Resource Document Table of Contents

General Instructions for the Time Frames for Grade

The three new grade data items reflect the points in time in the patient's work-up when grade may be assessed. These are similar to the time frames used for assigning AJCC TNM staging.

Grade Clinical

For the Grade Clinical data item, record the grade of a solid primary tumor before any treatment, whether surgical resection or initiation of any treatment including neoadjuvant.

Grade Pathological

For the Grade Pathological data item, record the grade of a solid primary tumor that has been resected and for which no neoadjuvant therapy was administered. If AJCC pathological 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.

Grade Post-Therapy

For the Grade Post-Therapy data item, record the grade of a solid primary tumor that has been resected following neoadjuvant therapy. If AJCC post-therapy staging is being assigned, the tumor must have met the surgical resection requirements for yp in the AJCC manual.

This data item corresponds to the yp staging period only.

Clinical Grade Colon and Rectum

Note 1: Clinical grade must not be blank.

Note 2: Assign the highest grade from the primary tumor assessed during the clinical time frame.

Note 3: G4 includes anaplastic.

Note 4: Code 9 when

- Grade from primary site is not documented
- Clinical workup is not done (for example, cancer is an incidental finding during surgery for another condition)
- Grade checked "not applicable" on CAP Protocol (ifavailable) and no other grade information is available

Note 5: If there is only one grade available and it cannot be determined if it is clinical, pathological, or after neo-adjuvant therapy, assign as a clinical grade and code unknown (9) for pathological grade, and blank for post-therapy grade.

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
4	G4: Undifferentiated
9	Grade cannot be assessed (GX); Unknown

Pathological Grade for Colon and Rectum

Note 1: Pathological grade must not be blank.

Note 2: Assign the highest grade from the primary tumor. If the clinical grade is higher than the grade determined during the pathological time frame, use the grade that was identified during the clinical time frame for both the clinical grade and the pathological grade.

Note 3: G4 includes anaplastic.

Note 4: Code 9 when

- Grade from primary site is not documented
- No resection of the primary site
- Neo-adjuvant therapy is followed by a resection (see Post-Therapy grade)
- Clinical case only (see clinical grade)
- There is only one grade available and it cannot be determined if it is clinical, pathological,or after neo-adjuvant therapy
- Grade checked "not applicable" on CAP Protocol (ifavailable) and no other grade information is available

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
4	G4: Undifferentiated
9	Grade cannot be assessed (GX); Unknown

Post-Therapy for Colon and Rectum

Note 1: Leave post-therapy grade blank when

- No neoadjuvant therapy
- Clinical or pathological case only
- There is only one grade available and it cannot be determined if it is clinical, pathological or Post-Therapy

Note 2: Assign the highest grade from the resected primary tumor assessed after the completion of neoadjuvant therapy.

Note 3: G4 includes anaplastic.

Note 4: Code 9 when

- Surgical resection is done after neoadjuvant therapy and grade from primary site is not documented
- Grade checked "not applicable" on CAP Protocol (ifavailable) and no other grade information is available

Code	Grade Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated
4	G4: Undifferentiated
9	Grade cannot be assessed (GX); Unknown; Not applicable (per CAP protocol)
Blank	See Note 1

Clinical Grade for Breast

Note 1: Clinical grade must not be blank.
Note 2: Assign the highest grade from the primary tumor assessed during the clinical time frame.
Note 3: Priority order for codes

- Invasive cancers: codes 1-3 take priority over A-D.
- In situ cancers: codes L, M, H take priority over A-D

Note 4: Scarff-Bloom-Richardson (SBR) score is used for grade. SBR is also referred to as: Bloom-Richardson, Nottingham, Nottingham modification of Bloom-Richardson score, Nottingham modification, Nottingham-Tenovus grade, or Nottingham score.

Note 5: All invasive breast carcinomas should be assigned a histologic grade. The Nottingham combined histologic grade (Nottingham modification of the SBR grading system) is recommended. The grade for a tumor is determined by assessing morphologic features (tubule formation, nuclear pleomorphism, and mitotic count), assigning a value from 1 (favorable) to 3 (unfavorable) for each feature, and totaling the scores for all three categories. A combined score of 3–5 points is designated as grade 1; a combined score of 6–7 points is grade 2; a combined score of 8–9 points is grade 3.

- Do not calculate the score unless all three components are available

Note 6: Code 9 when

- Grade from primary site is not documented
- Clinical workup is not done (for example, cancer is an incidental finding during surgery for another condition)
- Grade checked "not applicable" on CAP Protocol (ifavailable) and no other grade information is available

Note 7: If there is only one grade available and it cannot be determined if it is clinical, pathological, or after neo-adjuvant therapy, assign as a clinical grade and code unknown (9) for pathological grade, and blank for post-therapy grade.
Note 8: If you are assigning an AJCC 8th edition stage group

- Grade is required to assign stage group
- Codes A-D are treated as an unknown grade when assigning AJCC stagegroup
- An unknown grade may result in an unknown stage group

