300 Partial cystectomy

A500 Simple/total/complete cystectomy

A600 Complete cystectomy with reconstruction
- A610 Radical cystectomy PLUS ileal conduit
- A620 Radical cystectomy PLUS continent reservoir or pouch, NOS
- A630 Radical cystectomy PLUS abdominal pouch (cutaneous)
- A640 Radical cystectomy PLUS in situ pouch (orthotopic)

When the procedure is described as a pelvic exenteration for males, but the prostate is not removed, the surgery should be coded as a cystectomy (code A600-A640).

A700 Pelvic exenteration, NOS
- A710 Radical cystectomy including anterior exenteration

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For females, includes removal of bladder, uterus, ovaries, entire vaginal wall, and entire urethra. For males, includes removal of the prostate. When a procedure is described as a pelvic exenteration for males, but the prostate is not removed, the surgery should be coded as a cystectomy (code A600-A640).

A720 Posterior exenteration

For females, also includes removal of vagina, rectum and anus. For males, also includes prostate, rectum and anus.

A730 Total exenteration

Includes all tissue and organs removed for an anterior and posterior exenteration.

A740 Extended exenteration

Includes pelvic blood vessels or bony pelvis.

A800 Cystectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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BRAIN

Meninges C70.0–C70.9, Brain C71.0–C71.9,

Spinal Cord, Cranial Nerves and Other Parts of Central Nervous System C72.0–C72.9

Do not code laminectomies for spinal cord primaries.

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Tumor destruction, NOS

No specimen sent to pathology from surgical event A100.

Do not record stereotactic radiosurgery (SRS), Gamma knife, Cyber knife, or Linac radiosurgery as surgical tumor destruction. All of these modalities are recorded in the radiation treatment fields.

A200 Local excision of tumor, lesion or mass; excisional biopsy

A210 Subtotal resection of tumor, lesion or mass in brain

A220 Resection of tumor of spinal cord or nerve

A300 Radical, total, gross resection of tumor, lesion or mass in brain

A400 Partial resection of lobe of brain, when the surgery cannot be coded as 20-30.

A550 Gross total resection of lobe of brain (lobectomy)

Codes A300-A550 are not applicable for spinal cord or spinal nerve primary sites.

Specimen sent to pathology from surgical events A200–A550.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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THYROID GLAND

C73.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A130 Local tumor destruction, NOS

No specimen sent to pathology from surgical event A130.

A250 Removal of less than a lobe, NOS
- A260 Local surgical excision
- A270 Removal of a partial lobe ONLY

A200 Lobectomy and/or isthmectomy
- A210 Lobectomy ONLY
- A220 Isthmectomy ONLY
- A230 Lobectomy WITH isthmus

A300 Removal of a lobe and partial removal of the contralateral lobe

A400 Subtotal or near total thyroidectomy

A500 Total thyroidectomy

A800 Thyroidectomy, NOS

Specimen sent to pathology from surgical events A200–A800.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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LYMPH NODES

C77.0–C77.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A190 Local tumor destruction or excision, NOS

Unknown whether a specimen was sent to pathology for surgical events coded to A190 (principally for cases diagnosed prior to January 1, 2003).

A150 Local tumor destruction, NOS

No specimen sent to pathology from surgical event A150.

A250 Local tumor excision, NOS

Less than a full chain, includes an excisional biopsy of a single lymph node.

A300 Lymph node dissection, NOS

A310 One chain

A320 Two or more chains

A400 Lymph node dissection, NOS PLUS splenectomy

A410 One chain

A420 Two or more chains

A500 Lymph node dissection, NOS and partial/total removal of adjacent organ(s)

A510 One chain

A520 Two or more chains

A600 Lymph node dissection, NOS and partial/total removal of adjacent organ(s) PLUS splenectomy (Includes staging laparotomy for lymphoma.)

A610 One chain

A620 Two or more chains

Specimen sent to pathology for surgical events A250-A620.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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ALL OTHER SITES

C14.2–C14.8, C17.0–C17.9, C23.9, C24.0–C24.9, C26.0–C26.9, C30.0–C 30.1, C31.0–C31.9, C33.9, C37.9, C38.0–C38.8, C39.0–C39.9, C48.0–C48.8, C51.0–C51.9, C52.9, C57.0–C57.9, C58.9, C60.0–C60.9, C63.0–C63.9, C68.0–C68.9, C69.0–C69.9, C74.0–C74.9, C75.0–C75.9

Codes

A000 None; no surgery of primary site; autopsy ONLY

A100 Local tumor destruction, NOS
- A110 Photodynamic therapy (PDT)
- A120 Electrocautery; fulguration (includes use of hot forceps for tumor destruction)
- A130 Cryosurgery
- A140 Laser

No specimen sent to pathology from surgical events A100–A140.

A200 Local tumor excision, NOS
- A260 Polypectomy
- A270 Excisional biopsy
- Any combination of A200 or A260–A270 WITH
  - A210 Photodynamic therapy (PDT)
  - A220 Electrocautery
  - A230 Cryosurgery
  - A240 Laser ablation
- A250 Laser excision

A300 Simple/partial surgical removal of primary site

A400 Total surgical removal of primary site; enucleation
- A410 Total enucleation (for eye surgery only)

A500 Surgery stated to be “debulking”

A600 Radical surgery

Partial or total removal of the primary site WITH a resection in continuity (partial or total removal) with other organs.

Specimen sent to pathology from surgical events A200–A600.

A900 Surgery, NOS

A990 Unknown if surgery performed; death certificate ONLY

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UNKNOWN AND ILL-DEFINED PRIMARY SITES

C76.0–C76.8, C80.9

Code

A980 All unknown and ill-defined disease sites, WITH or WITHOUT surgical treatment.

Surgical procedures for unknown and ill-defined primaries are to be recorded using the data item *Surgical Procedure/Other Site* (NAACCR Item #1294) or *Surgical Procedure/Other Site at This Facility* (NAACCR Item #674).

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APPENDIX B: ICD-O-3 Eligibility Reporting Table for diagnosis year 2022+

The Eligibility section in STORE has been updated to include the new ICD-O codes for new terminology, behavior changes, reportability changes, and specific histology for specific primary beginning in 2022+.

The table below represents the additional ICD-O-3 terms that CoC is required to collect for diagnosis year 2022+.

ICD-O Code	Term	Required and collected by CoC	Remarks
8033/3	Carcinoma with sarcomatoid component	Y	New related term
8085/3	Squamous cell carcinoma, HPV-associated	Y	New term for uterine cervix
8086/3	Squamous cell carcinoma, HPV-independent	Y	New term for uterine cervix
8144/2	Intestinal-type adenoma, high grade (C16.0 – C16.9, C17.0 -C17.9)	Y Reportable for Stomach and Small Intestine only	Term is reportable for stomach and small intestines ONLY beginning 1/1/2022
8213/2	Serrated dysplasia, high grade (C16.0 – C16.9, C17.0 -C17.9)	Y for Stomach and Small Intestine	Term is reportable for stomach and small intestines ONLY beginning 1/1/2022
8243/3	Goblet cell adenocarcinoma	Y	New preferred term
8262/3	Adenoma-like adenocarcinoma	Y	New term
8310/3	Adenocarcinoma, HPV-independent, clear cell type	Y	New term for uterine cervix
8455/2	Intraductal oncocytic papillary neoplasm, NOS	Y	New ICD-O code/term
8455/3	Intraductal oncocytic papillary neoplasm with associated invasive carcinoma	Y	New ICD-O code/term
8480/2	Low-grade appendiceal mucinous neoplasm (LAMN)	Y	New behavior/term
8480/3	Low-grade appendiceal mucinous neoplasm (LAMN)	Y	New behavior/term
8480/2	High grade appendiceal mucinous neoplasm (HAMN)	Y	New behavior/term
8480/3	Appendiceal mucinous neoplasm with extra-appendiceal spread	Y	New behavior/term

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8482/3	Adenocarcinoma, HPV-independent, gastric type	Y	New term
8483/3	Adenocarcinoma, HPV-associated	Y	New ICD-O code/term
8484/3	Adenocarcinoma, HPV-independent, NOS	Y	New ICD-O code/term
8503/2	Ductal carcinoma in situ, papillary	Y	New preferred term
8509/3	Tall cell carcinoma with reversed polarity	Y	New preferred term
8859/3	Myxoid pleomorphic liposarcoma	Y	New ICD-O code/term
8912/3	Congenital spindle cell rhabdomyosarcoma with VGLL2/NCOA2/CITED2 rearrangements	Y	New term
8912/3	MYOD1-mutant spindle cell/sclerosing rhabdomyosarcoma	Y	New term
8912/3	Intraosseous spindle cell rhabdomyosarcoma with TFCP2/NCOA2 rearrangements	Y	New term
8976/3	Gastroblastoma (C16.0 – C16.9)	Y	New ICD-O code/term
9110/3	Adenocarcinoma, HPV-independent, mesonephric type	Y	New preferred term
9111/3	Mesonephric-like adenocarcinoma	Y	New ICD-O code/term for ovary and corpus uterus
9120/3	Post radiation angiosarcoma of the breast	Y	New term
9133/3	Epithelioid hemangioendothelioma with WWTR1-CAMTA1 fusion	Y	New term
9133/3	Epithelioid hemangioendothelioma with YAP1-TFE3 fusion	Y	New term
9222/3	Chondrosarcoma, grade 1	Y	Behavior change. Reportable 1/1/2022 forward
9366/3	Round cell sarcoma with EWSR1-non-ETS fusions	Y	New ICD-O code/term
9367/3	CIC-rearranged sarcoma	Y	New ICD-O code/term
9368/3	Sarcoma with BCOR genetic alterations	Y	New ICD-O code/term

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APPENDIX C: Country and State Codes

Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
United States (state and armed forces codes)		
Alabama	USA	AL
Alaska	USA	AK
Arizona	USA	AZ
Arkansas	USA	AR
Armed Forces Americas	USA	AA
Armed Forces Canada, Europe, Middle East, Africa	USA	AE
Armed Forces Pacific	USA	AP
California	USA	CA
Colorado	USA	CO
Connecticut	USA	CT
Delaware	USA	DE
District of Columbia	USA	DC
Florida	USA	FL
Georgia	USA	GA
Hawaii	USA	HI
Idaho	USA	ID
Illinois	USA	IL
Indiana	USA	IN
Iowa	USA	IA
Kansas	USA	KS
Kentucky	USA	KY
Louisiana	USA	LA
Maine	USA	ME
Maryland	USA	MD
Massachusetts	USA	MA
Michigan	USA	MI
Minnesota	USA	MN
Mississippi	USA	MS
Missouri	USA	MO
Montana	USA	MT
Nebraska	USA	NE
Nevada	USA	NV
New Hampshire	USA	NH

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
New Jersey	USA	NJ
New Mexico	USA	NM
New York	USA	NY
North Carolina	USA	NC
North Dakota	USA	ND
Ohio	USA	OH
Oklahoma	USA	OK
Oregon	USA	OR
Pennsylvania	USA	PA
Rhode Island	USA	RI
South Carolina	USA	SC
South Dakota	USA	SD
Tennessee	USA	TN
Texas	USA	TX
Utah	USA	UT
Vermont	USA	VT
Virginia	USA	VA
Washington	USA	WA
West Virginia	USA	WV
Wisconsin	USA	WI
Wyoming	USA	WY
Canada (province and territory codes)		
Alberta	CAN	AB
British Columbia	CAN	BC
Manitoba	CAN	MB
New Brunswick	CAN	NB
Newfoundland and Labrador	CAN	NL
Northwest Territories	CAN	NT
Nova Scotia	CAN	NS
Nunavut	CAN	NU
Ontario	CAN	ON
Prince Edward Island	CAN	PE
Quebec	CAN	QC
Saskatchewan	CAN	SK
Yukon Territory	CAN	YT
Afghanistan	AFG	XX

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Africa, NOS	ZZF	YY
Alabama	USA	AL
Aland Islands	ALA	XX
Alaska	USA	AK
Albania	ALB	XX
Alberta	CAN	AB
Algeria	DZA	XX
American Samoa	ASM	AS
Andorra	AND	XX
Angola	AGO	XX
Anguilla	AIA	XX
Antarctica	ATA	XX
Antigua and Barbuda	ATG	XX
Argentina	ARG	XX
Arizona	USA	AZ
Arkansas	USA	AR
Armed Forces Americas	USA	AA
Armed Forces Canada, Europe, Middle East, Africa	USA	AE
Armed Forces Pacific	USA	AP
Armenia	ARM	XX
Aruba	ABW	XX
Asia, NOS	ZZA	YY
Australia	AUS	XX
Austria	AUT	XX
Azerbaijan	AZE	XX
Bahamas	BHS	XX
Bahrain	BHR	XX
Bangladesh	BGD	XX
Barbados	BRB	XX
Belarus	BLR	XX
Belgium	BEL	XX
Belize	BLZ	XX
Benin	BEN	XX
Bermuda	BMU	XX
Bhutan	BTN	XX
Bolivia	BOL	XX
Bonaire, Saint Eustatius and Saba	BES	XX
Bosnia and Herzogovina	BIH	XX

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Preferred: Specific Codes for Use Where the Detail is Known		
Botswana	BWA	XX
Bouvet Island	BVT	XX
Brazil	BRA	XX
British Columbia	CAN	BC
British Indian Ocean Territory	IOT	XX
British Virgin Islands	VGB	XX
Brunei	BRN	XX
Bulgaria	BGR	XX
Burkina Faso	BFA	XX
Burundi	BDI	XX
California	USA	CA
Cambodia	KHM	XX
Cameroon	CMR	XX
Canada	CAN	CD
Cape Verde	CPV	XX
Cayman Islands	CYM	XX
Central African Republic	CAF	XX
Central America, NOS	ZZC	YY
Chad	TCD	XX
Chile	CHL	XX
China	CHN	XX
Christmas Island	CXR	XX
Cocos (Keeling) Islands	CCK	XX
Colombia	COL	CO
Colorado	USA	XX
Comoros	COM	XX
Congo	COG	XX
Congo, Democratic Republic of	COD	CT
Connecticut	USA	XX
Cook Islands	COK	XX
Costa Rica	CRI	XX
Cote d'Ivoire	CIV	XX
Croatia	HRV	XX
Cuba	CUB	XX
Curacao	CUW	XX
Cyprus	CYP	XX
Czech Republic	CZE	XX
Czechoslovakia	CSK	YY

