Effective with cases diagnosed January 1, 2018



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Stephanie Hill, MPH Loretta Huston, BS, CTR Tiffany Janes, BA, CTR

Bobbi Jo Matt, BS, RHIT, CTR Patrick Nicolin, BA, CTR Nektarios Pappas, MD, CTR Lisa A. Pareti, BS, RHIT, CTR Cathryn R. Phillips, BA, CTR Elizabeth Ramirez-Valdez, CTR

Winny Roshala, BA, CTR Frances E. Ross, BA, CTR Candis Sanders, BS, CTR Christina Schwarz, BA, CTR

Steve Scoppa, BS

Sheree Serrian, BBA, RN, CTR

Laine Suggs, CTR

Taina Valone, RHIA, CTR Kacey Wigren, RHIT, CTR **IMS**

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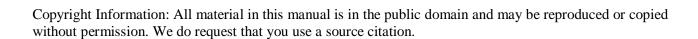


Table of Contents

Preface to the 2018 SEER Program Coding and Staging Manual	1
Effective Date	1
Summary of Changes	1
Submitting Questions	3
Collection and Storage of Date Fields	4
Transmission Instructions for Date Fields	4
SEER Site-Specific Factors 1 – 6	4
Introduction	5
SEER Program	5
SEER Coding And Staging Manual Contents	5
Reportability	6
Dates of Diagnosis/Residency	6
Reportable Diagnosis List	6
Diagnosis Prior to Birth	8
Disease Regression	8
Reportable Examples	8
Non-Reportable Examples	8
Instructions for Reporting Solid Tumors	9
Cases Diagnosed Clinically Are Reportable	9
Brain or CNS Neoplasms	9
Casefinding Lists	9
Ambiguous Terminology	10
How to Use Ambiguous Terminology for Case Ascertainment	11
Instructions for Hematopoietic and Lymphoid Neoplasms	13
Changing Information on the Abstract	14
Determining Multiple Primaries	15
Solid Tumors	15
Hematopoietic and Lymphoid Neoplasms	15
Transplants	15
Section I Basic Record Identification	17
SEER Participant	18
Patient ID Number	20
Record Type	21
SEER Record Number	22
SEER Coding SystemOriginal	23
SEER Coding SystemCurrent	24

25
26
29
30
31
32
33
35
36
37
38
39
40
41
42
43
44
45
47
48
49
50
51
52
53
54
55
56
57
58
60
61
62
63
64
69
71
72
iv

Computed Ethnicity	73
Computed Ethnicity Source	74
NHIA Derived Hispanic Origin	75
Sex	76
Marital Status at Diagnosis	77
Primary Payer at Diagnosis	78
Section IV Description of this Neoplasm	80
Date of Diagnosis	81
Date of Diagnosis Flag	86
Sequence NumberCentral	87
Primary Site	91
Laterality	95
Diagnostic Confirmation	98
Morphology	101
Histologic Type ICD-O-3	102
Behavior Code	104
Grade Clinical	107
Grade Pathological	108
Grade Post Therapy	109
Tumor SizeClinical	110
Tumor SizePathologic	113
ICD-O-2 Conversion Flag	117
ICD-O-3 Conversion Flag	118
Section V Stage of Disease at Diagnosis	119
Stage Data Items	120
Lymph-vascular Invasion	121
Mets at DiagnosisBone	123
Mets at DiagnosisBrain	125
Mets at DiagnosisLiver	127
Mets at DiagnosisLung	129
Mets at DiagnosisDistant Lymph Node(s)	131
Mets at DiagnosisOther	133
Extent of Disease Data Items	135
Extent of Disease Primary Tumor	136
Extent of Disease Regional Nodes	137
Extent of Disease Metastases	138
Summary Stage	139
Summary Stage 2018	140