Code	Grade Description
1	G1: Low combined histologic grade (favorable), SBR score of 3–5 points
2	G2: Intermediate combined histologic grade (moderately favorable); SBR score of 6–7 points
3	G3: High combined histologic grade (unfavorable); SBR score of 8–9 points
L	Nuclear Grade I (Low) (in situ only)
M	Nuclear Grade II (interMediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Pathologcial Grade for Breast

Note 1: Pathological grade must not be blank.
Note 2: Assign the highest grade from the primary tumor. If the clinical grade is higher than the grade determined during the pathological time frame, use the grade that was identified during the clinical time frame for both the clinical grade and the pathological grade.
Note 3: Priority order for codes

- Invasive cancers: codes 1-3 take priority over A-D.
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- Do not calculate the score unless all three components are available

Note 6: Code 9 when

- Grade from primary site is not documented
- No resection of the primary site
- Neo-adjuvant therapy is followed by a resection (see post-therapy grade)
- Clinical case only (see clinical grade)
- There is only one grade available and it cannot be determined if it is clinical, pathological,or after neo-adjuvant therapy
- Grade checked “not applicable” on CAP Protocol (ifavailable) and no other grade information is available

Note 7: If you are assigning an AJCC 8th edition stage group

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M	Nuclear Grade II (interMediate) (in situ only)
H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown

Post-Therapy for Breast

Note 1: Leave post-therapy grade blank when

- No neoadjuvant therapy
- Clinical or pathological case only
- There is only one grade available and it cannot be determined if it is clinical, pathological or post-therapy

Note 2: Assign the highest grade from the resected primary tumor assessed after the completion of neoadjuvant therapy.

Note 3: Priority order for codes

- Invasive cancers: codes 1-3 take priority over A-D.
- In situ cancers: codes L, M, H take priority over A-D

Note 4: Scarff-Bloom-Richardson (SBR) score is used for grade. SBR is also referred to as: Bloom-Richardson, Nottingham, Nottingham modification of Bloom-Richardson score, Nottingham modification, Nottingham-Tenovus grade, or Nottingham score.

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- Do not calculate the score unless all three components are available

Note 6: Code 9 when

- Surgical resection is done after neoadjuvant therapy and grade from the primary site is not documented
- Grade checked “not applicable” on CAP Protocol (ifavailable) and no other grade information is available

Note 7: If you are assigning an AJCC 8th edition stage group

- Grade is required to assign stage group
- Codes A-D are treated as an unknown grade when assigning AJCC stagegroup
- An unknown grade may result in an unknown stage group

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H	Nuclear Grade III (High) (in situ only)
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
9	Grade cannot be assessed (GX); Unknown
Blank	See Note 1

Clinical Grade for Prostate

Note 1: Clinical grade must not be blank.

Note 2: Assign the highest grade from the primary tumor assessed during the clinical time frame.

Note 3: Codes 1-5 take priority over A-E.

Note 4: Code 9 when

- Grade from primary site is not documented
- Clinical workup is not done (for example, cancer is an incidental finding during surgery for another condition)
- Grade checked "not applicable" on CAP Protocol (ifavailable) and no other grade information is available

Note 5: If there is only one grade available and it cannot be determined if it is clinical, pathological, or after neo-adjuvant therapy, assign as a clinical grade and code unknown (9) for pathological grade, and blank for post-therapy grade.

Note 6: If you are assigning an AJCC 8th edition stage group

- Grade is required to assign stage group
- Codes A-E are treated as an unknown grade when assigning AJCC stagegroup
- An unknown grade may result in an unknown stage group

Code	**Grade Description**
1	Grade Group 1: Gleason score less than or equal to 6
2	Grade Group 2: Gleason score 7 Gleason pattern 3+4
3	Grade Group 3: Gleason score 7 Gleason pattern 4+3
4	Grade Group 4: Gleason score 8
5	Grade Group 5: Gleason score 9 or 10
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
E	Stated as "Gleason score 7" with no patterns documented or Any Gleason patterns combination equal to 7 not specified in 2 or 3
9	Grade cannot be assessed; Unknown

Pathological Grade for Prostate

Note 1: Pathological grade must not be blank.

Note 2: Assign the highest grade from the primary tumor. If the clinical grade is higher than the grade determined during the pathological time frame, use the grade that was identified during the clinical time frame for both the clinical grade and the pathological grade.

Note 3: Codes 1-5 take priority over A-E.

Note 4: Code 9 when

- Grade from primary site is not documented
- No resection of the primary site
- Neo-adjuvant therapy is followed by a resection (see post-therapy grade)
- Clinical case only (see clinical grade)
- There is only one grade available and it cannot be determined if it is clinical, pathological,or after neo-adjuvant therapy
- Grade checked “not applicable” on CAP Protocol (ifavailable) and no other grade information is available

Note 5: If you are assigning an AJCC 8th edition stage group

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5	Grade Group 5: Gleason score 9 or 10
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated, anaplastic
E	Stated as “Gleason score 7” with no patterns documented or Any Gleason patterns combination equal to 7 not specified in 2 or 3
9	Grade cannot be assessed; Unknown

Post-Therapy Grade for Prostate

Note 1: Leave post-therapy grade blank when

- No neoadjuvant therapy
- Clinical or pathological case only
- There is only one grade available and it cannot be determined if it is clinical, pathological or post-therapy

Note 2: Assign the highest grade from the resected primary tumor assessed after the completion of neoadjuvant therapy.