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Preferred: Specific Codes for Use Where the Detail is Known		
Delaware	USA	DE
Denmark	DNK	XX
District of Columbia	USA	DC
Djibouti	DJI	XX
Dominica	DMA	XX
Dominican Republic	DOM	XX
Ecuador	ECU	XX
Egypt	EGY	XX
El Salvador	SLV	XX
England	ENG	XX
Equatorial Guinea	GNQ	XX
Eritrea	ERI	XX
Estonia	EST	XX
Ethiopia	ETH	XX
Europe, NOS	ZZE	YY
Falkland Islands	FLK	XX
Faroe Islands	FRO	XX
Fiji	FJI	XX
Finland	FIN	XX
Florida	USA	FL
France	FRA	XX
French Guiana	GUF	XX
French Polynesia	PYF	XX
French Southern Territories	ATF	XX
Gabon	GAB	XX
Gambia	GMB	XX
Georgia	USA	GA
Georgia	GEO	XX
Germany	DEU	XX
Ghana	GHA	XX
Gibraltar	GIB	XX
Greece	GRC	XX
Greenland	GRL	XX
Grenada	GRD	XX
Guadeloupe	GLP	XX
Guam	GUM	GU
Guatemala	GTM	XX
Guernsey	GGY	XX

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Guinea	GIN	XX
Guinea Bissau	GNB	XX
Guyana	GUY	XX
Haiti	HTI	XX
Hawaii	USA	HI
Heard Island and McDonald Islands	HMD	XX
Honduras	HND	XX
Hong Kong	HKG	XX
Hungary	HUN	XX
Iceland	ISL	XX
Idaho	USA	ID
Illinois	USA	IL
India	IND	XX
Indiana	USA	IN
Indonesia	IDN	XX
Iowa	USA	IA
Iran	IRN	XX
Iraq	IRQ	XX
Ireland	IRL	XX
Isle of Man	IMN	XX
Israel	ISR	XX
Italy	ITA	XX
Jamaica	JAM	XX
Japan	JPN	XX
Jersey	JEY	XX
Jordan	JOR	XX
Kazakhstan	KAZ	XX
Kentucky	USA	KY
Kenya	KEN	XX
Kiribati	KIR	XX
Korea	KOR	XX
Kuwait	KWT	XX
Kyrgyzstan	KGZ	XX
Laos	LAO	XX
Latvia	LVA	XX
Lebanon	LBN	XX
Lesotho	LSO	XX
Liberia	LBR	XX

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Libya	LBY	XX
Liechtenstein	LIE	XX
Lithuania	LTU	XX
Louisiana	US	LA
Luxembourg	LUX	XX
Macao	MAC	XX
Macedonia	MKD	XX
Madagascar	MDG	XX
Maine	USA	ME
Malawi	MWI	XX
Malaysia	MYS	XX
Maldives	MDV	XX
Mali	MLI	XX
Malta	MLT	XX
Manitoba	CAN	MB
Marshall Islands	MHL	MH
Martinique	MTQ	XX
Maryland	USA	MD
Massachusetts	USA	MA
Mauritania	MRT	XX
Mauritius	MUS	XX
Mayotte	MYT	XX
Mexico	MEX	XX
Michigan	USA	MI
Micronesia	FSM	FM
Minnesota	USA	MN
Mississippi	USA	MS
Missouri	USA	MO
Moldova	MDA	XX
Monaco	MCO	XX
Mongolia	MNG	XX
Montana	USA	MT
Montenegro	MNE	XX
Montserrat	MSR	XX
Morocco	MAR	XX
Mozambique	MOZ	XX
Myanmar	MMR	XX
Namibia	NAM	XX
Nauru	NRU	XX

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Nepal	NPL	XX
Netherlands	NLD	XX
Nevada	USA	NV
New Brunswick	CAN	NB
New Caledonia	NCL	XX
New Hampshire	USA	NH
New Jersey	USA	NJ
New Mexico	USA	NM
New York	USA	NY
New Zealand	NZL	XX
Newfoundland and Labrador	CAN	NL
Nicaragua	NIC	XX
Niger	NER	XX
Nigeria	NGA	XX
Niue	NIU	XX
Non-US/Canada NOS	ZZX	YY
Norfolk Island	NFK	XX
North America, NOS	ZZN	YY
North Carolina	USA	NC
North Dakota	USA	ND
North Korea	PRK	XX
Northern Ireland	NIR	XX
Northern Mariana Islands	MNP	MP
Northwest Territories	CAN	NT
Norway	NOR	XX
Nova Scotia	CAN	NS
Nunavut	CAN	NU
Ohio	USA	OH
Oklahoma	USA	OK
Oman	OMN	XX
Ontario	CAN	ON
Oregon	USA	OR
Pacific, NOS	ZZP	YY
Pakistan	PAK	XX
Palau	PLW	PW
Palestine	PSE	XX
Panama	PAN	XX
Papua New Guinea	PNG	XX
Paraguay	PRY	XX

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Pennsylvania	USA	PA
Peru	PER	XX
Philippines	PHL	XX
Pitcairn Islands	PCN	XX
Poland	POL	XX
Portugal	PRT	XX
Prince Edward Island	CAN	PE
Puerto Rico	PRI	PR
Qatar	QAT	XX
Quebec	CAN	QC
Republic of South Africa	ZAF	XX
Réunion	REU	XX
Rhode Island	USA	RI
Romania	ROU	XX
Russia	RUS	XX
Rwanda	RWA	XX
Saint-Martin (French part)	MAF	XX
Samoa	ASM	XX
San Marino	SMR	XX
Sao Tome & Principe	STP	XX
Saskatchewan	CAN	SK
Saudi Arabia	SAU	XX
Scotland	SCT	XX
Senegal	SEN	XX
Serbia	SRB	XX
Seychelles	SYC	XX
Sierra Leone	SLE	XX
Singapore	SGP	XX
Sint-Maarten	SXM	XX
Slovakia	SVK	XX
Slovenia	SVN	XX
Solomon Islands	SLB	XX
Somalia	SOM	XX
South America, NOS	ZZS	YY
South Carolina	USA	SC
South Dakota	USA	SD
South Georgia and the South Sandwich Islands	SGS	XX
South Korea	KOR	XX
South Sudan	SSD	XX

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Spain	ESP	XX
Sri Lanka	LKA	XX
St Pierre and Miquelon	SPM	XX
St. Barthelemy	BLM	XX
St. Helena	SHN	XX
St. Kitts and Nevis	KNA	XX
St. Lucia	LCA	XX
St. Vincent and the Grenadines	VCT	XX
Sudan	SDN	XX
Suriname	SUR	XX
Svalbard and Jan Mayen	SJM	XX
Swaziland	SWZ	XX
Sweden	SWE	XX
Switzerland	CHE	XX
Syria	SYR	XX
Taiwan	TWN	XX
Tajikistan	TJK	XX
Tanzania	TZA	XX
Tennessee	USA	TN
Texas	USA	TX
Thailand	THA	XX
Timor-Leste	TLS	XX
Togo	TGO	XX
Tokelau Islands	TKL	XX
Tonga	TON	XX
Trinidad and Tobago	TTO	XX
Tunisia	TUN	XX
Turkey	TUR	XX
Turkmenistan	TKM	XX
Turks and Caicos	TCA	XX
Tuvalu	TUV	XX
U.S Minor Outlying Islands	UMI	UM
U.S. Virgin Islands	VIR	VI
Uganda	UGA	XX
Ukraine	UKR	XX
United Arab Emirates	ARE	XX
United Kingdom	GBR	XX
United States	USA	US
Unknown	ZZU	ZZ

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Geographic Area	Country Code	State or Province Code
Preferred: Specific Codes for Use Where the Detail is Known		
Uruguay	URY	XX
Utah	USA	UT
Uzbekistan	UZB	XX
Vanuatu	VUT	XX
Vatican City	VAT	XX
Venezuela	VEN	XX
Vermont	USA	VT
Vietnam	VNM	XX
Virginia	USA	VA
Wales	WLS	XX
Wallis and Fotuna	WLF	XX
Washington	USA	WA
West Virginia	USA	WV
Western Sahara	ESH	XX
Wisconsin	USA	WI
Wyoming	USA	WY
Yemen	YEM	XX
Yugoslavia	YUG	YY
Yukon Territory	CAN	YT
Zambia	ZMB	XX
Zimbabwe	ZWE	XX

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General

Geographic Area	Country Code	State or Province Code
General: Codes to Use In the Absence of More Specific Information		
United States, NOS	USA	US
Canada, NOS	CAN	CD
Africa, NOS (Central, Equatorial)	ZZF	YY
Asia, NOS	ZZA	YY
Asian and Arab Countries	ZZA	YY
Atlantic/Caribbean Area	ZZN	YY
Baltic Republic(s), NOS (Baltic States, NOS)	ZZE	YY
Central America	ZZC	YY
Czechoslovakia	CSK	YY
East Asia	ZZA	YY
Europe, NOS (Central, Eastern, Northern, Southern, Western)	ZZE	YY
Latin America, NOS	ZZU	YY
Near East	ZZA	YY
North America, NOS	ZZN	YY
Other Atlantic/Caribbean Area (not on detailed list)	ZZN	YY
Other Mainland Europe (not on detailed list)	ZZE	YY
Other Mediterranean Isles (not on detailed list)	ZZE	YY
Other Pacific Area (not on first list)	ZZP	YY
Pacific Area, NOS	ZZP	YY
Pacific Islands, NOS	ZZP	YY
Romance-Language Countries	ZZE	YY
South America, NOS	ZZS	YY
South American Islands	ZZS	YY
United Kingdom, NOS	GBR	XX
Yugoslavia	YUG	YY
Not U.S., but no other information	ZZX	YY
Unknown, no mention in patient record	ZZU	ZZ

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Obsolete

Geographic Area	Country Code	State or Province Code
Obsolete: State/Province or Country Codes That Must Not Be Used for Current Coding (May have been assigned during conversion, so may be present in pre-2013 data)		
New England and New Jersey	USA	NN
Maritime Provinces (New Brunswick, Newfound, Nova Scotia, PE)	CAN	MM
Northwest Territories, Yukon Territory	CAN	YN
Prairie Provinces (Alberta, Manitoba, Saskatchewan)	CAN	PP
African Coastal Islands (previously in South Africa, NOS)	XIF	YY
Arabian Peninsula	XAP	YY
Caucasian Republics of the USSR	XCR	YY
China, NOS	XCH	YY
East Africa	XEF	YY
England, Channel Islands, Isle of Man	XEN	XX
Ethiopia (Abyssinia), Eritrea	XET	YY
Germanic Countries	XGR	YY
Indochina	XSE	YY
Israel and former Jewish Palestine	XIS	YY
Malaysia, Singapore, Brunei	XMS	YY
Melanesian Islands, Solomon Islands	XML	YY
Micronesian Islands	XMC	YY
North Africa	XNF	YY
North American Islands	XNI	YY
Other Asian Republics of the USSR	XOR	YY
Other Caribbean Islands	XCB	YY
Other West African Countries	XWF	YY
Polynesian Islands	XPL	YY
Republic of South Africa, Botswana, Lesotho, Namibia, Swaziland	XSF	YY
Scandinavia	XSC	YY
Slavic Countries	XSL	XX
South Africa, NOS	XSF	YY
Southeast Asia	XSE	YY
Sudanese Countries	XSD	YY
Ukraine and Moldavia	XUM	YY
West Africa, NOS (French Africa, NOS)	XWF	YY

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APPENDIX R: CTR Guide to Coding Radiation Therapy Treatment in the STORE

CTR Guide to Coding Radiation Therapy Treatment in the STORE

Version 5.0 January 2023

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Radiation Oncology Working Group

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A Word from the Editors

The work you do collecting radiotherapy data elements matters a lot. Over the last 5 years, over 2,000 manuscripts have been published utilizing radiotherapy data from the National Cancer Database or SEER. These manuscripts, in small ways and large, help clinicians take better care of patients, policy makers take better care of communities, and academics and entrepreneurs develop more impactful innovations. All these benefits to radiotherapy patients and society start with you. We hope you take enormous personal satisfaction knowing how important this work is to the radiotherapy community and our patients.

The work you do collecting radiotherapy data elements is not easy. Radiotherapy is delivered in a wide variety of settings, radiotherapy technology is constantly changing, and clinicians often describe their treatments using informal, seemingly inconsistent terminology. Despite these challenges, the CTR community has been extraordinary successful at capturing complete and accurate information. As members of the CoC Radiation Oncology Working Group, we review analyses of completeness. We can confirm that the transition to STORE from FORDS has been an enormous success.

We want you to know that we are committed to you like you are committed to the cancer community. This Guide is our best attempt to provide an easy-to-use resource for clarifying how to code radiotherapy courses, but it is not perfectly accurate or complete. If you see errors or find gaps, do not hesitate to let us know. We are eager to make this better.

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Revision History

Date	Version	Remarks
03/15/2019	1.0	Initial release
02/2020	2.0	First revision
02/2021	3.0	Third revision
02/2022	4.0	Fourth revision, 3 new case studies
01/2023	5.0	Fifth revision

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Introduction

By now you undoubtedly know that, with the STORE, coding for radiation treatment has changed significantly. These changes were introduced to provide the NCDB with a more complete and accurate description of contemporary radiation treatment. Consistent coding and reporting of treatment across multiple registry platforms is critical in many dimensions:

- Optimizing quality measure performance scores
- Providing meaningful outcome results for future analysts of NCDB data
- Allowing accurate comparisons of patterns of care by type, size, and location of treating facilities
- Monitoring practice patterns over time
- Offering in-house reports of service utilization, and predictions of growth for facility planning.

While the STORE changes offer a significant improvement in the value of radiation treatment data, they also present a challenge for the cancer registrar charged with translating the radiation record into the 31 data fields defined by STORE. To that end, this document has been prepared as a platform for "learning by example". It is our hope that the clinical examples provided will lead the way to efficient and uniform reporting of radiation data. This fourth edition contains several new examples drawn from contact with registrars at meetings and webinars, as well as questions submitted to CAnswer. We expect this to continue to be a living document that evolves as technology changes, or we are presented with new clinical situations. To that end, we invite the CTR community to continue submit cases that do not seem to be covered within to the Commission on Cancer CAnswer.

Note to Cancer Registry Software Developers and Vendors

You will observe that this document bears a copyright statement.

Where is the Data?

If you have years of experience abstracting radiation data, you probably "know the ropes" and can skip this short section. There are a few principles here that will help you towards the goal of complete and accurate data collection.