Derived Summary Stage 2018	141
Section VI Stage-related Data Items	142
SEER Site-specific Factor 1	143
Additional Stage-related Data Items for 2018	144
Section VII First Course of Therapy	146
First Course of Therapy	147
Date Therapy Initiated	151
Date Therapy Initiated Flag	154
Treatment Status	155
Date of First Surgical Procedure	156
Date of First Surgical Procedure Flag	157
Date of Most Definitive Surgical Resection of the Primary Site	158
Date of Most Definitive Surgical Resection of the Primary Site Flag	159
Surgery of Primary Site	160
Surgical Margins of the Primary Site	162
Scope of Regional Lymph Node Surgery	163
Date of Sentinel Lymph Node Biopsy	168
Date of Sentinel Lymph Node Biopsy Flag	169
Sentinel Lymph Nodes Examined	170
Sentinel Lymph Nodes Positive	171
Date of Regional Lymph Node Dissection	172
Date of Regional Lymph Node Dissection Flag	173
Regional Nodes Positive	174
Regional Nodes Examined	177
Surgical Procedure of Other Site	180
Reason for No Surgery of Primary Site	181
Date Radiation Started	184
Date Radiation Started Flag	185
Radiation Treatment ModalityPhase I, II, III	186
Radiation Sequence With Surgery	188
Reason for No Radiation	190
Date Systemic Therapy Started	191
Date Systemic Therapy Started Flag	192
Date Chemotherapy Started	193
Date Chemotherapy Started Flag	194
Chemotherapy	195
Date Hormone Therapy Started	201
Date Hormone Therapy Started Flag	202

Hormone Therapy	203
Date Immunotherapy Started	200
Date Immunotherapy Started Flag	20°
Immunotherapy	208
Hematologic Transplant And Endocrine Procedures	21
Systemic Treatment/Surgery Sequence	214
Date Other Treatment Started	210
Date Other Treatment Started Flag	217
Other Therapy	218
Section VIII Follow Up Information	22
Death Clearance Instructions	222
Date of Last Follow-Up or of Death	223
Date of Last Follow-Up or Death Flag	220
Vital Status	227
ICD Code Revision Used for Cause of Death	228
Underlying Cause of Death	229
Type of Follow-Up	233
Survival Data Items	232
Section IX Administrative Codes	233
Site/Type Interfield Review	234
Histology/Behavior Interfield Review	233
Age/Site/Histology Interfield Review	230
Sequence Number/Diagnostic Confirmation Interfield Review	23
Site/Histology/Laterality/Sequence Interrecord Review	238
Surgery/Diagnostic Confirmation Interfield Review	239
Type of Reporting Source/Sequence Number Interfield Review	240
Sequence Number/Ill-Defined Site Interfield Review	24
Leukemia or Lymphoma/Diagnostic Confirmation Interfield Review	242
Over-ride Flag for Name/Sex	243
Over-ride Flag for Site/Behavior (IF39)	244
Over-ride Flag for Site/EOD/Diagnosis Date (IF40)	245
Over-ride Flag for Site/Laterality/EOD (IF41)	240
Over-ride Flag for Site/Laterality/Morphology (IF42)	24
Over-ride Flag for TNM Tis	248
Over-ride Flag for Site/TNM-Stage Group	249

Preface to the 2018 SEER Program Coding and Staging Manual

The 2018 Surveillance, Epidemiology and End Results (SEER) Program Coding and Staging Manual may be downloaded in electronic format from the SEER website: http://www.seer.cancer.gov/tools/codingmanuals.

Effective Date

The 2018 SEER Program Coding and Staging Manual is effective for cases diagnosed January 1, 2018 and forward. Previous editions of this manual are available on the SEER website.

Summary of Changes

Extent of Disease and Summary Stage

Beginning in 2018, Extent of Disease (EOD) and Summary Stage data items are being incorporated into cancer staging.

Site-Specific Data Items

Data items formerly referred to as site-specific factors (SSFs) were assigned to specific cancer sites. SSFs have been transitioned to individual data items called site-specific data items (SSDIs) that can be utilized across cancer sites in 2018.