Note 3: Codes 1-5 take priority over A-E.

Note 4: Code 9 when

- Surgical resection is done after neoadjuvant therapy and grade from the primary site is not documented
- Grade checked "not applicable" on CAP Protocol (ifavailable) and no other grade informationis available

Note 5: If you are assigning an AJCC 8th edition stage group

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A	Well differentiated
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D	Undifferentiated, anaplastic
E	Stated as "Gleason score 7" with no patterns documented or Any Gleason patterns combination equal to 7 not specified in 2 or 3
9	Grade cannot be assessed; Unknown
Blank	See Note 1

Effective January 1, 2018
ICD-O-3 codes, behaviors and terms are site-specific
This is an excerpt from the 2018 ICD-O-3 Coding Table Alpha Order
For purposes of the quiz assume that if the histology you are looking for is not listed, that it is not included in the full list.

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
New Term	8551/3	Acinar adenocarcinoma **(C34. _)**	**Y**	Lung primaries diagnosed prior to 1/1/2018 use code 8550/3 For prostate (all years) see 8140/3
New Term	8140/3	Acinar adenocarcinoma **(C61.9 ONLY)**	**Y**	For prostate only, do not use 8550/3
New Term	8572/3	Acinar adenocarcinoma, sarcomatoid **(C61.9)**	**Y**	
New Term	8550/3	Acinar cell carcinoma	**Y**	Excludes C61.9- see 8140/3
New Term	8316/3	Acquired cystic disease-associated renal cell carcinoma (RCC) **(C64.9)**	**Y**	
New code/term	8158/1	ACTH-producing tumor	**N**	
New Term	8574/3	Adenocarcinoma admixed with neuroendocrine carcinoma **(C53. _)**	**Y**	
Behavior Code/term	8253/2	**Adenocarcinoma in situ, mucinous (C34. _)**	**Y**	**Important note**: lung primaries ONLY: For cases diagnosed 1/1/2018 forward do not use code 8480 (mucinous adenocarcinoma) for in-situ adenocarcinoma, mucinous or invasive mucinous adenocarcinoma.
Behavior code/term	8250/2	**Adenocarcinoma in situ, non-mucinous (C34. _)**	**Y**	
New Term	9110/3	Adenocarcinoma of rete ovarii **(C56.9)**	**Y**	

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
New code/term	9396/3	**Ependymoma, RELA fusion-positive (C71. _)**	**Y**	
New Term	9440/3	Epithelioid glioblastoma **(C71._)**	**Y**	
Behavior code/term	9133/3	**Epithelioid hemangioendothelioma**	**Y**	
New code/term	9542/3	**Epithelioid malignant peripheral nerve sheath tumor (C47.0–C47.6, C47.8, C47.9)**	**Y**	
New Term	8572/3	Fibromatosis-like metaplastic carcinoma **(C50. _)**	**Y**	
New Term	8832/3	Fibrosarcomatous dermatofibrosarcoma protuberans	**Y**	
New code/term	8339/3	**Follicular thyroid carcinoma (FTC), encapsulated angioinvasive (C73.9)**	**Y**	
New code/term	9086/3	**Germ cell tumors with associated hematological malignancy (C37.9)**	**Y**	
Behavior Code/term	9302/3	Ghost cell odontogenic carcinoma **(C41.0, C41.1)**	**Y**	
New Term	9440/3	Glioblastoma, IDH wildtype **(C71._)**	**Y**	
New code/term	9445/3	**Glioblastoma, IDH-mutant (C71._)**	**Y**	
Behavior Code/term	8311/3	Hereditary leiomyomatosis & RCC-associated renal cell carcinoma **(C64.9)**	**Y**	
New Term	8041/3	High-grade neuroendocrine carcinoma **(C54. _, C55.9)**	**Y**	
New Term	8461/3	High-grade serous carcinoma **(C48. _, C56.9, C57.0, C57.1-C57.3)**	**Y**	
New code/term	9741/1	Indolent systemic mastocytosis	**N**	
New Term	8144/3	Intestinal-type adenocarcinoma **(C30.0, C53. _)**	**Y**	
New code/term	9137/3	**Intimal sarcoma**	**Y**	
New Term	8503/3	Intracystic papillary neoplasm with associated invasive carcinoma	**Y**	
New Term	8453/3	Intraductal papillary mucinous neoplasm (IPMN) with an associated invasive carcinoma **(C25. _)**	**Y**	