1. Start early in the patient's course. Much of the data you need will be available once the treatment prescriptions have been written if you have read access to the radiation therapy department "record and verify" system. Most courses of radiation therapy are completed as initially prescribed. For these, when treatment is completed, all you should have to do is confirm or update the dates.
2. The ultimate source of data should be the mandatory treatment summary letter created by the radiation oncologist. Most radiation oncologists are very supportive of the registry's contribution but not all speak the language of STORE so you may have to train them a bit.
3. Get to know your radiation oncologists. They tend to be active participants in cancer conferences. Take your questions to them in or after that venue. They are a friendly bunch.
4. If you abstract remotely, particularly if you are employed by an outside contractor, find a way to contact the radiation oncologists directly, introduce yourself, and let them know you want to work with them in support of the cancer program.

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Summary of Coding Principles

1. First Course

You are responsible for, and the NCDB wants, documentation only of treatment given in the "first course of treatment for this cancer". Nothing more. Nothing less. Forget the old 4-month rule. The first course of treatment is clearly defined in the STORE as this snippet from STORE 2023, page 55, shows.

> **First Course of Treatment**
>
> The first course of treatment includes all methods of treatment recorded in the treatment plan and administered to the patient before disease progression or recurrence.

This doesn't mean you can't collect data from subsequent courses. Just don't put it in the first three (reportable) phases. For an example of treatment that you would not document in these three sets of fields, see Case #10.

We know that, in some cases, you, or your administration, or your radiation oncology team (often the registrar's best friend) may want to collect data on additional first course phases, or treatment given in later courses. If your registry software can support this data, you should put it outside the set of three phases designated by your software vendor as reportable.

2. **Words:** There are few words in the oncology treatment lexicon with more possible interpretations than "course". To the medical oncologist it typically means a series of treatments with a specific combination of drugs, including periodic dose adjustments. To some radiation oncologists, it describes a series of treatments to one specific target irrespective of possible changes along the way. As we have just seen, STORE has its own definition. This is the one you should use. We are working to get everyone else on board.
"Phase" is another term with confusion potential. It appears briefly in the ROADS radiation treatment discussions, and with more conviction in the FORDS, but has now become an anchor term for separating the distinct components of a "course" of radiation. Each phase is meant to reflect a "delivered radiation prescription". At the start of the radiation planning process, physicians write radiation prescriptions to treatment volumes and specify the dose per fraction (session), the number of fractions, the modality, and the planning technique. A phase simply represents the radiation prescription that has actually been delivered (as sometimes the intended prescription differs from the delivered prescription.) The STORE 2023 definition on page 59 is quite specific:

> Note that phases can be delivered sequentially or simultaneously. In sequential phases, a new phase begins when there is a change in the anatomic target volume of a body site, treatment fraction size, modality or technique.

Many of the case examples that follow are designed to emphasize this definition. Please note that phases can be delivered sequentially or simultaneously which can generate confusion. Case # 9 and #13 highlight potential areas of confusion with this definition of phase.

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With respect to the order in which phases should be summarized, our recommendation is:

- Phases should be summarized first in chronological order.
- If multiple phases start on the same date, then list the phases in order from highest 'Total Phase Dose' to lowest 'Total Phase Dose',
- If multiple phases start on the same date and have the same Total Phase Dose, then any order is acceptable.

3. **When there are more than three phases:** In most treatment settings this will occur in a relatively small number of cases, typically with unusually complex treatment plans, occasionally with cases with multiple metastatic sites treated simultaneously. The STORE guidelines are clear. Collect and report details of the first three phases but report the actual number of first course phases treated in the field "Number of Phases of Radiation Treatment in this Course".

4. **Phase Total Dose:** The upcoming STORE manual will make an important clarification as follows: Doses should ONLY be summed across phases to create a Total Dose when all of the phases were delivered *using the same major modality type (External Beam, Brachytherapy or Radioisotopes)*. If phases were delivered using two or more different major modalities (e.g. external beam and brachytherapy to the same body site), then code 999998, Not applicable.

5. **Phase N Radiation Primary Treatment Volume:** Don't let the word "primary" confuse you. In a large percentage of cases, you will be choosing an item from the list that closely matches the diagnostic primary site code. But not always. The first volume treated may be metastatic and remote from the site of origin of the tumor. From the list presented for this data field, choose the best match to the treatment target volume.

6. **Brachytherapy, radioisotopes, and infusion therapy:** Early reports from registrars indicate some confusion here in part because the initial version of this guidance document differed from the STORE manual. Herein we attempt to correct and clarify.

   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 there is only one phase in the entire course of radiation, then the phase total dose can be used to record the Radiation 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 Radiation Course Total Dose should be coded to 999998 (five 9's). This is because there is no agreed upon standard for summing doses across radiation modalities. For example, it is not biologically meaningful to sum dose from a brachytherapy treatment with dose from an external beam treatment (EBRT). If a radiation phase dose is not prescribed in cGy or Gy, then code the Dose per Fraction 99998(four 9's), the Total Phase Dose to 999998 (five 9's) and the Radiation Course Total Dose to 999998 (five 9's).

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7. **Where to find the data:** Hopefully, in most cases, you will find all the information you need in the treatment summary letter written by the Radiation Oncologist and generally available promptly after completion of treatment to a volume. Unfortunately, at this time, there is no standard for the content of these letters. There may be times when you must look at more detailed radiation records or need expert guidance. Happily, there are usually several resources within the radiation department. Certainly, the radiation oncologist is a consideration but think also of the physicist(s) and dosimetrist(s). They speak the language and may be more available.

Sources

This edition draws on four sources for case studies:

1. The original set of cases (Case 1 and Cases 4-15) with adjustments for changes in coding policy.
2. Situations posed to the CAnswer staff in the interim since the 1st Edition was published (Cases 17-28). These are identified as such in the Clinical description and information provided to CAnswer is n italics (with occasional additions by editorial staff for clarity)
3. Examples provided in Webinars delivered by the authors (for example, Case 29).
4. The authors imaginations (Cases 2 and 3).

Changes

STORE2021 brings only one change to coding options with the addition of code 98 to Radiation Modality in each phase:

98 Radiation therapy administered, modality unknown

Use this in place of code 99 when you know the patient has had treatment but details, such as modality, are unknown. Coding rules are summarized in pages 48 and 49, and should be reviewed carefully.

Looking to the Future

Someday most of the radiation data may be automatically downloaded into the registry from the "record and verify" computer systems that control the treatment machines. But don't go making retirement arrangements just yet. For the more immediate future a plan is afoot.

Inspired by the work of Dr. James Connolly and his team in developing the "synoptic pathology report", the CoC Radiation Therapy Data Standards Committee organized a diverse group of oncology, physics, and data specialists to develop a model for synoptic radiation treatment reporting based on the STORE data set. The result was published in the November-December 2020 journal "Practical Radiation Oncology" (PMID: 31988040).

We hope that, if this model is adopted widely, it will greatly simplify the registrar's task and at the same time proved a template for standardized electronic transfer.

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Case Studies

1 No Radiation Therapy

Clinical

- 87-year-old man with mild fatigue is found to have an elevated lymphocyte count on CBC.
- Bone marrow biopsy in your facility confirms a diagnosis of chronic lymphocytic leukemia.
- Physician and patient agree that no treatment is indicated at this time.

Coding Logic

- #2: Though not required by EDITS, this field has research value, and we encourage everyone to apply the appropriate code for all untreated cases.
- #9: SEER registries only: Code Phase I Modality to 00.
- #9: All other registries, code the Volume for Phase I to 00.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	
	2	Reason No Rad	1 Not part of planned 1st
	3	Location of Rad	
	4	Date Started	
	5	Date Ended	
	6	Number of Phases	
	7	Discontinued Early	
	8	Course Total Dose	
Phase 1	9	Volume	00 No Radiation Treatment
	10	Rad to Nodes	
	11	Modality	00 No Rad Treatment (SEER)
	12	Planning Technique	
	13	Number of Fractions	
	14	Dose per Fraction	
	15	Total Phase 1 Dose	
Phase 2	16	Volume	
	17	Rad to Nodes	
	18	Modality	
	19	Planning Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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2 Radiation Given – Details Unknown

Clinical

- A 56-year-old man is first seen in your emergency room with a history of rapid onset of weight loss, and inability to swallow solids.
- He is scoped and a tight mid-esophagus lesion is identified. Biopsy shows adenocarcinoma.
- He is treated with neo-adjuvant chemotherapy at your facility and then referred to a nearby university for surgery. He chooses to have all further care and follow-up at the university.
- Sometime later you notice a letter from someone at the university to your medical oncologist. The letter mentions post-operative radiation but provides no details.
- You contact the university for information but the clerk you speak to pleads HIPAA and refuses to provide any information.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	3 Radiation after surgery
	2	Reason No Rad	0 RT administered
	3	Location of Rad	4 All RT elsewhere
	4	Date Started	
	5	Date Ended	
	6	Number of Phases	
	7	Discontinued Early	
	8	Course Total Dose	
Phase 1	9	Volume	99 Unknown
	10	Rad to Nodes	
	11	Modality	98 RT given, modality unk.
	12	Planning Technique	
	13	Number of Fractions	
	14	Dose per Fraction	
	15	Total Phase 1 Dose	
Phase 2	16	Volume	
	17	Rad to Nodes	
	18	Modality	
	19	Planning Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Coding Logic

It is important to code anything you have available and, hopefully, enough information so that any future reviewer or analyst will have a clear picture of what is going on.

- #1, #2: Because you know these to be true.
  #3: This tells much of the story.
- #9: It might be tempting, given the available history, to code the volume to esophagus but we don't know that for sure so 99 is the honest and safest choice.
- #11: Code 98, new in STORE2021, resolves the ambiguity in #9. This is useful because analysis of Phase data, in the proper context, can stand alone from Summary data.
- #16: It is standard to code the first untreated volume this way (of course, if the information was available, we might learn that the radiation required 2 or more phases).

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3 Bladder Cancer – Patient Takes a Flyer

Clinical

- A 42-year-old vegetarian of Austrian decent, has enjoyed fiddlehead and bracken fern salads nightly for years.
- When she tells her naturopath she is having painful urination with blood, he wisely refers her to a urologist on your hospital's staff.
- Cystoscopy shows a large, invasive bladder cancer, stage III.
- She is advised to have surgery and warned that she will likely need post-operative radiation and chemotherapy.
- Like so many patients, she turns to the internet for advice and finds a clinic in Bermuda that reports a high cure rate with infusions of Vitamin C during radiation treatment with their 1956 vintage Picker Cobalt machine.
- She tells the urologist she is going for alternative therapy and is never heard from again.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	9 Unknown
	2	Reason No Rad	8 Recommended, unknown if administered
	3	Location of Rad	9 Unknown
	4	Date Started	
	5	Date Ended	
	6	Number of Phases	
	7	Discontinued Early	
	8	Course Total Dose	
Phase 1	9	Volume	99 Unknown
	10	Rad to Nodes	
	11	Modality	
	12	Planning Technique	
	13	Number of Fractions	
	14	Dose per Fraction	
	15	Total Phase 1 Dose	
Phase 2	16	Volume	
	17	Rad to Nodes	
	18	Modality	
	19	Planning Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Coding Logic

Some Class 00 patients can be a frustrating challenge, so we just have to go with what we know.

- #2: Tells most of the story
- #9: A code of 00 is technically not correct since we don't know if she was ever treated.
- #16: It is reasonable to leave this blank when field #9 is coded to 99.

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4 Single Target Volume – Single Phase

Clinical

- 78 y/o female with new diagnosis of multiple myeloma
- R hip pain
- Lytic lesion, threatening fracture

Treatment

- Treated locally using opposed conformal[1] 15Mv photons
- 5 fractions at 400 cGy per day - 4/5/18 to 4/9/18
- Chemo started on completion of radiation treatment

Coding Logic

- #1: Code 0 in this field because there was no surgery.
- #8: Simple math, 400 x 5, but you should always find the total dose in the summary letter.
- #10: Inguinal lymph nodes may be exposed to radiation during treatment of the hip, but they are not being intentionally targeted.
- #12: Here you need to read the record carefully. However, the hip is a complex structure adjacent to radiosensitive organs (bowel and bladder) so, even for palliative treatment, the radiation "ports" (the radiation oncologist's term for radiation beams, a.k.a. "fields") for hip treatment are usually conformally shaped to avoid adjacent soft tissue and organs as much as possible.
- #16: STORE rules say you must code the Volume of the first unused phase to 00. In this case all the fields in phase 3 can be left blank.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	0 No radiation and/or sur
	2	Reason No Rad	0 Radiation was admin..
	3	Location of Rad	1 All RT at this facility
	4	Date Started	04/05/2018
	5	Date Ended	04/09/2018
	6	Number of Phases	01
	7	Discontinued Early	01 Radiation completed
	8	Course Total Dose	002000
Phase 1	9	Volume	84 Hip
	10	Rad to Nodes	00 No RT to nodes
	11	Modality	02 External beam, photons
	12	Planning Technique	04 Conformal or 3D…
	13	Number of Fractions	005
	14	Dose per Fraction	00400*
	15	Total Phase 1 Dose	002000
Phase 2	16	Volume	00 No Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Planning Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

[1] "Conformal" simply means that the fields were shaped to was created to "conform" the radiation dose to the target and/or avoid normal tissue. With "3D Conformal" treatment a CT simulation is obtained and a plan generated using 3-dimensional information. In conformal treatments, beams are shaped using lead blocks or a multi-leafed collimator to something other than the basic rectangular beams used in 2D therapy.

*Vendor software generally populates leading zeros.

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5 Thyroid Cancer Treated with Radioiodine

Clinical

- Thirty-seven-year-old female
- Painless lump in her right lower neck (level VI)
- Ultrasound guided needle biopsy
- Follicular carcinoma, clinical T1bN0M0.

Treatment

- Thyroidectomy, pathologic T2N0M0
- Radiation treatment is delivered with a single injection of 150 millicuries of radioiodine (I-131) on August 7, 2018.

Coding Logic

- #5: Our recommendation is to consider the injection of a radioisotope as the treatment and thus to set the Date Finished equal to the Date Started.[2] STORE makes a similar recommendation for brachytherapy treatments; however, with some brachytherapy procedures, the radioactive seeds are left in place for two or three days then removed. In those situations, code the date of removal as the Date Finished.
- #9: Technically I-131 may be effective wherever there are thyroid cancer cells in the body, so there is no specific anatomic treatment volume here. Therefore, we recommend coding radioisotope treatments as "98 Other". You might think another reasonable option would be to code the volume as "93 Whole Body". Traditionally, however, the code 93 (Whole Body) has been reserved for whole body treatment with external beam radiation such as is done prior to bone marrow transplantation. So, for the sake of historic consistency, our preference is "98 Other".