Solid Tumor Rules

The 2018 SEER Multiple Primary/Histology Rules are referred to as the Solid Tumor Rules.

The major changes and additions to the 2018 SEER Program Coding and Staging Manual include

Reportability

Reportable and non-reportable examples moved to Appendix E

Appendix E.1: Reportable Examples

Appendix E.2: Non-reportable Examples

Date of Diagnosis

Date of a suspicious cytology if followed by a definitive diagnosis may be used as the date of diagnosis

Sections added

Changing Information on the Abstract Section VI: Stage-related Data Items

Section modified

Reportability: Ambiguous Terminology Lists: References of Last Resort added

Data items added

Section II: Information Source

CoC Accredited Flag

Section III: Demographic Information

County at Diagnosis Analysis

State at Diagnosis Geocode 1970/80/90

State at Diagnosis Geocode 2000

State at Diagnosis Geocode 2010

Geo Location ID 1970/80/90

Geo Location ID 2000

Geo Location ID 2010

Rural Urban Commuting Area--Tract Level 2000

Rural Urban Commuting Area--Tract Level 2010

Urban Rural Indicator Code--Tract Level 2000

Urban Rural Indicator Code--Tract Level 2010

Place of Death--State

Place of Death--Country

Section IV: Description of this Neoplasm

Grade Clinical

Grade Pathological

Grade Post Therapy

Section V: Stage of Disease at Diagnosis

Extent of Disease Primary Tumor

Extent of Disease Regional Nodes

Extent of Disease Metastases

Summary Stage 2018

Derived Summary Stage 2018

Section VII: First Course of Therapy

Date of Most Definitive Surgical Resection of the Primary Site

Date of Most Definitive Surgical Resection of the Primary Site Flag

Date of Sentinel Lymph Node Biopsy

Date of Sentinel Lymph Node Biopsy Flag

Sentinel Lymph Nodes Examined

Sentinel Lymph Nodes Positive

Date of Regional Lymph Node Dissection

Date of Regional Lymph Node Dissection Flag

Radiation Treatment Modality--Phase I, II, III

Reason for No Radiation

Section VIII: Administrative Codes

Over-ride Flag for Name/Sex

Over-ride Flag for TNM Tis

Over-ride Flag for Site/TNM-Stage Group

Data items moved

Moved from Stage of Disease at Diagnosis (separate 2016 document) to Description of this Neoplasm (main document)

Tumor Size--Clinical

Tumor Size--Pathologic

Moved from Stage of Disease at Diagnosis (separate 2016 document) to Stage of Disease at Diagnosis (main document)

Lymph-vascular Invasion

Mets at Diagnosis--Bone

Mets at Diagnosis--Brain

Mets at Diagnosis--Liver

Mets at Diagnosis--Lung

Mets at Diagnosis--Distant Lymph Node(s)

Mets at Diagnosis--Other

Moved from Stage of Disease at Diagnosis (separate 2016 document) to First Course of Treatment (main document)

Regional Nodes Positive Regional Nodes Examined

Data items deleted

County at Diagnosis Geocode 2020 Grade, Differentiation, or Cell Indicator

Radiation

Over-ride Summary Stage/Nodes Positive

Over-ride Summary Stage/TNM-N

Over-ride Summary Stage/TNM-M

Data items modified

County at Diagnosis Geocode 1970/80/90 (name updated) Over-ride Flag for Site/Behavior (IF39) (name updated)