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
New Term	8453/2	Intraductal papillary mucinous neoplasm with high-grade dysplasia **(C25. _)**	**Y**	
New Term	8503/2	Intraductal papilloma with ductal carcinoma in situ **(C50. _)**	**Y**	
New Term	8520/2	Intraductal papilloma with lobular carcinoma in situ **(C50. _)**	**Y**	
New Term	8503/2	Intraductal tubulopapillary neoplasm **(C25. _)**	**Y**	
New Term	8500/3	**Invasive carcinoma of no special type (C50. _)**	**Y**	
New Term	8500/3	Invasive carcinoma, NST **(C50. _)**	**Y**	
New Term	8343/3	Invasive encapsulated follicular variant of papillary thyroid carcinoma (invasive EFVPTC) **(C73.9)**	**Y**	Cases diagnosed 1/1/2017 forward
New Term	8520/3	Invasive lobular carcinoma **(C50. _)**	**Y**	
New Term	8520/3	Invasive lobular carcinoma, alveolar type **(C50. _)**	**Y**	
New Term	8520/3	Invasive lobular carcinoma, solid type **(C50. _)**	**Y**	
New Term	8520/3	Invasive lobular carcinoma, tubulolobular variant **(C50. _)**	**Y**	
New Term	8500/3	Invasive mammary carcinoma **(C50. _)**	**Y**	
Behavior Code/term	8507/3	**Invasive micropapillary carcinoma (C50. _)**	**Y**	For sites other than C50. _, see 8265/3
New Term	8253/3	**Invasive mucinous adenocarcinoma (C34. _)**	**Y**	**Important note**: lung primaries ONLY: For cases diagnosed 1/1/2018 forward do not use code 8480 (mucinous adenocarcinoma) for in-situ adenocarcinoma, mucinous or invasive mucinous adenocarcinoma.
New Term	8250/3	**Lepidic adenocarcinoma (C34. _)**	**Y**	
New Term	8250/3	Lepidic predominant adenocarcinoma **(C34. _)**	**Y**	
New Term	8120/3	Lipid-rich urothelial carcinoma **(C65.9, C66.9, C67. _, C68. _)**	**Y**	
New Term	8570/3	Low grade adenosquamous carcinoma **(C50. _)**	**Y**	

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
New Term	8571/3	Metaplastic carcinoma with chondroid differentiation **(C50. _)**	**Y**	
New Term	8571/3	Metaplastic carcinoma with osseous differentiation **(C50. _)**	**Y**	
New Term	8575/3	Metaplastic carcinoma with other types mesenchymal differentiation **(C50. _)**	**Y**	
New Term	8120/3	Microcystic urothelial carcinoma **(C65.9, C66.9, C67. _, C68. _)**	**Y**	
New code/term	8265/3	Micropapillary adenocarcinoma **(C34. _)**	**Y**	Cases diagnosed prior to 1/1/2018 use code 8507/3. Code 8265 is not valid for C50._. Use 8507 for micropapillary adenocarcinoma in breast primaries
New code/term	8265/3	**Micropapillary carcinoma, NOS (C18. _, C19.9, C20.9, C34. _)**	**Y**	Cases diagnosed prior to 1/1/2018 use code 8507/3. Code 8265 is not valid for C50._. Use 8507 for micropapillary adenocarcinoma in breast primaries
New code/term	8023/3	Midline carcinoma of children and young adults with NUT rearrangement **(C30.0, C31.9, C34. _)**	**Y**	
New code/term	8257/3	**Minimally invasive adenocarcinoma, mucinous (C34. _)**	**Y**	
New code/term	8256/3	**Minimally invasive adenocarcinoma, non-mucinous (C34. _)**	**Y**	
New Term	8140/3	Minimally invasive adenocarcinoma, NOS **(C34. _)**	**Y**	
Behavior code/term	8311/3	MiT family translocation renal cell carcinoma **(C64.9)**	**Y**	
New code/term	8552/3	**Mixed acinar ductal carcinoma**	**Y**	Cases diagnosed prior to 1/1/2018 use code 8523/3

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
Behavior code/Term	8815/3	**Solitary fibrous tumor/hemangiopericytoma Grade 3 (CNS) (C71. _)**	**Y**	
New Term	8120/3	Squamotransitional cell carcinoma **(C53. _)**	**Y**	
New code/term	8086/3	**Squamous cell carcinoma, HPV-negative (C01.9, C10.2, C10.3, C10.8, C10.9, C31.0–C31.3, C31.9)**	**Y**	
New code/term	8085/3	**Squamous cell carcinoma, HPV-positive (C01.9, C10.2, C10.3, C10.8, C10.9, C31.0–C31.3, C31.9)**	**Y**	
New Term	8200/3	Thymic carcinoma with adenoid cystic carcinoma-like features **(C37.9)**	**Y**	
New Term	8316/3	Tubulocystic renal cell carcinoma **(C64.9)**	**Y**	
New Term	8520/3	Tubulolobular carcinoma **(C50. _)**	**Y**	
New Term	8804/3	Undifferentiated epithelioid sarcoma	**Y**	
New Term	8830/3	Undifferentiated high-grade pleomorphic sarcoma	**Y**	
New Term	8802/3	Undifferentiated pleomorphic sarcoma	**Y**	
New Term	8803/3	Undifferentiated round cell sarcoma	**Y**	
New Term	8801/3	Undifferentiated spindle cell sarcoma	**Y**	
New Term	8805/3	Undifferentiated uterine sarcoma	**Y**	
New Term	8010/3	Urachal carcinoma **(C65.9, C66.9, C67. _, C68. _)**	**Y**	
New Term	8120/3	Urothelial carcinoma with divergent differentiation **(C65.9, C66.9, C67. _, C68. _)**	**Y**	
New Term	8120/3	Urothelial carcinoma with squamous differentiation **(C65.9, C66.9, C67. _, C68. _)**	**Y**	
New Term	8120/3	Urothelial carcinoma with trophoblastic differentiation **(C65.9, C66.9, C67. _, C68. _)**	**Y**	
New Term	8263/3	Villoglandular carcinoma **(C53. _)**	**Y**	
New code/term	8054/3	Warty carcinoma **(C60.0-C60.2, C60.9)**	**Y**	Cases diagnosed prior to 1/1/2018 use code 8051/3 All other sites use 8051/3 2018 forward