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	3 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	08/07/2018
	5	Date Ended	08/07/2018
	6	Number of Phases	01
	7	Discontinued Early	01 Completed
	8	Course Total Dose	999998
Phase 1	9	Volume	98 Other
	10	Rad to Nodes	00 No RT to draining nodes
	11	Modality	13 Radioisotopes, NOS
	12	Planning Technique	88 Not applicable
	13	Number of Fractions	1
	14	Dose per Fraction	99998
	15	Total Phase 1 Dose	999998
Phase 2	16	Volume	00 No Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Planning Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

[2] Like other radioisotopes, I=131 "decays" with a "half-life". That means that, from any given point in time, only half as much will remain after an elapsed time equal to the half-life. The half-life of I -131 is 8.06 days. With a typical injection it will be between 21 and 24 months before the last I-131 atom spits out its radiation.

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- #8, 14, 15: These dose fields are coded as 99998 and 999998 because dose was not prescribed in cGy or Gy.
- #12: We code this to "88 Not applicable" because with I-131 and other systemic isotopes there is no planning in the conventional sense. The physician selects a dose level based on risks of residual disease and the risk of complications.

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6 Prostate Cancer, Boost First, Elsewhere

Clinical

- Otherwise healthy 69 y/o man
- Gleason 9, cT1c prostate Ca.

Treatment

- Treated with iodine seed implant (2/21/2018) at a university hospital
- Returned home for additional treatment.
- 4-field conformal pelvic radiation with 15Mv photons (3/5/2018 to 4/6/2018, 4500cGy in 25 fractions) at your facility.

Coding Logic

- #4: The date of the implant marks the beginning of treatment.[3]
- #5: The last date of external beam is the only logical choice. For permanent implants and systemic radioisotopes, there is no good choice for a Date Finished. See Case #5.
- #8: There is no standard for summing a dose from brachytherapy with an external beam dose, so always code a mixed modality treatment using 999998 (**5** 9's) for Total Dose in this situation.
- #11: With an iodine implant, seeds are permanently placed in the prostate tissue and radiation is emitted continuously over a long period of time as described in Case 6. The "dose rate" is much lower with iodine implants than it is with iridium-192 seeds, which are in tubes that are removed after a day or two.
- #12: There is actually a lot of planning involved with prostate implants, both before and after the procedure, but code 88 is the only reasonable option from the choices available.
- #14, 15: Four 9's before the terminal "8" because no dose for brachytherapy is provided in the treatment summary. If a brachytherapy dose was given, then it can be entered here.

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	2 Regional RT at this Facility
	4	Date Started	02/21/2018
	5	Date Ended	04/06/2018
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	999998
Phase 1	9	Volume	64 Prostate - whole
	10	Rad to Nodes	00 No RT to draining nodes
	11	Modality	10 BrachyTx, Interstitial, LDR
	12	Planning Technique	88 Not applicable
	13	Number of Fractions	001
	14	Dose per Fraction	99998
	15	Total Phase 1 Dose	99998
Phase 2	16	Volume	64 Prostate - whole
	17	Rad to Nodes	06 Pelvic lymph nodes
	18	Modality	02 External beam, photons
	19	Planning Technique	04 Conformal or 3D…
	20	Number of Fractions	025
	21	Dose per Fraction	00180
	22	Total Phase 2 Dose	04500
Phase 3	23	Volume	00 No Treatment
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

[3] Registrars have asked us why the STORE did not include date ranges for each phase. There are two good reasons:
- Limited clinical or analytic value,
- Avoid unnecessary work for registrars.

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- #16: The prostate is still the primary target. The next field tells us that pelvic lymph nodes were treated. In FORDS you would have used Volume code 35, "Prostate and pelvis.

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7 Breast and Regional Nodes with Breast and Axillary Boost

Clinical

- 46 y/o female with T2N1M0 breast cancer, and conservation surgery. 3 of 5 axillary nodes
- positive. ER 100%, PR 10%, Her-2 negative.

Treatment

- Whole breast RT, 5040 cGy in 28 fractions given between 8/13/2018 and 9/19/2018 using 6Mv photons, conformal fields.
- Axillary and supraclavicular (SC) nodes treated concurrently with 6Mv photons using an anterior field covering both regions to deliver a daily dose of 180 cGy to a depth of 3 cm. Because the radiation intensity diminishes with depth, a posterior axillary field (PAB) was added delivering 30cGy per day to the midplane of the axilla so this region also received the prescribed daily dose of 180cGy.
- The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury.
- Between 9/20 and 9/26 the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	3 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	08/13/2018
	5	Date Ended	09/26/2018
	6	Number of Phases	3
	7	Discontinued Early	01 Completed
	8	Course Total Dose	006040
Phase 1	9	Volume	40 Breast. - whole
	10	Rad to Nodes	04 Breast/chest wall LN region
	11	Modality	02 External beam photon
	12	Planning Technique	04 Conformal or 3D Conformal
	13	Number of Fractions	025
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	004500
Phase 2	16	Volume	40 Breast - whole
	17	Rad to Nodes	04 Breast/chest wall LN region
	18	Modality	02 External beam photon
	19	Planning Technique	04 Conformal
	20	Number of Fractions	003
	21	Dose per Fraction	00180
	22	Total Phase 2 Dose	000540
Phase 3	23	Volume	41 Breast – partial
	24	Rad to Nodes	00 No RT to draining nodes
	25	Modality	04 External beam, electrons
	26	Planning Technique	04 Conformal
	27	Number of Fractions	005
	28	Dose per Fraction	00200
	29	Total Phase 3 Dose	001000

Coding Logic

- #8: The sum the doses reported in Phase 1 2 and 3 (#15 + #22 + #29). In general, the "total dose" to be reported will be the dose at the point in the volume receiving the most radiation.

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This dose is meant to represent the "cumulative" dose across phases to the same point or region (receiving the highest dose). Importantly, this field should report the cumulative dose to the highest dose treatment volume so long as the phases were performed using the same modality (i.e. external beam, brachytherapy, etc.).

- #10: In this phase the code "04" represents both axillary and SC regions as a single target. STORE coding does not provide enough granularity to distinguish between the possible combination of targets in this region.
- #17: In this field, code 04 represents just the axilla as it receives three additional treatments. Note that the PAB is simply regarded as part of the axillary plan and not coded as a phase.
- #23: This is what is commonly called the "boost" or "cone down" to deliver additional radiation to the region at greatest risk for recurrence, the surgical bed.

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8 Prostate Cancer: Concurrent Prostate and SV Boost

Clinical

- 76 y/o man with T3b prostate cancer.

Treatment

- 7/9/2018 to 8/10/2018: Treated initially with whole pelvis RT to 4500 cGy in 25 fractions of 180 cGy using a four-field approach, all fields shaped conformally to pelvic anatomy.
- 8/13/2018 to 9/07/2018: IMRT boost of 19 fractions in which the seminal vesicles receive an additional 3420 cGy while the prostate receives 3800 cGy.

Coding Logic

- #6: Although the volumes described in Phase 2 and Phase 3 were delivered at the same time with the same beams, they represent different organs receiving different daily and total doses and, under STORE rules, are treated as separate but concurrent phases. This is typically accomplished using an IMRT capability known as "dose painting" or "simultaneous integrated boosts" (SIB).

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	0 No radiation and/or surg
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	07/09/2018
	5	Date Ended	09/07/2018
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course Total Dose	008300
Phase 1	9	Volume	64 Prostate - whole
	10	Rad to Nodes	06 Pelvic lymph nodes
	11	Modality	02 External beam photons
	12	Planning Technique	04 Conformal or 3-D
	13	Number of Fractions	025
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	004500
Phase 2	16	Volume	64 Prostate - whole
	17	Rad to Nodes	00 No Treatment to Nodes
	18	Modality	02 External beam photons
	19	Planning Technique	05 IMRT
	20	Number of Fractions	019
	21	Dose per Fraction	00200
	22	Total Phase 2 Dose	003800
Phase 3	23	Volume	98 Other
	24	Rad to Nodes	00 No Treatment to Nodes
	25	Modality	02 External beam photons
	26	Planning Technique	05 IMRT
	27	Number of Fractions	019
	28	Dose per Fraction	00180
	29	Total Phase 3 Dose	003420

- #8: Add the regional dose from Phase 1 to the highest dose delivered within the boost target volumes. That would be the prostate dose. 4500 + 3800 = 8300cGy
- #23: The standard setters had to draw the line somewhere for the list of volumes and, since seminal vesicles are very rarely the primary target volume, they were not included as a separate volume. That is why we have always (ROADS -> FORDS -> STORE) had a code 98. For the benefit of future local[4] users of the data it would be a good idea to document treatment of seminal vesicles in the radiation comments field.

[4] Comments in NAACCR text fields are transmitted to state registries (primarily for quality control purposes) but are not transmitted to NCDB and therefore not useful for PUF file analysis.

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9 Multiple Metastatic Sites Treated Concurrently.

Clinical

65-year-old male smoker presents with Stage IV adenocarcinoma of the lung and multiple symptomatic sites of metastases:

- Proximal right humerus, lytic, painful, but not thought to be at risk of fracture.
- Left hip, minimal radiographic changes but positive on bone scan and painful.
- Mid-shaft right femur, minimal pain but judged to be at risk for path fracture
- T7 lesion with no fracture but extension of tumor into spinal canal and rapid onset of lower extremity weakness.

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	1 All treatment at this facility
	4	Date Started	11/10/2018
	5	Date Ended	11/23/2018
	6	Number of Phases	04 '4 or more phases'
	7	Discontinued Early	01 Completed
	8	Course Total Dose	003000
Phase 1	9	Volume	81 Spine
	10	Rad to Nodes	00 No RT to nodes
	11	Modality	02 External beam, photons
	12	Planning Technique	03 2-D therapy
	13	Number of Fractions	10
	14	Dose per Fraction	00300
	15	Total Phase 1 Dose	003000
Phase 2	16	Volume	88 Extremity Bone, NOS
	17	Rad to Nodes	00 No RT to nodes
	18	Modality	02 External beam, photons
	19	Planning Technique	03 2-D therapy
	20	Number of Fractions	010
	21	Dose per Fraction	00300
	22	Total Phase 2 Dose	003000
Phase 3	23	Volume	84 Hip
	24	Rad to Nodes	00 No RT to nodes
	25	Modality	02 External beam, photons
	26	Planning Technique	04 Conformal or 3-D
	27	Number of Fractions	05
	28	Dose per Fraction	00400
	29	Total Phase 3 Dose	002000

Treatment

- Treatment to thoracic spine was initiated evening of Saturday, 11/10/2018 and continued until 11/21/2018. Unblocked photon field, 3000 cGy in 10 fractions
- 11/12/2018 to 11/23/2018: Treatment to right femur, unblocked photon field, 3000 cGy in 10 fractions
- 11/12/2018 to 11/16/2018: Left hip treated with c onformal fields designed to spare adjacent bowel, bladder, and soft tissues. 2000 cGy in 5 equal fractions.
- 11/12/2018 to 11/16/2018: Right humerus, open square field, 2000cGy in 5 equal fractions.

Coding Logic

- #4: The earliest date of treatment in the first course.
- #5: The last date of treatment in the first course even though it may not be associated with any of the radiation phases that have been documented here.
- #6: Four distinct volumes treated with each treatment represented by a distinct phase.

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- #8 Record the maximum dose to first volume/phase. Do not add doses to different treatment volumes.
- #9: Chronology is the primary determinant of phase. The spine was treated first.
- #16: After chronology we look at dose. The femur received a higher dose than either the hip or the humerus.
- #23: Two targets with the same dose. Toss a coin.

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10 Lung: How Many Phases?

Clinical

72-year-old male diagnosed with small cell lung cancer on 2/22/2018.

- PET-CT scan shows activity limited to the right upper lobe and right hilum.
- Brain MRI is interpreted as showing a pattern consistent with scattered, age-related microvascular infarcts.
- The patient refuses chemotherapy.

Treatment

- 3/5 – 4/6/2018: Area of PET activity treated with 6 MV photons using an IMRT plan to minimize esophagitis, 180 cGy per day, 25 fractions, 4500 cGy.
- 4/6/2018: Repeat simulation CT scan shows greater than 50% reduction in gross tumor volume. A new plan is developed.
- 4/10 – 4/16/2018: IMRT to upper lobe and hilar nodes (same target as before), 180cGy per day, 900cGy in 5 fractions
- 6/5/2018: Patient presents with confusion and aphasia. Brain MRI shows numerous sub-centimeter lesions consistent with metastases, most at locations previously interpreted as infarcts.
- 6/7 – 6/13/2018: Whole brain radiation, conformal opposed photon fields. 2000cGy in 5 fractions.

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	1 All RT at this facility
	4	Date Started	03/05/2018
	5	Date Ended	04/16/2018
	6	Number of Phases	01
	7	Discontinued Early	01 Completed
	8	Course Total Dose	005400
Phase 1	9	Volume	30 Lung or bronchus
	10	Rad to Nodes	02 Thoracic lymph nodes
	11	Modality	02 External beam, photons
	12	Planning Technique	05 IMRT
	13	Number of Fractions	030
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	005400
Phase 2	16	Volume	00 No Radiation Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Planning Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Coding Logic

- #6 and #16: We have coded only one phase for chest treatment. The patient had a new plan developed in the middle of therapy; but, because the treatment was to the same target volumes (primary and node) using the same modality, planning technique and dose per fraction, the new plan does NOT represent a new phase of radiation. This patient had "off-line" plan adaptation, which adapted the radiation targeting to changes in shape of the tumor or surrounding normal tissues. In some cases, this can occur several times throughout the course of radiation. So long as there is no change of targeted organs, modality, planning technique and dose per fraction, all of the adapted plans should be considered one phase. The second important consideration in this case is that treatment to the brain is

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not coded under STORE rules because treatment to the brain did not occur until after progression occurred in the brain. STORE collects only first course treatment data where first course is defined as:

First Course of Treatment

The first course of treatment includes all methods of treatment recorded in the treatment plan and administered to the patient before disease progression or recurrence.

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11 Prophylactic Cranial Irradiation (PCI): How Many Phases?