Codes added/modified

Record Type

SEER Coding System--Current

SEER Coding System--Original

County at Diagnosis Geocode 1970/80/90

County at Diagnosis Geocode 2000

County at Diagnosis Geocode 2010

Sequence Number—Central

Lymph-vascular Invasion

Hematologic Transplant and Endocrine Procedures

Vital Status

ICD Code Revision Used for Cause of Death

Appendices modified

Appendix C Breast Coding Guidelines

Appendix C Breast Surgery Codes

Appendix C Skin Surgery Codes

New Appendix

Appendix E

Appendix E.1 Reportable Examples

Appendix E.2 Non-reportable Examples

Submitting Questions

Submit technical questions, suggestions, and revisions related to this manual to <u>Ask A SEER Registrar</u> on the SEER website. SEER regions may also submit technical questions to NCI SEER inquiry system using the web-based <u>SINO system</u>. Relevant questions and answers from Ask A SEER Registrar and from the SINO system will be incorporated into the next edition of the SEER manual.

Note: See the <u>American College of Surgeons Commission on Cancer CAnswer Forum</u> for questions about **AJCC TNM staging**, the **Site-Specific Data Items**, and **data items not required by SEER**. SEER required data items are listed here: http://datadictionary.naaccr.org/?c=8.

Collection and Storage of Date Fields

Dates may be collected and stored in any format, including the traditional format, (month, day, year [MMDDYYYY]), or the recommended date format, (year, month, day [YYYYMMDD]). The recommended format must be used for transmission (see Transmission Instructions for Date Fields below). See the 2010 NAACCR Implementation Guidelines and Recommendations for converting dates collected and stored in the traditional format to the recommended format and vice versa, and for deriving the date flags from information collected in the traditional format.

Transmission Instructions for Date Fields

As of January 1, 2010, date fields must be transmitted in the year, month, day format (YYYYMMDD). The transmission requirements are intended to improve the interoperability, or communication, of cancer registry data with other electronic record systems. Date fields are fixed-length and left-justified. Replace any missing component with spaces. If there are no known date components, the date field will be completely blank.

For example

- YYYYMMDD when complete date is known and valid
- YYYYMM when year and month are known and valid, and day is unknown
- YYYY when year is known/estimated, and month and day are unknown
- Blank when no known date applies

Date flags associated with each date field were added as new data items in 2010. The date flags are used when all eight places of a date field are blank. The flags explain why the field is blank. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

Note: Date of Diagnosis cannot be entirely blank. See the specific coding instructions for each date field.

Most SEER registries collect the month, day, and year. When the full date (YYYYMMDD) is transmitted for Date of Diagnosis and/or Date of Last Follow-Up or of Death, the seventh and eighth digits will be held confidentially and only used for survival calculations when received by NCI SEER. The corresponding date flag is not affected (it will remain blank).

SEER Site-Specific Factors 1 – 6

Six data items have been set aside as place holders. Five of these data items are not in use and must be left blank. SEER Site-Specific Factor 1 is reserved for capturing information on human papilloma virus (HPV) status. These SEER site-specific factors are not part of the Collaborative Stage Data Collection System.

NAACCR Item#	Item Name	Codes/Data Collected
3700	SEER Site-Specific Factor 1	HPV
3702	SEER Site-Specific Factor 2	Blank
3704	SEER Site-Specific Factor 3	Blank
3706	SEER Site-Specific Factor 4	Blank
3708	SEER Site-Specific Factor 5	Blank
3710	SEER Site-Specific Factor 6	Blank

Introduction

SEER Program

Two programs, the End Results Group and the Third National Cancer Survey, were predecessors of the Surveillance, Epidemiology, and End Results (SEER) Program.

SEER publishes the 2018 SEER Program Coding and Staging Manual to provide instructions and descriptions that are detailed enough to promote consistent abstracting and coding.

SEER Coding And Staging Manual Contents

The 2018 SEER Program Coding and Staging Manual includes data item descriptions, codes, and coding instructions for cases diagnosed January 1, 2018 and forward as reported by SEER registries. For all cases diagnosed on or after January 1, 2018, the instructions and codes in this manual take precedence over all previous instructions and codes.