Phase I Radiation Primary Treatment Volume

Description: Identifies the primary treatment volume or primary anatomic target treated during the first phase of radiation therapy during the first course of treatment. This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018.

Rationale: Radiation treatment is commonly delivered in one or more phases. Typically, in each phase, the primary tumor or tumor bed is treated. This data item should be used to indicate the primary target volume, which might include the primary tumor or tumor bed. If the primary tumor was not targeted, record the other regional or distant site that was targeted. Draining lymph nodes may also be targeted during the first phase. These will be identified in a separate data item Phase I Radiation to Draining Lymph Nodes [#1505].

This data item provides information describing the anatomical structure targeted by radiation therapy during the first phase of radiation treatment and can be used to determine whether the site of the primary diseases 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. The breakdown and reorganization of the sites will allow for concise reporting.

Allowable values and format: numeric; 00-07, 09-14, 20-26, 29-32, 39-42, 50-68, 70-73, 80-86, 88, 90-99

Revised data item coding instructions:

- Radiation treatment volume will typically be found in the radiation oncologist's summaryletter for the first course of treatment. Determination of the exact treatment volume may require assistance from the radiation oncologist for consistent coding.
- The first phase 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.
- If one or more discrete volumes are treated and one of those includes the primary site, record the treatment to the primary site in this data item.
- A new phase begins when there is a change in target volume, treatment fraction size (i.e., dose given during a session), modality or treatment technique." Any one of these changes will mean that a new radiation plan will be generated in the treatment planning system, and should be coded as a new phase of radiation therapy.
- Note: "online adaptive therapy" means that the shape of the target may change from day to day, but the volume that is being targeted won't change. Just because a treatment plan has been adapted any given day should not be coded as though a new phase of treatment hasbeen initiated.
- Code 00 if the tumor was diagnosed at autopsy.
- Phase I 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 I Radiation to Draining Lymph Nodes data item [#1505].
- Note: When the primary volume is lymph nodes draining lymph nodes are not targeted. Record code 88 in the Phase I Radiation to Draining Lymph Nodes data item [#1505].

Codes:

Code	Label	Definition
00	No radiation treatment	Radiation therapy was not administered to the patient.
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 some combination of hilar, mediastinal, and supraclavicular lymph nodes without concurrent treatment of a visceral organ site. Example situations include mantle or mini-mantle for lymphomas, and 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.
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 some mantle or mini-mantle fields used in lymphoma treatments or some treatments for lymphatic recurrences following definitive treatment for tumors of the head and neck or thoracic regions.
04	Breast/ Chestwall lymph node regions	Radiation is directed primarily to some combination of axillary, supraclavicular, and/or internal mammary lymph node sites WITHOUT concurrent treatment of the breast or chest wall. If the Breast AND Lymph nodes are being treated then choose the primary code for breast and the regional lymph node secondary code 04, breast-chest wall lymph nodes
05	Abdominal lymph nodes	Treatment is directed to some combination of the lymph nodes of the abdomen, including retrocrural, perigastric, peri-hepatic, portocaval and para-aortic nodes. Possible situations might include seminoma, lymphoma or lymph node recurrence following surgical resection of the prostate, bladder or uterus.
06	Pelvic lymph nodes	Treatment is directed to some combination of the lymph nodes of the pelvis, including the common, internal and external iliac, obturator, inguinal and per-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 of 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"
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, including the lips, gingiva, alveolus, buccal mucosa, retromolar trigone, hard palate, floor of mouth and 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.
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.
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".
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 could be used for sarcomas arising from the mediastinum.
40	Breast - whole	Treatment is directed at all of 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.
60	Bladder - whole	Treatment is directed at all of 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 and/or 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. Consider the possibility of this code when you encounter terms like "cryotherapy", "HiFu", "brachytherapy", "focal ablation", "laser therapy" or "radiofrequency therapy".
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’.
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 or cervix.
72	Vagina	Treatment is directed at all or a portion of the vagina. Treatments of urethral primaries should be coded as 'urethra'.
73	Vulva	Treatment is directed at all or a portion of the vulva. Treatments of urethral primaries should be coded as 'urethra'.
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'.
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 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). This excludes the proximal humerus (Shoulder).
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 not fitting 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.
94	Mantle, mini-mantle (obsolete after 2016)	For conversion of historical data only
95	Lower extended field (obsolete after 2016)	For conversion of historical data only
96	Inverted Y (obsolete after 2016)	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.
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.