Clinical

72-year-old male diagnosed with small cell lung cancer on 2/22/2018.

- PET-CT scan shows activity limited to the right upper lobe and right hilum.
- He was treated with concurrent cisplatin, etoposide and radiation as summarized below.
- After completion of his thoracic radiation, he had follow-up imaging including brain MRI which showed no evidence of disease. He then had prophylactic cranial irradiation.

Treatment

- 3/5 – 4/13/2018: Area of PET activity treated with 6MVphotons using an IMRT plan to minimize esophagitis, 200 cGy per day, 30 fractions, 6000 cGy.
- 5/7 – 5/18/2018: whole brain radiation at 25Gy in 10 fractions.

Coding Logic:

- #5: Date finished should be the last day of the last phase of the entire radiation course even if there are gaps between phases, as in this case.
- #10: When the hilum of the lung is listed as a target, it almost invariably means that the lymph nodes of the hilar region are the targets.
- #8: It is a universal rule that you should NEVER add doses from different target volumes. In the Total Dose field, you will most often be simply recording the phase 1 dose. If the target volume in phase 1 is given a boost, in phase 2 you should add the doses. You should rarely have to add the phase 3 dose, unless it represents a further change in the size or technique used to give additional radiation within the first boost.
- #6 and #16: We have coded two phases in the first course of therapy, one for the chest treatment and another for the brain treatment. In this case, the whole brain radiation treatment is coded as part of the first course of therapy because it occurred prior to any evidence of progression or recurrence (i.e. it was done prophylactically).

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	1 All RT at this facility
	4	Date Started	03/05/2018
	5	Date Ended	5/18/2018
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	006000
Phase 1	9	Volume	30 Lung or bronchus
	10	Rad to Nodes	02 Thoracic lymph nodes
	11	Modality	02 External beam, photons
	12	Planning Technique	05 IMRT
	13	Number of Fractions	030
	14	Dose per Fraction	00200
	15	Total Phase 1 Dose	006000
Phase 2	16	Volume	12 Brain
	17	Rad to Nodes	00 No RT to nodes
	18	Modality	02 External beam, photons
	19	Planning Technique	01 External beam, NOS
	20	Number of Fractions	010
	21	Dose per Fraction	00250
	22	Total Phase 2 Dose	002500
Phase 3	23	Volume	00 No Radiation Treatment
	24	Rad to Nodes	
	25	Modality	
	26	Planning Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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12 Total Body Irradiation for Transplant

Clinical

43-year-old woman with advanced multiple myeloma is referred for total body irradiation in preparation for a bone marrow transplant.

Treatment

- 11/14 – 11/16/2018: Treated twice daily for three consecutive days in a total body stand at extended distance with open rectangular photon fields, 200cGy to mid-body per treatment.

Coding Logic:

- #9: Volume code 93 is reserved for this circumstance and the now somewhat rare whole-body treatment for bone metastases. Use code 98 for systemic treatment with radioisotopes.
- #10: Obviously lymph nodes are included in a whole-body beam, but they are not the primary target and there is no code describing total lymph node irradiation.
- #12: With the data available (no mention of secondary shielding) it is reasonable to describe this as 2-D planning (open field, no blocks) was used. In some centers, particularly if the total dose is greater than 1200cGy, the record may describe lung, liver, or kidney blocks. In these situations, it is appropriate to code planning technique to 3-D conformal.

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	1 All RT at this facility
	4	Date Started	11/14/2018
	5	Date Ended	11/16/2018
	6	Number of Phases	01
	7	Discontinued Early	01 Completed
	8	Course Total Dose	001200
Phase 1	9	Volume	93 Whole Body
	10	Rad to Nodes	00 No RT to draining nodes
	11	Modality	02 External beam, photons
	12	Technique	03 2-D therapy
	13	Number of Fractions	006
	14	Dose per Fraction	00200
	15	Total Phase 1 Dose	001200
Phase 2	16	Volume	00 No Radiation Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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13 Head and Neck: 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).

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	1 All RT at this facility
	4	Date Started	9/10/2018
	5	Date Ended	10/29/2018
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course 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 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

Treatment

- Dates of treatment: 9/10/2018 to 10/29/2018.
- Proton pencil beam scanning
- Area: 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.

Coding Logic

- #6: This course of RT is an example of a simultaneous integrated boost. 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 usually 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 requires only one radiation plan to be developed.
- #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.

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- #12: We recommend that protons should be coded as conformal planning technique unless intensity modulated proton therapy (IMPT) is explicitly referenced. IMPT is just a version of IMRT using protons instead of X-rays and would be coded as such for Technique.
- #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.
- #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.

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14 Lung: Off-line Adaptive Re-plan

Clinical

72 y/o man with NSCLC diagnosed on 2/22/2018 with a mass limited to the right upper lobe and right hilum. Patient was treated with radiation alone. He refused chemotherapy.

Treatment

- 03/5/2018-4/6/2018: Area of PET activity was treated with 6MV photons using an IMRT plan to minimize esophagitis, 180cGy per day, 25 fractions, 4500 cGy.
- 4/6/2018: at 4500 cGy a repeat CT simulation showed dramatic shrinkage of the primary tumor volume, so a new plan was generated.
- 4/10/2018- 4/12/2018: IMRT to right upper lobe and right hilar nodes was restarted with new plan, 180cGy per day, 3 fractions to 540cGy.
- 4/14/2018 – 4/16/2018: Third CT simulation scan showed even further shrinkage of the primary tumor and no evidence of the peritracheal node. Field revised to an opposed pair of ports angled off esophagus and spinal cord and reduced to include only the primary tumor and residual hilar node. 900 cGy prescribed and delivered in 5 fractions

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	1 All RT at this facility
	4	Date Started	03/05/2018
	5	Date Ended	04/16/2018
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	005940
Phase 1	9	Volume	30 Lung or bronchus
	10	Rad to Nodes	02 Thoracic lymph nodes
	11	Modality	02 External beam, photons
	12	Technique	05 IMRT
	13	Number of Fractions	028
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	005040
Phase 2	16	Volume	30 Lung or bronchus
	17	Rad to Nodes	02 Thoracic lymph nodes
	18	Modality	02 External beam, photons
	19	Technique	04 – Conformal
	20	Number of Fractions	005
	21	Dose per Fraction	00180
	22	Total Phase 2 Dose	000900
Phase 3	23	Volume	00 No Radiation Treatment
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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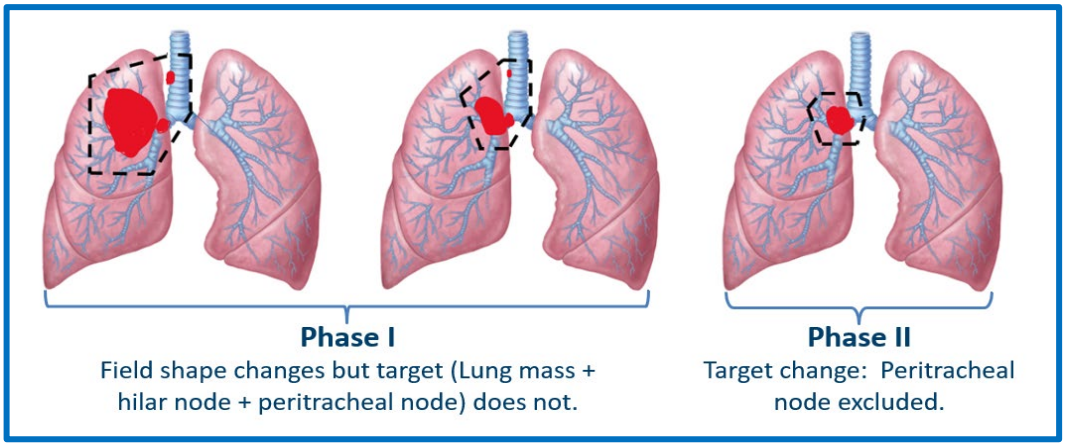
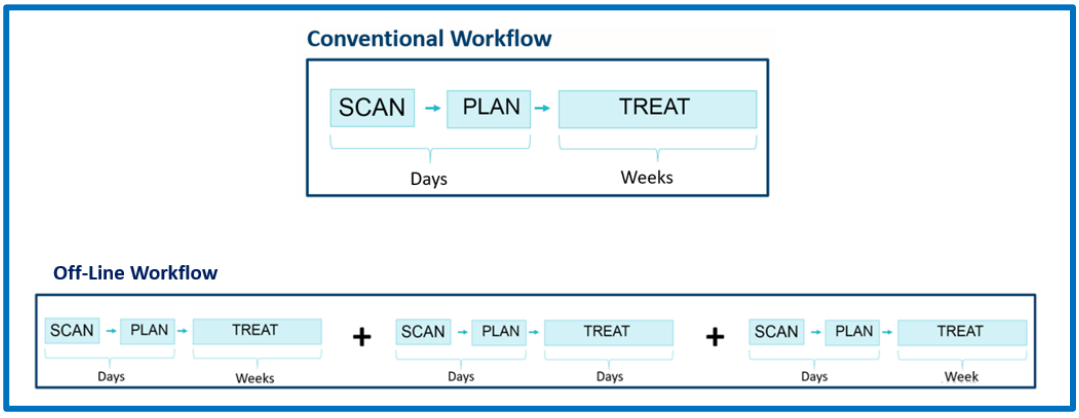
The concept of off-line adaptive planning is illustrated below. Note that in Phase I, there is a change in the shape of the radiation field but the target volume (primary + hilar node + peritracheal node) does not change.



In the diagram below we illustrate the workflow for conventional and off-line plans.

- In the majority of cases, a patient will have a single CT scan and over the course of a few days a treatment plan will be generated and then applied daily for several days or weeks.
- In an off-line adaptive plan, the scan-plan-treat sequence may be repeated two or three times on the same time scales. Short treatment interruptions may occur to allow time for planning. Off-line planning has been part of the radiation oncologists play book for decades. It has been most frequently employed with tumors that respond very quickly to radiation, such as lymphomas and small cell lung cancer.



Coding Logic

- During the first adaptation, the physical volume has changed but the target volume (diseased organs), modality, planning technique and daily fraction size have not changed. Therefore, we do not code a second phase at this point.
- In the second adaptation, the target volume changes and paratracheal nodes are now excluded. This alone is reason for a second phase, as is the change to conformal therapy.

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15 Bladder: On-line Adaptive Therapy with an MR-Linac

Clinical

75-year-old woman with average risk muscle-invasive bladder cancer treated with selective bladder preservation. She had a complete transurethral resection followed by neoadjuvant chemotherapy with gemcitabine and cisplatin and finally concurrent mitomycin/5FU and radiation.

Treatment

- Dates of treatment: 9/10/2018 to 10/30/2018.
- She received 180 cGy x 36 to 6480cGy to the whole bladder.
- Her radiation was performed on the MR-linac with IMRT and daily on-line treatment adaptation to account for changes in bladder filling. Seventeen of 36 fraction required a full re-plan.

Coding Logic

- #12: Some new linear accelerators are attached to such high-quality imaging devices that they can function as both simulation scanners for planning and radiation delivery systems. If a new radiation plan is created while the patient is on the radiation delivery table to take into account that day's anatomy, this is referred to "on-line" (or on-table) adaptive radiation. If a new radiation plan is created while the patient is elsewhere, then it is referred to as "off-line" adaptive therapy. Off-line adaptive therapy treatments are relatively common, but MR-guided and CT-guided online adaptive therapy treatments are just emerging. Applicability is limited to situations where tumor anatomy is variable with time as can be the case with bladder tumors.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	3 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	9/10/2018
	5	Date Ended	10/30/2018
	6	Number of Phases	01
	7	Discontinued Early	01 Completed
	8	Course Total Dose	006480
Phase 1	9	Volume	60 Bladder - whole
	10	Rad to Nodes	00 No radiation to nodes
	11	Modality	02 External beam, photons
	12	Technique	10 MR-guided on-line adaptive
	13	Number of Fractions	036
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	006480
Phase 2	16	Volume	00 No Radiation Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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This case describes MR-guided online adaptive therapy[5]. If a treatment is described as both MR-guided (or CT-guided) on-line adaptive as well as another external beam planning technique (e.g. IMRT, SBRT, etc.), then it should be categorized as MR-guided online adaptive therapy. Online adaptive techniques are the most complex and usually include IMRT and/or SBRT techniques within them, so the online adaptive component is most important to capture.

[5] For more information see: Apollo, W., Online Adaptive Radiation Therapy", Journal of Registry Management, Summer 2018, Vol45 #2, page 91.

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16 Gyn-Brachytherapy + External Beam Radiotherapy (EBRT)

Clinical

67 y/o patient, G2P2, presented with postmenopausal bleeding with positive findings on endometrial bx. Patient underwent TAH/BSO with pelvic lymphadenectomy, pT3b, pN0 w/ +margins, and then concurrent RT/cisplatin followed by carboplatin + paclitaxel.

Treatment

- 1/7/21-2/11/121, Whole pelvis RT w/ 6X/IMRT, 180 cGy x 25 fx[6] to 45 Gy.
- 2/13/21-3/18/21, Vaginal cuff HDR brachytherapy via Ir-192 seeds, 600 cGy x 2 fx for a total of 1200 cGy.

Coding Logic

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	3 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	01/07/2021
	5	Date Ended	03/18/2021
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	999998
Phase 1	9	Volume	71 Uterus or Cervix
	10	Rad to Nodes	06 Pelvic lymph nodes
	11	Modality	02 External beam, photons
	12	Technique	05 IMRT
	13	Number of Fractions	025
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	004500
Phase 2	16	Volume	72 Vagina
	17	Rad to Nodes	00 No RT to draining LNs
	18	Modality	09 Brachytherapy, intracavitary, HDR
	19	Technique	88 NA
	20	Number of Fractions	02
	21	Dose per Fraction	00600
	22	Total Phase 2 Dose	001200
Phase 3	23	Volume	00 No Radiation Treatment
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

- #8: You cannot add dose from a brachytherapy phase with dose from EBRT phase.
- #9: When possible, phases are captured in chronological order based on phase start date. If a primary site in the pelvic region is surgically resected, code the primary irradiated volume to the primary site
- #10: RT treatment summary tells us that the whole pelvis was irradiated. This includes regional lymph nodes.
- #15 180 x 25 = 4500
- #16: When intracavitary HDR brachytherapy is administered to the vaginal cuff for endometrial or cervical cancer, post TAH/BSO, primary irradiated volume is vagina (72) because the vaginal surface is the organ at risk for recurrence. Note that in this setting, the effective range of the treatment is limited to the vaginal wall. This is an exception to general rule of coding to the organ of origin and a code 71 would be technically correct, just less informative.
- 21-22: If dose per fraction and total dose is given in cGy, code it as such in the abstract for that phase.