The 2018 SEER Program Coding and Staging Manual explains the format and the definitions of the data items required by SEER. Documentation and codes for historical data items can be found in earlier versions of the SEER Program Code Manual. Earlier versions are available on the SEER website.

This coding manual does not prevent SEER contract registries or other registries that follow SEER rules from collecting additional data items useful for those regions.

Data items that are not required for 2018 diagnoses but were collected in years prior to 2018 must be transmitted to SEER as blanks for cases diagnosed in 2018 and subsequent years. Descriptions of historic data items, allowable codes, and coding rules can be found in historic coding manuals on the <u>SEER website</u>.



Reportability

Dates of Diagnosis/Residency

SEER registries are required to collect data on persons who are diagnosed with cancer and who, at the time of diagnosis, are **residents** of the geographic area covered by the SEER registry. Cases diagnosed on or after January 1, **1973** are reportable to SEER. Registries that joined the SEER Program after 1973 have different reporting start dates specified in their contracts. All cases meeting this criteria are reportable to SEER, including non-analytic cases.

Reportable Diagnosis List

Definition of Reportable: Meets the criteria for inclusion in a registry. Reportable cases are cases that the registry is required to collect and report. Reporting requirements for SEER registries are established by NCI SEER. A "Reportable List" includes all diagnoses to be reported by the registry to NCI SEER.

1. Malignant Histologies (In Situ and Invasive)

- a. Report all histologies with a **behavior code** of /2 or /3 in the *International Classification* of *Diseases for Oncology*, Third Edition (ICD-O-3) and in approved ICD-O-3 updates, except as noted in section 1.b. of this manual
 - i. Carcinoid, NOS of the appendix is reportable. As of 01/01/2015, the ICD-O-3 behavior code changed from /1 to /3.
 - ii. The following diagnoses are reportable (not a complete list)

Lobular carcinoma in situ (LCIS) of breast

Intraepithelial neoplasia, grade III

Examples: (not a complete list)

- Anal intraepithelial neoplasia III (AIN III) of the anus or anal canal (C210-C211)
- High grade biliary intraepithelial neoplasia (BiIN III) of the gallbladder (C239)
- Laryngeal intraepithelial neoplasia III (LIN III) (C320-C329)
- Lobular neoplasia grade III (LN III)/lobular intraepithelial neoplasia grade III (LIN III) breast (C500-C509)
- Pancreatic intraepithelial neoplasia (PanIN III) (C250-C259)
- Penile intraepithelial neoplasia, grade III (PeIN III) (C600-C609)
- Squamous intraepithelial neoplasia III (SIN III) excluding cervix and skin sites coded to C44_
- Vaginal intraepithelial neoplasia III (VAIN III) (C529)
- Vulvar intraepithelial neoplasia III (VIN III) (C510-C519)
- iii. Report Pilocytic/Juvenile astrocytomas; code the histology and behavior as 9421/3
- iv. Non-invasive mucinous cystic neoplasm (MCN) of the pancreas with high grade dysplasia is reportable. For neoplasms of the pancreas, the term MCN with high grade dysplasia replaces the term mucinous cystadenocarcinoma, non-invasive.
- v. Mature teratoma of the testes in adults is malignant and reportable as 9080/3

- vi. **Urine** cytology positive for malignancy is reportable for diagnoses in 2013 and forward
 - *Exception*: When a subsequent biopsy of a urinary site is negative, do not report.
 - Code the primary site to C689 in the absence of any other information
 - Do not implement new/additional casefinding methods to capture these cases

Do not report cytology cases with ambiguous terminology (see page 10 for ambiguous terms)

- vii. GIST tumors and thymomas are reportable when there is evidence of multiple foci, lymph node involvement or metastasis
- b. Do not report (Exceptions to reporting requirements)
 - i. **Skin** primary (C440-C449) with any of the following histologies

Malignant neoplasm (8000-8005)

Epithelial carcinoma (8010-8046)

Papillary and squamous cell carcinoma (8050-8084)