Phase I Radiation Treatment Modality

Description: Identifies the radiation modality administered during the first phase of radiation treatment delivered during the first course of treatment. This data item is required for CoC-accredited facilities as of cases diagnosed 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. This data item should be used to indicate the radiation modality administered during the first phase of radiation.

Historically, the previously-named Regional Treatment Modality data item [#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 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 treatment summaries.

Allowable values and format: numeric; 00-16, 99, no blanks

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

Revised data item coding instructions:

- Radiation treatment modality will typically be found in the radiation oncologist's summary letter for the first course of treatment. Segregation of treatment components into Phases and determination of the respective treatment modality may require assistance from the radiation oncologist to ensure consistent coding.

- The first phase 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.
- A new phase begins when there is a change in target volume, treatment fraction size (I.e. dose given during a session), modality or treatment technique. Any one of these changes will mean that a new radiation plan will be generated in the treatment planning system, and should be coded as a new phase of radiation therapy.
- For purposes of this data item, photons, x-rays and gamma-rays are equivalent.
- Use code 13 for radioembolization procedures, e.g. intravascular Yttrium-90.
- 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 represent a change in treatment technique. It is extraordinarily rare for change in MV energy to occur during any phase of radiation therapy.
- Change to a volume or modality means a change to subsequent phase. If the volume or modality is changed, this should be coded as a new phase of radiation therapy.
- Note: “online adaptive therapy” means that the shape of the target may change from day to day, but the volume that is being targeted won’t change. Just because a treatment plan has been adapted any given day should not be coded as though a new phase of treatment hasbeen initiated.
- If this data item is coded to any of the External beam codes (01-06), the planning technique must be recorded in the data item Phase I External Beam Radiation Planning Technique [#1502).
- If this data item 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 External Beam Radiation Planning Technique [#1502).
- Note: Do not confuse a radioiodine scan with treatment. Only treatment is recorded in this item.

Phase I Radiation to Draining Lymph Nodes

Description: Identifies the draining lymph nodes treated (if any) during the first phase of radiation therapy delivered to the patient during the first course of treatment. This data item is required for CoC-accredited facilities as of cases diagnosed 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.

Allowable values and format: numeric; 00-08, 88, 99, no blanks

Codes:
00 = No Radiation Treatment
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; No Radiation Treatment to Draining Lymph Nodes
99 = Unknown if any Radiation Treatment to Draining Lymph Nodes; Unknown if radiation treatment administered

Coding instructions:

- Radiation treatment to draining lymph nodes will typically be found in the radiation Oncologist's summary letter for the first course of treatment. Determination of the exact draining lymph nodes may require assistance from the radiation oncologist for consistent coding.
- The first phase 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 00 if the tumor was diagnosed at autopsy.
- Phase I of 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 I Radiation Primary Treatment Volume data item [#1504].
- Note: When the Primary Treatment Volume is lymph nodes draining lymph nodes are not targeted. Record code 88 in this data item.

Phase I External Beam Radiation Planning Technique

Description: Identifies the external beam radiation planning technique used to administer the first phase of radiation treatment during the first course of treatment. This data item is required for CoC-accredited facilities as of cases diagnosed 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 data item [#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 Radiation Treatment Modality [#1506] and Phase I External Beam Radiation Planning Technique [#1502] 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 treatment summaries.

Allowable values and format: numeric; 00-10, 88, 98, 99, no blanks

Codes:

Code	Label	Definition
00	No radiation treatment	Radiation therapy was not administered to the patient.
01	External beam, NOS	The treatment is known to be by external beam, but there is insufficient information to determine the specific modality.
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.
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 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 adaptivetherapy. If a treatment is described as "adaptive" but does notinclude the descriptor "online", this code should not be used.
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.
88	Not Applicable	Treatment not by external beam

98	Other, NOS	Other radiation, NOS; Radiation therapy administered, but the treatment modality is not specified or is unknown.
99	Unknown	It is unknown whether radiation therapy was administered.

Revised data item coding instructions:

- Radiation external beam treatment planning technique will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the planning technique may require assistance from the radiation oncologist to ensure consistent coding.
- The first phase 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.
- A new phase begins when there is a change in target volume, treatment fraction size (I.e. dose given during a session), modality or treatment technique." Any one of these changes will mean that a new radiation plan will be generated in the treatment planning system, and should be coded as a new phase of radiation therapy.
- Note: "online adaptive therapy" means that the shape of the target may change from day to day, but the volume that is being targeted won't change. Just because a treatment plan has been adapted any given day should not be coded as though a new phase of treatment hasbeen initiated. Two new technique codes have been added to capture when online adaptive therapy is occurring: CT guided and MR guided adaptive therapy.
- 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 explicitlymentioned.
- When code 98 is recorded, document the planning technique in the appropriate text dataitem.

Phase I Dose per Fraction

Description: Records the dose per fraction (treatment session) delivered to the patient in the first phase of radiation during the first course of treatment. The unit of measure is centiGray (cGy). This data item is required for CoC-accredited facilities as of cases diagnosed 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. Outcomes are strongly related to the dose delivered.