[6] "fx" is a common abbreviation for "fraction" which, in turn, simply means a treatment event.

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17 Multiple Brain Mets: Treated with Gamma Knife

Clinical

67 y/o with a history of stage IV Lung adenocarcinoma (NSCLC), T2N0M1c, EGFR+, s/p left frontal craniotomy for resection of brain mets, now presents for Gamma Knife treatment to multiple (7) intracranial lesions.

Treatment

- On 11/4/19, patient was treated to 7 CNS lesions via Gamma Knife SRS. Dose ranged from 16-20 Gy prescribed to the 50% isodose line.
- # of shots: 51

Coding Logic

- #6/#13: The Gamma Knife teletherapy unit can target multiple CNS lesions simultaneously in a single session (1 fraction,1 phase). Regardless of whether 4 or 15 CNS lesions are targeted by the Gamma Knife unit in a single session, consider this a single fraction and a single phase.
- #15: It is not unusual with Gamma Knife SRS for the dose to vary among the targeted CNS lesions. Select the highest delivered dose as the total dose for this single-phase treatment.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	03 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	11/04/2019
	5	Date Ended	11/04/2019
	6	Number of Phases	01
	7	Discontinued Early	01 Completed
	8	Course Total Dose	002000
Phase 1	9	Volume	13 Brain-limited
	10	Rad to Nodes	00 No radiation to nodes
	11	Modality	02 External beam, photons
	12	Technique	08 SRS, Gamma Knife
	13	Number of Fractions	001
	14	Dose per Fraction	02000
	15	Total Phase 1 Dose	002000
Phase 2	16	Volume	00 No Radiation Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Historical Note: Gamma Knife treatment is an example of a very old concept that took a long time to reach general use. It was invented in 1951 by a Swedish physician, Dr. Lars Leksell and took advantage of a newly available source of gamma radiation, Cobalt-60. The first commercial Gamma Knife machine was not available until 1967 and general availability is much more recent.

In simple terms, the original Gamma Knife machine is spherical lead "helmet" with 210 holes distributed over the surface and drilled in a fashion such that they come to a common small focus in the open center of the helmet. Each hole contains a small source of Cobalt-60 (a radioactive metal with a long half-life). Ignoring the complexity of turning the radiation on and off, the net result is 210 narrow beams of radiation coming together to a small region with a very high dose rate.

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18 Prostate and Rectal: Treated with One Plan

Clinical (This case was submitted to CAnswer.)

"In the course of a workup for prostate cancer (cT1c cN0 cM0, Gleason 6) the patient was also found to have an adjacent rectal cancer (cT2 cN1b cM0)."

Treatment

"The radiation record shows that the two malignancies were treated simultaneously within a single planned volume using SBRT (stereotactic body radiation therapy). 10Mv x-rays were utilized and treatment was completed in 5 fractions starting on 11/18/2021 and ending on 11/27/2021.

- *The prostate received a dose of 3625 cGy.*
- *Clinically suspicious nodes in the "neighborhood" received 2750 cGy*
- *The rectal primary and remaining pelvic lymph nodes received 2500 cGy."*

Coding Logic

This is obviously a unique and very infrequent situation. The key fact here is that the patient has two primaries and each one must be reported separately to NCDB with a complete STORE compatible record (demographics / diagnostics / treatment / follow-up). Registry software may vary in how this is accomplished, but the end result should always be the same. Treatment will be reported twice, in one record for the prostate cancer and another for the rectal cancer since both were targeted by the plan. Because we can not arbitrarily attribute some aspects of the radiation course to the prostate cancer record and the rest to the rectal cancer record, the entire course is reported for both. This is an SIB treatment.

#8: As usual, record the maximum dose delivered to the primary tumor volume (prostate).

#10: Unlike case # 8, the target for this phase of the prescription is just the prostate.

#12: The summary explicitly references SBRT.

Prostate

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	0 No radiation
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	11/18/2021
	5	Date Ended	11/27/2021
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course Total Dose	003625
Phase 1	9	Volume	64 Prostate - Whole
	10	Rad to Nodes	00 No Radiation to Nodes
	11	Modality	02 External Beam, Photons
	12	Planning Technique	06 Stereotactic
	13	Number of Fractions	5
	14	Dose per Fraction	00725
	15	Total Phase 1 Dose	003625
Phase 2	16	Volume	06 Pelvic lymph nodes
	17	Rad to Nodes	88 Not Applicable
	18	Modality	02 External Beam, Photons
	19	Planning Technique	06 Stereotactic radiotherapy, NOS
	20	Number of Fractions	5
	21	Dose per Fraction	00550
	22	Total Phase 2 Dose	002750
Phase 3	23	Volume	54 Rectum
	24	Rad to Nodes	06 Pelvic lymph nodes
	25	Modality	02 External Beam, Photons
	26	Planning Technique	06 Stereotactic
	27	Number of Fractions	5
	28	Dose per Fraction	00500
	29	Total Phase 3 Dose	002500

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18 (Continued)

Clinical

- As above.

Treatment

- As above.

Coding Logic

- Because we cannot arbitrarily attribute some aspects of the radiation course to the prostate cancer record and the rest to the rectal cancer record, the entire course is reported for both.

Rectum

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	2 Radiation Before Surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	11/18/2021
	5	Date Ended	11/27/2021
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course Total Dose	003625
Phase 1	9	Volume	64 Prostate - Whole
	10	Rad to Nodes	00 No Radiation to Nodes
	11	Modality	02 External Beam, Photons
	12	Planning Technique	06 Stereotactic radiotherapy, NOS
	13	Number of Fractions	5
	14	Dose per Fraction	00725
	15	Total Phase 1 Dose	003625
Phase 2	16	Volume	06 Pelvic lymph nodes
	17	Rad to Nodes	88 Not Applicable
	18	Modality	02 External Beam, Photons
	19	Planning Technique	06 Stereotactic radiotherapy, NOS
	20	Number of Fractions	5
	21	Dose per Fraction	00550
	22	Total Phase 2 Dose	002750
Phase 3	23	Volume	54 Rectum
	24	Rad to Nodes	06 Pelvic lymph nodes
	25	Modality	02 External Beam, Photons
	26	Planning Technique	06 Stereotactic radiotherapy, NOS
	27	Number of Fractions	5
	28	Dose per Fraction	00500
	29	Total Phase 3 Dose	002500

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19 Unknown Primary, Head and Neck: with Simultaneous Integrated Boost

Clinical [7] **(**This case, amended to provide more detail - was submitted to CAnswer.)

The patient, fond of alcohol and cigarettes, presented with a large, bilateral, lymph nodes that appeared to originate at levels IIA and IIB (upper neck), pushing down into level III (mid-neck). Biopsy of the left neck mass showed squamous carcinoma. Examination under anesthesia by an otolaryngologist, with multiple biopsies, failed to identify the primary site.

Treatment

The radiation oncologist defined three areas of interest for planning and treatment was delivered using an IMRT class of plan (VMAT) with simultaneous integrated boosts (SIB's). Thirty-five identical treatments were delivered between 11/02/2020 and 12/17/2020.

- The palpable lymph nodes received 7000 CGy.
- Immediately adjacent lymph nodes, clinically negative but considered to be high risk, received 5950 cGy.
- Lymph nodes in the low neck, considered to be low risk, received 5600cGy

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	1 All RT at this facility
	4	Date Started	11/02/2020
	5	Date Ended	12/17/2020
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course Total Dose	007000
Phase 1	9	Volume	02 Neck Lymph Node Regions
	10	Rad to Nodes	88 Not Applicable
	11	Modality	02 External Beam, Photons
	12	Planning Technique	05 IMRT
	13	Number of Fractions	35
	14	Dose per Fraction	200
	15	Total Phase 1 Dose	007000
Phase 2	16	Volume	02 Neck Lymph Node Regions
	17	Rad to Nodes	88 Not Applicable
	18	Modality	02 External Beam, Photons
	19	Planning Technique	05 IMRT
	20	Number of Fractions	35
	21	Dose per Fraction	170
	22	Total Phase 2 Dose	005950
Phase 3	23	Volume	02 Neck Lymph Node Regions
	24	Rad to Nodes	88 Not Applicable
	25	Modality	02 External Beam, Photons
	26	Planning Technique	05 IMRT
	27	Number of Fractions	35
	28	Dose per Fraction	160
	29	Total Phase 3 Dose	005600

Coding Logic

While treatment was delivered simultaneously, there were dose prescriptions to 3 adjacent but separate volumes. As with Case #17, each prescription volume is considered a phase with the highest dose volume assigned to Phase I.

- #8 Document the highest dose delivered to any one volume; with SIB this would be the dose recorded for Phase I. With older techniques (See Case #17), it may be appropriate to add doses for each phase.

[7] Case originally presented to CAnswer with the question: "Is the total dose the sum of phase I and phase II doses (12950 cGy) or the sum for all 3 phases (18550 cGy)."

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20 Head and Neck: Unknown Primary with Staged Boost

Clinical

The patient, twin brother of the patient in Case #19, is also fond of alcohol and cigarettes, and presented with a large, bilateral, lymph nodes that appeared to originate at levels IIA and IIB (upper neck), pushing down into level III (mid-neck). Biopsy of the left neck mass showed squamous carcinoma. Examination under anesthesia by an otolaryngologist, with multiple biopsies, failed to identify the primary site.

Treatment

The radiation oncologist defined three areas of interest for planning but, lacking the equipment for IMRT, he used a classic, time-proven, staged approach with 3-D conformal treatment in each phase:

- The entire neck, masses, adjacent high-risk nodes, and more distant nodes were treated to a uniform dose of 5600 cGy in 28 equal "fractions" of 200cGy each.
- The field was reduced and an additional 2 fractions of 200cGy were given to the masses and high-risk regions.
- Finally, the field was reduced again, and treatment continued for an additional 5 fractions bringing the palpable masses to a total dose of 7000cGy

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	1 All RT at this facility
	4	Date Started	11/02/2020
	5	Date Ended	12/17/2019
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course Total Dose	007000
Phase 1	9	Volume	02 Neck Lymph Node Regions
	10	Rad to Nodes	88 Not Applicable
	11	Modality	02 External Beam, Photons
	12	Planning Technique	04 – Conformal
	13	Number of Fractions	28
	14	Dose per Fraction	00200
	15	Total Phase 1 Dose	005600
Phase 2	16	Volume	02 Neck Lymph Node Regions
	17	Rad to Nodes	88 Not Applicable
	18	Modality	02 External Beam, Photons
	19	Planning Technique	04 – Conformal
	20	Number of Fractions	2
	21	Dose per Fraction	00200
	22	Total Phase 2 Dose	000400
Phase 3	23	Volume	02 Neck Lymph Node Regions
	24	Rad to Nodes	88 Not Applicable
	25	Modality	02 External Beam, Photons
	26	Planning Technique	04 – Conformal
	27	Number of Fractions	5
	28	Dose per Fraction	00200
	29	Total Phase 3 Dose	001000

Coding Logic

Unlike the situation with case #16, the three phases here are delivered consecutively, each with its own plan.

#8 Document the highest dose delivered to any one volume. That volume is the volume of Phase III which also has dose contributions from phases I and II. Here it is appropriate to add the doses across all three phases.

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21 Breast: Simultaneous Integrated Boost (SIB)

Clinical (This case was submitted to CAnswer.)

A 74-year-old woman underwent lumpectomy followed by breast irradiation for a pT2 (2.3cm) pN1a cM0, ER 100%, PR 90%, Her-2 negative, left breast cancer.

Treatment

- Dates of treatment: 5/20/20 to 6/8/2020 (hypo-fractionated).
- Cardiac sparing IMRT with simultaneous integrated boost.
- Regional (breast plus axillary lymph nodes) treatment to a prescribed dose of 4005 cGy (267 cGy per day) in 15 fractions.
- Simultaneous treatment of lumpectomy bed with margins to a prescribed dose of 320 cGy per day for a total of 4800cGy

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	3 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	5/20/2020
	5	Date Ended	6/8/2020
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	004800
Phase 1	9	Volume	41 Breast, partial
	10	Rad to Nodes	00 No radiation to nodes
	11	Modality	02 External beam, photons
	12	Technique	05 IMRT
	13	Number of Fractions	015
	14	Dose per Fraction	00320
	15	Total Phase 1 Dose	004800
Phase 2	16	Volume	40 Breast - whole
	17	Rad to Nodes	04 Breast/chest wall nodes
	18	Modality	02 External beam, photons
	19	Technique	05 IMRT
	20	Number of Fractions	015
	21	Dose per Fraction	00267
	22	Total Phase 2 Dose	004005
Phase 3	23	Volume	00 No Radiation
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Coding Logic

- While treatment to both prescription areas occurred simultaneously, there were two prescriptions and therefore two phases. The only question is which should be considered Phase I, the prescription with the larger volume or the prescription with the higher total dose. It is a bit of a chicken-egg thing, but for consistency the standard in this setting is to assign Phase I to the target volume receiving the highest dose.
- SIB is not a new technique. It was in use long before we had IMRT but it was a lot more bother with fixed fields.
- #17: Axillary treatment is a physical extension of breast treatment and therefore assigned to Phase II.

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22 Prostate and Seminal Vesicles with IMRT

Clinical (This case was submitted to CAnswer.)

"This radiation was given at another facility. All I have is the treatment summary. The Rad Onc physician states in his note that "He was treated as per the above radiation chart" [provided below]. How would this be entered in the abstract? What is the Total Dose to Volume? (12,600? - doesn't seem right). Case #6 in the guide isn't quite the same. Here is the treatment summary:

Treatment

Treatment Site	*Energy*	*Technique*	*Dose*	*Fractions*	*Dates*	*Elapsed Days*
Prostate + SV	*6 MV*	*RapidArc*	*2 Gy x28=56 Gy*	*28*	*3/18/19- 4/25/19*	*38*
Prostate	*6 MV*	*RapidArc*	*2.5 Gy x28= 70 Gy*	*28*	*3/18/19- 4/25/19*	*38"*

•"RapidArc" is a marketing name (Varian) for one implementation of IMRT

•STORE does not collect "Elapsed Days" because it is easily calculated from the start and end dates.

Coding Logic

- This case is problematic because it includes logical inconsistencies. In order to code it, one must decide what the error is. In this case, the most likely error is that treatment sites should be "Prostate" and "SV" not "Prostate + SV" and "Prostate". We know this because the prescriptions would be typical for such an approach.

- This case shares some elements with cases 8, 13, and 18 and 20. From a coding point of view, it presents the same issues as phases II and III of case 6. There, the "boost" was managed with IMRT in a manner such that the prostate received a higher dose than the adjacent seminal vesicles, i.e., two prescriptions, therefore two phases.

- #8 Following the general rule, when phases are given simultaneously, record the dose to the prescribed volume receiving the highest dose (prostate). Doses are added across phases only when they are attributed to the same target volume, and treatment as

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	4 All RT elsewhere
	4	Date Started	3/18/20
	5	Date Ended	4/25/20
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	007000
Phase 1	9	Volume	64 Prostate - whole
	10	Rad to Nodes	00 No Treatment to Nodes
	11	Modality	02 External beam photons
	12	Planning Technique	05 IMRT
	13	Number of Fractions	028
	14	Dose per Fraction	00250
	15	Total Phase 1 Dose	007000
Phase 2	16	Volume	98 Other
	17	Rad to Nodes	00 No Treatment to Nodes
	18	Modality	02 External beam photons
	19	Planning Technique	05 IMRT
	20	Number of Fractions	028
	21	Dose per Fraction	00200
	22	Total Phase 2Dose	005600
Phase 3	23	Volume	00 No Radiation
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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with some form of external beam. [8]

- 16: Here, as in case #8 we are regarding the seminal vesicles as a separate phase even though they are treated concurrently with the prostate. From a planning point of view, they are receiving a different dose. In principle the result is no different from a situation in which the prostate is treated with one set of fields at 250 CGy per day then the seminal vesicles are treated separately with additional fields at 200 CGy per day.

[8] if your calculated Total Dose from external beam sources is greater than 10000 cGy it is probably wrong. This unusual way to summarize treatment could easily be misinterpreted.

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23 Cervical Cancer: HDR Brachytherapy with Variable Dose per Fraction

Clinical (This case was submitted to CAnswer.)

"The end of treatment summary for HDR brachytherapy for cervical cancer states 5 fractions and dose per fraction for the first 3 fractions is 800 cGy and fraction 4 and 5 were 550 cGy. Volume, modality and treatment planning are the same. Due to the change in dose, would this be considered 2 phases? If considered same phase, can the doses be added together? Or would it be coded 999998?"

The text in italics was submitted by the CTR, but for completeness we will add that the assuming that treatment was done at the reporting facility between 11/9/2020 and 11/18/2020. No information is given about surgery so we only code using the radiation information.

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	1 All RT at this facility
	4	Date Started	11/9/2020
	5	Date Ended	11/18/2020
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	003500
Phase 1	9	Volume	71 – Cervix or 72 - Vagina
	10	Rad to Nodes	00 No Treatment to Nodes
	11	Modality	09 Brachy, intracavitary, HDR
	12	Planning Technique	88 NA
	13	Number of Fractions	003
	14	Dose per Fraction	00800
	15	Total Phase 2 Dose	002400
Phase 2	16	Volume	71 – Cervix or 72 - Vagina
	17	Rad to Nodes	00 No Treatment to Nodes
	18	Modality	09 Brachy, intracavitary, HDR
	19	Planning Technique	88 NA
	20	Number of Fractions	002
	21	Dose per Fraction	00550
	22	Total Phase 2 Dose	001100
Phase 3	23	Volume	00 No Treatment
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Treatment

- As above.

Coding Logic

Under the 2021 guidelines a change in daily dose fraction constitutes a change in phase

- #3: Treatment was administered by the same modality (HDR) in each case so the doses for each phase can be added.
- #9,16: If the patient has had a hysterectomy, code the Volume to vagina, since it is the primary target.
- #9,16: If the patient has not had a hysterectomy, code the Volume to 71 Cervix.
- #10, 16: Lymph nodes are rarely the target of intracavitary therapy.

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24 Pelvis, Prostate and Seminal Vesicles with VMAT

Clinical (This case was submitted to CAnswer.)*"Is the following coded correctly into 3 phases?*

Ph 1: *10/4/19-11/8/19 6MV-VMAT Pelvis PTV1 180x25=4500cGy.*
Ph 3: *11/11/19-11/15/19 6MV-VMAT Pelvis PTV2 (Prostate + SV) 180x5=900cGy.*
Ph 2: *11/18/19-12/4/19 6MV-VMAT Pelvis PTV3 (Prostate) 180x12=2160cGy.*
TOTAL 7560cGy.

Rad Onc Note = I will be following NCCN and [XYZ] guidelines and delivering 7560cGy in 42 fractions to Prostate + SV w/ at least 4500cGy to high-risk Pelvic LN region w/ IMRT/IGRT."

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	1 All RT at this facility
	4	Date Started	10/4/2019
	5	Date Ended	12/4/2019
	6	Number of Phases	03
	7	Discontinued Early	01 Completed
	8	Course Total Dose	007560
Phase 1	9	Volume	64 Prostate - whole
	10	Rad to Nodes	06 Pelvic lymph nodes
	11	Modality	02 External beam photons
	12	Planning Technique	05 IMRT
	13	Number of Fractions	028
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	004500
Phase 2	16	Volume	64 Prostate - whole
	17	Rad to Nodes	00 No Treatment to Nodes
	18	Modality	02 External beam photons
	19	Planning Technique	05 IMRT
	20	Number of Fractions	005
	21	Dose per Fraction	00180
	22	Total Phase 2 Dose	000900
Phase 3	23	Volume	64 Prostate - whole
	24	Rad to Nodes	00 No Treatment to Nodes
	25	Modality	02 External beam photons
	26	Technique	05 IMRT
	27	Number of Fractions	012
	28	Dose per Fraction	00180
	29	Total Phase 3 Dose	002160

Treatment

The short answer to their question is, "not quite", with the only problem being the numbering of the phases. The record shows treatment divided into three consecutive date intervals with a different target volume definition (prescription) in each case. Each time interval defines a phase because the volume also changes. Phases to a common volume are recorded in the chronological order they are given and no on the bases of phase dose.

Coding Logic

- #4: Record first date of Phase I
- #5: Record last date of treatment (Phase III)
- #8: The prostate is included in all three phases so the doses can be summed across all three phases.
- #9,10: When a region like the pelvis is treated, code the primary site. Pelvic lymph nodes are identified as a target in field #10.
- #12: VMAT is just a form of IMRT (an "advanced" form for marketing purposes)
- #23: In the final phase, just the prostate is covered.

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25 Breast: Treatment Interrupted – Big Time

Clinical (This case was submitted to CAnswer.)

Lumpectomy was done and path came back as 1/5 lymph nodes positive. Oncotype results led to a decision to omit chemotherapy. Radiation was started and the patient had received 3 of 16 planned fractions (hypo-fractionation, often referred to as the "Canadian protocol") when word was received that the specimen had been re-examined and path report was amended to 5/5 lymph nodes positive.
Radiation treatment was stopped and chemotherapy initiated with a plan to have the patient return to Radiation Oncology to be re-simulated and treated upon completion of chemo.

How would I code this XRT? Would I code it as completed since they will be re-simulating and re-planning when the patient returns? Or would I code it as not completed due to other reasons?

Coding Logic

This patient is not going to be back in two weeks to complete radiation, it will be more like four to six months, by which time any tumoricidal benefit from the first radiation will have been lost and any tissue injury will have been largely repaired. Many, if not most, radiation oncologists would make little or no adjustment and simply treat the patient as though they had not had any prior radiation. That said, the right answer here is to code what occurred starting from the first fraction of radiotherapy, even if there is a very long break in the middle of the course or phase, because there has been no progression event.

With this strategy, any researcher should, from the elapsed time alone, determine that this treatment was interrupted.

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26 Prostate: VMAT to Pelvis with SBRT Boost

Clinical

67 y.o. male with high-risk prostatic adenocarcinoma (cT3a by MRI(suspicious for EPE), Gleason 4+3=7, 14/17 total cores, PSA 14.5).He has been referred for radiation therapy. How would you code the VMAT (05) & SBRT/SRS (06)?

Treatment

Volume	First Tx	Last Tx	Frac	Dose/Fx	Dose	Technique
Pelvis (incl. Prostate)	5/14/19	6/18/19	25	180	4500	VMAT
Prostate	6/19/19	6/25/19	3	650	1950	SBRT

Coding Logic

VMAT (an IMRT variant) is typically used when the target is complex. In this case we have a pelvic organ, prostate, and pelvic lymph nodes of concern, and there is a desire to reduce the risk of injury to small bowel and bladder (with fixed fields, options for such protection are limited).

SBRT is another IMRT variant with steps taken to maximize precision of targeting. It is generally reserved for small target volumes (less than 5cm in diameter – prostate dimensions are usually less than 5cm) often with large doses per fraction.

- #8: Since the two phases were consecutive, had a common target and modality we can add the two-phase doses. This sum of phase doses may seem a bit low for fractionated prostate treatment but the 3 fractions of 650 cGy have a biologic effect (cell kill) that is substantially greater than the same total dose at 180cGy per fraction.
- #9, #10: Code to the organ of diagnosis and let the coding for nodes show that the pelvis was treated.
- #19: Although closely related to IMRT, SBRT has it own set of codes. We use code 06 as the most likely form since the record does not mention Gamma Knife or robotics.

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	1 All RT at this facility
	4	Date Started	5/14/19
	5	Date Ended	6/25/19
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	006450
Phase 1	9	Volume	64 Prostate -
	10	Rad to Nodes	06 Pelvic lymph nodes
	11	Modality	02 External beam photons
	12	Planning Technique	05 IMRT
	13	Number of Fractions	025
	14	Dose per Fraction	00180
	15	Total Phase 1 Dose	004500
Phase 2	16	Volume	64 Prostate -
	17	Rad to Nodes	00 No Treatment to Nodes
	18	Modality	02 External beam photons
	19	Planning Technique	06 Stereotactic Radiotherapy
	20	Number of Fractions	003
	21	Dose per Fraction	00650
	22	Total Phase 2Dose	001950
Phase 3	23	Volume	00 No Radiation
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

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27 Lung: Brain and Bone Metastases

Clinical (This case was submitted to CAnswer.)

57 year-old patient with a history of 80 pack year smoker, presents with stage IV lung cancer with multiple brain metastases and a painful Left Scapular met.

Treatment

- 6/16/21 to 6/25/21: Brain, (mets 1,6,10), VMAT, 10 MV photons, 5 fractions of 600cGy, 3000cGy total.
- 6/16/21: Brain (mets 2-5), VMAT, 10MV, 1 fraction of 2000cGy, 2000cGy total.
- 6/21/21: Brain (mets7-9), VMAT, 10MV, 1 fraction of 2000cGy, 2000cGy total.
- 6/23/21: Left Scapula, 3D, 10MV, 1 fraction of 800cGy, 800cGy total.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	0 No radiation and/or surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	6/16/21
	5	Date Ended	6/25/21
	6	Number of Phases	04
	7	Discontinued Early	01 Completed
	8	Course Total Dose	003000
Phase 1	9	Volume	13 Brain - Limited
	10	Rad to Nodes	00 No radiation to nodes
	11	Modality	02 External beam, photons
	12	Technique	05 IMRT
	13	Number of Fractions	005
	14	Dose per Fraction	00600
	15	Total Phase 1 Dose	003000
Phase 2	16	Volume	13 Brain - Limited
	17	Rad to Nodes	00 No radiation to nodes
	18	Modality	02 External beam, photons
	19	Technique	05 IMRT
	20	Number of Fractions	001
	21	Dose per Fraction	02000
	22	Total Phase 2 Dose	002000
Phase 3	23	Volume	13 Brain - Limited
	24	Rad to Nodes	00 No radiation to nodes
	25	Modality	02 External beam, photons
	26	Technique	05 IMRT
	27	Number of Fractions	001
	28	Dose per Fraction	02000
	29	Total Phase 3 Dose	002000

Coding Logic

- Assignment of phases for this case is easily determined by referring to the first two bullets on page 8 of this document:
  - Phases should be summarized first in chronological order.
  - If multiple phases start on the same date, then list the phases in order from highest 'Total Phase Dose' to lowest 'Total Phase Dose',
- Here the first two treatment bullets begin on the same date, but the first delivers a higher dose to its targets, so it is assigned to Phase I. A logical question is, since there are three targets described in the first bullet, shouldn't that use up all three phases? Twenty-five years or so ago the answer would have been yes because with the technology available each target would have its own plan and they would have to be treated sequentially. Today, with VMAT and other derivatives of IMRT technology, it is possible to treat all three sites at the same time with the same plan delivering high doses to the metastases with much lower doses to the spaces in between. Bottom line, just one phase for the first bullet. Should this be coded as SBRT? Only if "SBRT" appears in the plan or treatment summary.
- The second bullet uses the same technology but with a different plan, 1 fraction instead of 5, 2000cGy total instead of 3000. This is Phase II because the fraction size and total dose is lower and a different plan and time of treatment are required.

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- The treatment described in the third bullet occurs 5 days later and requires a new plan, Phase III!
- #6: The treatment to the scapula is Phase IV. It will not be reported to NCDB. Documenting Phase IV and higher in your registry is optional and probably of little if any value for outcomes studies.
- #8: When the phases target different volumes the total dose recorded is the highest dose delivered to any one phase (STORE 2021, page 290). Doses to different targets are never added.

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28 Breast: Lumpectomy, External Beam, Accuboost™

Clinical (This case was submitted to CAnswer.)

A 74-year-old woman underwent lumpectomy followed by breast irradiation for a pT1c (1.8cm, close margins) pN0 cM0, ER 40%, PR 10%, Her-2 negative, left breast cancer.

Treatment

- 01/10/2022 to 01/31/2022: Tangential opposed fields to left breast, 16 fractions, 4256 Gy (commonly called "the Canadian protocol").
- 02/01/2022 – 02/04/2021: 1000 cGy boost to surgical bed in 4 fractions using Accuboost™ technology.