Allowable values and format: numeric; 00000-99999, no blanks

Codes:
00000 = Radiation therapy was not administered
00001-99997 = Record the actual Phase I dose delivered in cGy
99998 = Not applicable, brachytherapy or radioisotopes administered to the patient
99999 = Regional radiation therapy was administered but dose is unknown, it is unknown whether radiation therapy was administered. Death Certificate only.

Revised data item coding instructions:

- The International Council for Radiation Protection (ICRP) recommends recording doses at the axis point where applicable (opposed fields, four field box, wedged pair, and so on). For maximum consistency in this data item, the ICRP recommendations should be followed whenever possible. Where there is no clear axis point, record the total dose as indicated in the summary chart. Determining the exact dose may require assistance from the radiation oncologist for consistent coding.
- Radiation treatment Phase I dose will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the Phase I dose of radiation therapy may require assistance from the radiation oncologist for consistent coding.
- The first phase 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.
- Record the actual dose delivered (NOT prescribed) as documented in the treatment summary.
- For proton treatment, dosage may occasionally be specified as in cGe units (Cobalt Gray Equivalent) rather than cGy. 1 cGe = 100 cGy (for the Phase I Total Dose, you would need to multiply cGe by 100).
- Note that dose is still occasionally specified in "rads". One rad is equivalent to one centiGray (cGy).
- 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 99998 when brachytherapy or radioisotopes-codes 07-16 for Phase I Treatment Modality [#1506] were administered to the patient.

Examples:

Code	Reason
05000	A patient with Stage III prostate carcinoma received pelvic irradiation to 5,000 cGy followed by a Phase II (boost) prostate irradiation to 7,000 cGy. Record the Phase I dose as 5,000 cGy.
06000	A patient with a left supraclavicular metastasis form a gastric carcinoma received 6,000 cGy to the left supraclavicular region. The dose is calculated at the prescribed depth of 3cm. A secondary calculation shows a Dmax dose of 6,450cGy. Record the Phase I dose reflecting the prescribed dose of 6,000 cGy.
05500	A patient with a Stage II breast carcinoma is treated with the breast intact. Tangent fields are utilized to bring the dose of the breast to 5,500 cGy. The supraclavicular lymph nodes (draining lymph nodes) are treated 4,500 cGy, calculated to a depth of 3cm, and an interstitial Phase II (boost) in the primary tumor bed delivered to a small volume in the breast. Record the primary target of the breast as 5,500 cGy.

Phase I Number of Fractions

Description: Records the total number of fractions (treatment sessions) delivered to the patient in the first phase of radiation during the first course of treatment. This data item is required for CoC-accredited facilities as of cases diagnosed 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.

Allowable values and format: numeric; 000-999, right justified, zero filled

Codes:
000 = Radiation therapy was not administered to the patient.
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.

Revised data item coding instructions:

- The number of fractions or treatments will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the exact number of treatments or fractions delivered to the patient may require assistance from the radiation oncologist for consistent coding.
- The first phase 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.
- Although a fraction or treatment session may include several treatment portals delivered within a relatively confined period of time-usually a few minutes-it is still considered one session.
- Count each separate administration of brachytherapy or implants as a single fraction or treatment.
- Record the actual number of fractions delivered (NOT prescribed), as documented in the treatment summary.
- Code 999 for Death Certificate Only (DCO) cases.
- 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.

Examples:

Code	Reason
025	A patient with breast carcinoma had treatment session in which treatment was delivered to the chest wall and separately to the ipsilateral supraclavicular region for a total of three fraction portals. Twenty-five treatment sessions were given. Record 25 fractions.
025	A patient with Stage IIIB bronchogenic carcinoma received 25 treatments to the left hilum and mediastinum, given in 25 daily fractions over five weeks.
050	A patient with advanced head and neck cancer was treated using "hyperfractionation." 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. Record 50 fractions.
010	The patient was given Mammosite® brachytherapy, repeated I 10 separate sessions. Record 10 fractions.

001	Prostate cancer patient treated with a single administration of seeds. Code as 1 fraction.

Phase I Total Dose

Description: Identifies the total radiation dose delivered to the patient in the first phase of radiation treatment during the first course of treatment. The unit of measure is centiGray (cGy). This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018.

Rationale: To evaluate the patterns of radiation care, it is necessary to capture information describing the prescribed dose of Phase I radiation to the patient during the first course of treatment. Outcomes are strongly related to the total dose delivered.

Allowable values and format: numeric, 000000-999999, right justified, zero filled, no blanks

Codes:
000000 = No therapy administered
000001-999997 = Record the actual total dose delivered in cGy
999998 = Not applicable, brachytherapy or radioisotopes administered to the patient
999999 = Radiation therapy was administered, but the dose is unknown; it is unknown whether radiation therapy was administered

Data item coding instructions:

- The International Council for Radiation Protection (ICRP) recommends recording doses at the axis point where applicable (opposed fields, four field box, wedged pair, and so on). For maximum consistency in this data item, the ICRP recommendations should be followed whenever possible. Where there is no clear axis point, record the total dose as indicated in the summary chart. Determining the exact dose may require assistance from the radiation oncologist for consistent coding.
- Phase I radiation treatment dose will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the Phase I dose of radiation therapy may require assistance from the radiation oncologist for consistent coding.
- The first phase 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.
- Record the actual total dose delivered (NOT prescribed), as documented in the treatment summary. The value recorded for this data item should NOT be auto-calculated within the registry abstraction software.
- For proton treatment, dosage may occasionally be specified as in cGe units (Cobalt Gray Equivalent) rather than cGy. 1 cGe = 100 cGy (for the Phase I Total Dose, you would need to multiply cGe by 100).
- Note that dose is still occasionally specified in "rads". One rad is equivalent to one centiGray (cGy).
- Code 000000, radiation therapy not administered, when diagnosed at autopsy.
- Code 888888 when radioisotopes (codes 13-16) are administered to the patient and recorded in the Phase I Treatment Modality [#1506] data item.
- Code 999999 for Death Certificate Only (DCO) cases.
- 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.

Examples:

Code	Reason
005000	A patient with Stage III prostate carcinoma received pelvic irradiation of 5,000 cGy during Phase I Radiation Treatment. Record the Phase I Total Dose as 5,000 cGy.
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 as 6,000 cGy.
005500	A patient with a Stage II breast carcinoma is treated with the breast intact. Tangent fields are utilized to bring the dose of the breast to 5,500 cGy. The supraclavicular (draining) lymph nodes are treated 4,500 cGy, calculated to a depth of 3 cm, and Phase II radiation treatment in the primary tumor bed is delivered to a small volume in the breast. Record the Phase I Total Dose as 5,500cGy.

Number of Phases of Radiation Treatment to this Volume

Description: Identifies the total number of phases administered to the patient during the first course of treatment. A "phase" consists of one or more consecutive treatments delivered to the same anatomic volume with no change in the treatment technique. Although the majority of courses of radiation therapy are completed in one or two phases (historically, the "regional" and "boost" treatments) there are occasions in which three or more phases are used, most typically with head and neck malignancies. This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018 and later.

Rationale: The number of phases of radiation treatment is used to evaluate patterns of radiation therapy and the treatment schedule

Allowable values and format: 00, 01, 02, 03, 04, 99 numeric; right justified, zero-filled, no blanks

Codes:
00 = No radiation treatment
01 = 1 phase
02 = 2 phases
03 = 3 phases
04 = 4 or more phases
99 = Unknown number of phases; Unknown if radiation therapy administered.

Revised data item coding instructions:

- The number of phases of radiation treatment will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the exact number of phases delivered to the patient may require assistance from the radiation oncologist for consistent coding.

Examples:

Code	Reason
00	Radiation therapy was not administered.
02	Patient with breast carcinoma treated in two phases, the whole breast with opposed x-ray fields (Phase 1) followed by an electron beam boost to the surgical bed (Phase 2).

Radiation Treatment Discontinued Early

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 as of 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 doesn't complete a radiation course as initially intended this is typically commented on within the radiation end of 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.

Allowable values and format: numeric; 00-07, 99, no blanks

Codes:

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.

Revised data item coding instructions:

- Radiation treatment recorded as discontinued will typically be found in theradiation oncologist's summary letter for the first course of treatment.
- 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, if it is unknown whether radiation therapy was administered, or it is a death certificate only case.

Total Dose

Description: Identifies the total radiation dose administered to the patient across all phases during the first course of treatment. The unit of measure is centiGray (cGy). This data item is required for CoC-accredited facilities as of cases diagnosed 01/01/2018 and later.

Rationale: To evaluate the patterns of radiation care, it is necessary to capture information describing the prescribed total dose of radiation during the first course of treatment. Outcomes are strongly related to the dose delivered.

Allowable values and format: numeric; 000000-999999, right justified, zero filled, no blanks

Codes:
000000 = No therapy administered
000001-999997 = Record the actual dose delivered in cGy
999998 = Not applicable, brachytherapy or radioisotopes administered to the patient
999999 = Radiation therapy was administered, but the dose is unknown; it is unknown whether radiation therapy was administered

Revised data item coding instructions:

- The International Council for Radiation Protection (ICRP) recommends recording doses at the axis point where applicable (opposed fields, four field box, wedged pair, and so on). For maximum consistency in this data item, the ICRP recommendations should be followed whenever possible. Where there is no clear axis point, record the total dose as indicated in the summary chart. Determining the exact dose may require assistance from the radiation oncologist for consistent coding.
- Total radiation treatment dose will typically be found in the radiation oncologist's summary letter for the first course of treatment. If the total is not documented, add the dose from each phase (I, II, III, or IV or more) and document the total. Determination of the total dose of radiation therapy may require assistance from the radiation oncologist for consistent coding.
- For proton treatment, dosage may occasionally be specified as in cGe units (Cobalt Gray Equivalent) rather than cGy. 1 cGe = 100 cGy (for the Phase I Total Dose, you would need to multiply cGe by 100).
- Note that dose is still occasionally specified in "rads". One rad is equivalent to one centiGray (cGy).
- 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 00000, radiation therapy not administered, when diagnosed at autopsy.