Note:

The person contacting CAnswer proposed the following for Phase 2 and wisely asked if it was correct: Modality – (13) Radioisotopes, NOS, Technique – (98) Other, Dose per Fraction – 99998, Total Dose -999998

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	03 Radiation after surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	1/10/2022
	5	Date Ended	2/4/2022
	6	Number of Phases	02
	7	Discontinued Early	01 Completed
	8	Course Total Dose	005256
Phase 1	9	Volume	40 Breast - whole
	10	Rad to Nodes	00 No radiation to nodes
	11	Modality	02 External beam, photons
	12	Technique	04 -Conformal
	13	Number of Fractions	016
	14	Dose per Fraction	00266
	15	Total Phase 1 Dose	004256
Phase 2	16	Volume	41 Breast -partial
	17	Rad to Nodes	00 No radiation to nodes
	18	Modality	02 External beam, photons
	19	Technique	02 Low energy X-ray
	20	Number of Fractions	004
	21	Dose per Fraction	00250
	22	Total Phase 2 Dose	001000
Phase 3	23	Volume	00 No Radiation
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Coding Logic

- The proposed phase II coding was incorrect, but it is easy to understand why they reached this conclusion. It demonstrates some of the challenge of dealing with the language of radiation oncology, a language that has been evolving since Dr. Emil H Grubbe administered the first x-ray treatment (for breast cancer, post-surgical recurrence) to Mrs. Rose Lee in Chicago, January 31, 1896
- Accuboost is a mechanical device that can position an iridium-192 radiation source in multiple orientations in close proximity around the exterior of the breast. Iridium-192 is a radioisotope that produces a stew of low energy x-rays (old-timers might still call them gamma rays) that, with some tungsten shielding, can form a "beam". Marketing material describes this as "Non-invasive Breast Brachytherapy" used both for surgical bed boosts, as in this case, and for accelerated partial breast irradiation (APBI). From a STORE coding perspective, it is just another form of external beam x-ray treatment, in a class with its predecessors, radium, cobalt-60 and Cesium 137. All these have been used as both external beam sources and for interstitial or intracavitary brachytherapy.

Marketing sources also refer to it as a form of brachytherapy. "Brachy" simply means" slow". The founding fathers of radiation oncology used prefix primarily to distinguish between external beam therapy which could be completed in less than an hour (radium), half-hour (Cobalt-60 with a tired source), or 5 to

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10 minutes. (linear accelerators), and implants with the same isotopes that might take 2-3 days. An Accuboost treatment takes 20-25 minutes. So, with the long tradition of "brachy" usage in mind, we would not recommend coding this as any form of brachytherapy.

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29 Prostate: Multifocal Bone Metastases Treated with Xofigo™

Clinical

A 95-year old retired logger, presented to the ER one afternoon with widespread bone pain ("…but I've had worse pain on the job a lot of times"). Evaluation revealed a PSA of 820 with widespread bone metastases.

Initial treatment with hormones failed to improve his situation so a decision was made to treat him with Xofigo, the brand name for Radium-223 Dichloride, an agent that selectively deposits in areas of injured bone.

Treatment

Six injections of Xofigo at roughly 10-day intervals, with the first on 11/2/2021 and the last on 12/17/2021.

Coding Logic

- 6: A single planned phase consisting of 6 injections, analogous to six consecutive external beam treatments.
- 9: There is no code for "whole body bone" but researchers will know what the target is by the diagnosis and choice of treatment.
- 12: There is no planning in the sense that "planning" applies to external beam treatments where a computer is used to combine the effects of any number of beams to predict a dose distribution within the patient.

Seg	#	Field	Code/Definition
Summary	1	Rad/Surg Sequence	00 No Radiation /Surgery
	2	Reason No Rad	0 Radiation was administered
	3	Location of Rad	1 All RT at this facility
	4	Date Started	11/2/2021
	5	Date Ended	12/17/2021
	6	Number of Phases	01
	7	Discontinued Early	01 Completed
	8	Course Total Dose	999998
Phase 1	9	Volume	98 Other
	10	Rad to Nodes	00 No RT to draining nodes
	11	Modality	14 Radioisotopes, Radium 223
	12	Technique	88 Not applicable
	13	Number of Fractions	006
	14	Dose per Fraction	99998
	15	Total Phase 1 Dose	999998
Phase 2	16	Volume	00 No Radiation Treatment
	17	Rad to Nodes	
	18	Modality	
	19	Technique	
	20	Number of Fractions	
	21	Dose per Fraction	
	22	Total Phase 2 Dose	
Phase 3	23	Volume	
	24	Rad to Nodes	
	25	Modality	
	26	Technique	
	27	Number of Fractions	
	28	Dose per Fraction	
	29	Total Phase 3 Dose	

Background:

Xofigo is a relatively new (2013) option for treating this relatively rare condition of "global" symptomatic metastases. Other isotopes have been used for this purpose for a long time, including phosphorus-32, strontium-89 and samarium 153. Each has its advantages and disadvantages. Strontium-89 replaced its predecessor, phosphorus-32 because it was less toxic to bone marrow. Whereas the other isotopes are treating with x-rays and beta particles, radium-223 has a theoretical advantage in that it delivers the goods using energetic, charged, bulky (in the atomic sense) alpha particles that have a very short range (2 -10 cell diameters) but do a lot of local damage in that short distance.

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Another treatment option is a procedure called "sequential hemi-body irradiation" in which very large x-ray fields are used to treat one half of the body at a time with a break in between for bone marrow recovery. Treatment is usually in multiple fractions. Palliative benefits are roughly comparable to the isotopes. Survival benefits are modest (a few months, at best). Coding is somewhat similar, but the modality would be external beam, planning technique could be 2-D or 3-D and there would be a meaningful dose per fraction and total dose. Also, it would most likely be done in two phases, upper hemi-body and lower hemi -body.

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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
00	No radiation treatment
01	Radiation treatment completed as prescribed
02	Radiation treatment discontinued early - toxicity
03	Radiation treatment discontinued early - contraindicated due to other patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned radiation etc.)
04	Radiation treatment discontinued early - patient decision
05	Radiation discontinued early - family decision
06	Radiation discontinued early - patient expired
07	Radiation discontinued early - reason not documented
99	Unknown if radiation treatment discontinued; Unknown whether radiation therapy administered

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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
71	Uterus or cervix
72	Vagina
73	Vulva
80	Skull
81	Spine/vertebral bodies
82	Shoulder
83	Ribs
84	Hip
85	Pelvic bones
86	Pelvis (NOS, non-visceral)
88	Extremity bone, NOS
90	Skin
91	Soft tissue
92	Hemibody
93	Whole body
94	Mantle, mini-mantle (obsolete after 2017)
95	Lower extended field (obsolete after 2017)
96	Inverted Y (obsolete after 2017)
98	Other
99	Unknown

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 Modality	
Code	Label
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-223
15	Radioisotopes, Strontium-89
16	Radioisotopes, Strontium-90
98	Treatment administered, modality unknown
99	Unknown if radiation treatment administered

Phase N Planning Technique	
Value	Description
00	No radiation treatment
01	External beam, NOS
02	Low energy x-ray/photon therapy
03	2-D therapy
04	Conformal or 3-D conformal therapy
05	Intensity modulated therapy
06	Stereotactic radiotherapy or radiosurgery, NOS
07	Stereotactic radiotherapy or radiosurgery, robotic
08	Stereotactic radiotherapy or radiosurgery, Gamma Knife?
09	CT-guided online adaptive therapy
10	MR-guided online adaptive therapy
88	Not applicable
98	Other, NOS
99	Unknown

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Coding Modality for the Heavy Equipment of Modern Radiation Therapy

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. We present the following table to help you find the correct codes. Many thanks to Wilson Apollo, MS, CTR, RTT, for sharing his heavy equipment research.

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
Accuboost	02	02
LIAC, NOVAC	04	03, 04
MammoSite, SAVI, Contura	09	88

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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	**MV**	Megavoltage
CW	Chest wall	**OAR**	Organs at Risk
DART	Dynamic Adaptive Radiation Therapy	**OBI**	On-Board Imaging
Dmax	Depth of Maximum Dose	**ODI**	Optical Distance Indicator
DMLC	Dynamic Multileaf Collimator	**OTT**	Overall Treatment Time
DRR	Digitally Reconstructed Radiograph	**PA**	Posterior-Anterior
DVH	Dose-Volume Histogram	**PRRT**	Peptide Receptor Radionuclide Therapy
Dx	Diagnosis	**PSA**	Patient Support Assembly (treatment couch)
EBRT	External Beam Radiation Therapy	**PTV**	Planning Tumor Volume
e-comp	Electronic compensator: describes 3D-conformal technique	**R&V**	Record and Verify
EFRT	Extended Field Radiation Therapy	**RAO**	Right Anterior Oblique
ENLs	Extranodal Lymphomas	**RBE**	Relative Biological Effect
EPID	Electronic Portal Imaging Device	**RL**	Right Lateral
FF	Filter-Flattened	**RPO**	Right Posterior Oblique
FFF	Flattening-Filter-Free	**Rx**	Prescription
FiF	Field-in-Field Technique (3D)	**SAD**	Source-to-Axis Distance
Fx	Fraction		
GTV	Gross Tumor Volume	**SART**	Stereotactic Ablative RT
Gy	Gray, unit of absorbed dose	**SBPT**	Stereotactic Body Proton Therapy
H-IMRT	Hybrid IMRT	**SBRT**	Stereotactic Body RT
HR-CTV	High-Risk Clinical Target Volume	**SCT**	Stem Cell Transplant
HT	Helical Tomotherapy	**SCV (S'clav)**	Supraclavicular
IC-BT	Intracavitary Brachytherapy	**SDD**	Source-to-Diaphragm Distance
IC/IS BT	Intracavitary/Interstitial Brachytherapy	**SGRT**	Surface Guided RT

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IFD	Intra-field Distance	**SIB**	Simultaneous Integrated Boost
IFRT	Involved Field Radiation Therapy	**SIRMIT**	Single Isocenter Radiosurgery for Multiple Intracranial Targets
IGART	Image-guided Adaptive RT	**SMART**	Simultaneous Accelerated RT
IGRT	Image-guided RT	**SSD**	Source-to-Skin Distance
IMPT	Intensity Modulated Proton Therapy	**STD**	Source-to-Target Distance
INRT	Involved Nodal RT	**T-IMRT**	Tangential IMRT
IOERT	Intraoperative Electron RT	**T-VMAT**	Tangential Volumetric Modulated Arc Therapy
IORT	Intraoperative RT	**TBI**	Total Body Irradiation
IS-BT	Interstitial Brachytherapy	**TID**	Three times a day
ISRT	Involved Site RT	**TSEB**	Total Skin Electron Boost
ITV	Irradiated Tumor Volume		
KV	Kilovoltage		

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Summary of Radiation Coding Rules

1. **First Course of Treatment:** The first course of treatment includes all treatments recorded in the treatment plan and administered to the patient before disease progression or recurrence.
2. **Fraction:** One radiation treatment to one target volume.
3. **Target Volume:** The anatomic content being treated, for example, primary lung tumor and adjacent regional nodes. Note that space occupied by the target volume may diminish (hopefully by shrinking) as treatment progresses, but that alone does not change the phase. However, if the anatomic content being treated changes (i.e. the field is modified to exclude some of the lymph node regions), a new phase begins.
4. **Treatment Volume:** The three-dimensional space around and including the target volume that is receiving therapeutic doses of radiation. A change in target volume (because of tumor shrinkage) does not by itself means a new phase.
5. **Phase:** A phase of treatment is a set of treatments delivered with a unique combination of target volume, treatment fraction size, treatment modality, and treatment technique. Phases can be delivered sequentially or simultaneously. A new phase begins when there is a change in any of these four parameters.
6. **Phase Order Rules:**
    - **a.** First phase first. Phases should be summarized first in chronological order.
    - **b.** If multiple phases start on the same date, then list the phases in order from highest 'Total Phase Dose' to lowest 'Total Phase Dose',
    - **c.** If multiple phases start on the same date and have the same Total Phase Dose, then any order is acceptable.
    - **d.** If there are more than three phases you only need to document the first three (additional phases will not be reported to NCDB) but be sure to record the actual total number of phases.
7. **Unknown Modality:** If patient had treatment but Modality details are not available code Modality to 98.
8. **When a Patient Has No Treatment**:
    a. **Non**-SEER facilities code Phase I Volume to 00. Leave other fields blank.
    b. SEER Facilities code Modality to 00. Leave other fields blank.
    c. Code the Reason for No Radiation field. It is not required by EDITS but it might be useful to future researchers.
9. **First Untreated Phase**:
    a. **Non**-SEER facilities code Volume to 00. Leave other fields blank.
    b. SEER Facilities code Modality to 00. Leave other fields blank.
10. **Adding Doses**
    a. If multiple phases are directed at the same target volume using an external beam modality, you can add the doses.

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b. If multiple phases are directed at the same target volume using brachytherapy you can add the doses.
c. If treatment uses a mix of external beam and brachytherapy you cannot add doses. Code Course Total Dose to 999998.

11. Coding Volume when the Site of Cancer Organ has been Removed:

a. In most cases code the volume to the organ removed. After prostatectomy, code the volume to prostate. If the whole pelvis is treated after prostatectomy, hysterectomy or cystectomy, code the volume to the organ of orgin and lymph nodes to pelvic.
b. Important clarification: Brachytherapy after hysterectomy is a grey area. We advise that if the vaginal apex is treated with brachytherapy after hysterectomy for cervical or uterine cancer, code the volume to 72 – Vagina because that is the target organ for treatment.

12. When Treatment is Interrupted

a. Treatment may be interrupted as part of a plan, or because of unplanned circumstances.
b. For treatment dates code the first date of the first treatment to the volume and the last date of treatment given after the interruption. This is consistent with the definition of course.

13. Avoid Isotope Confusion

a. With the exception of electronic brachytherapy (Modality Code 12), most brachytherapy (codes 07-11) is delivered with radioactive isotopes. Generally, this is in the form of seeds or rods of radioactive metal, radium and cobalt historically, cesium and iridium today, that are inserted in to tissue (interstitial) or body cavities (intracavitary).
b. Codes 13 to 16 are modalities specifically described as radioisotopes but not as brachytherapy. Most commonly these are available in liquid form and inserted into the blood stream or a body cavity.
c. A common coding mistake is to use modality code 13 – Radioisotopes, NOS, when the record shows, for example, intracavitary treatment to the vagina, cervix, uterine canal, or some combination. Yes, radioisotopes were used but no, that is not the correct code. You should use a brachytherapy code, high dose rate (HDR) if the isotope is iridium, low dose rate if it is cesium or iodine.
d. Eye plaque brachytherapy is a form of surface brachytherapy and should be coded Brachytherapy, NOS (Modality Code 07).

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