AIN III (8077) arising in perianal skin (C445)

Basal cell carcinoma (8090-8110)

Note: If the registry collects basal or squamous cell carcinoma of **skin** sites (C440-C449), sequence them in the 60-99 range and do not report to SEER.

ii. Carcinoma **in situ** of **cervix** (/2), cervical intraepithelial neoplasia (**CIN III**) or SIN III of the cervix (C530-C539)

Note: Collection stopped effective with cases diagnosed 01/01/1996 and later, except as required by individual contracts.

iii. Prostatic intraepithelial neoplasia (PIN III) (C619)

Note: Collection **stopped** effective with cases diagnosed 01/01/2001 and later.

2. Benign/Non-Malignant Histologies

- a. See Required Sites for Benign and Borderline Primary Intracranial and Central Nervous System Tumors table
- b. Report **Pilocytic/Juvenile astrocytomas**; code the histology and behavior as 9421/3
- c. Report **benign** and **borderline** primary **intracranial** and **central nervous system** (CNS) tumors with a behavior code of /0 or /1 in ICD-O-3, **effective with cases diagnosed 01/01/2004** and later. See the table below for the specific sites.
- d. **Neoplasm and tumor** are reportable terms for brain and CNS because they are listed in ICD-O-3 and approved ICD-O-3 updates with behavior codes of /0 and /1

Note: Benign and borderline tumors of the cranial bones (C410) are **not reportable**.

Table. Required Sites for Benign and Borderline Primary Intracranial and Central Nervous System Tumors

General Term	Specific Sites	ICD-O-3 Topography Code
Meninges	Cerebral meninges	C700
	Spinal meninges	C701
	Meninges, NOS	C709
Brain	Cerebrum	C710
	Frontal lobe	C711
	Temporal lobe	C712
	Parietal lobe	C713
	Occipital lobe	C714
	Ventricle, NOS	C715
	Cerebellum, NOS	C716
	Brain stem	C717
	Overlapping lesion of brain	C718
	Brain, NOS	C719
Spinal cord, cranial nerves, and other parts of	Spinal cord	C720
the central nervous system	Cauda equina	C721
	Olfactory nerve	C722
	Optic nerve	C723
	Acoustic nerve	C724
	Cranial nerve, NOS	C725
	Overlapping lesion of brain and	
	central nervous system	C728
	Nervous system, NOS	C729
Pituitary, craniopharyngeal duct, and pineal	Pituitary gland	C751
gland	Craniopharyngeal duct	C752
	Pineal gland	C753

Diagnosis Prior to Birth

SEER reportability requirements apply to diagnoses made in utero. Diagnoses made in utero are reportable **only when the pregnancy results in a live birth**. In the absence of documentation of stillbirth, abortion or fetal death, assume there was a live birth and report the case.

Disease Regression

When a reportable diagnosis is confirmed prior to birth and disease is not evident at birth due to regression, accession the case based on the pre-birth diagnosis.

Reportable Examples

Refer to Appendix E.1 for reportable examples.

Non-Reportable Examples

Refer to Appendix E.2 for non-reportable examples.

Instructions for Reporting Solid Tumors

Instructions in this manual apply to solid tumors. For hematopoietic and lymphoid neoplasms, see the Reportability Instructions in the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database*.

Cases Diagnosed Clinically Are Reportable

In the absence of a histologic or cytologic confirmation of a reportable neoplasm, accession a case based on the **clinical diagnosis** (when a recognized medical practitioner says the patient has a cancer, carcinoma, malignant neoplasm, or reportable neoplasm). A clinical diagnosis may be recorded in the final diagnosis on the face sheet or other parts of the medical record.

Note: A pathology report normally takes precedence over a clinical diagnosis. If the patient has a negative biopsy, the case would **not** be reported.

Exceptions

- 1. Patient receives **treatment** for cancer. Accession the case.
 - *Note*: Standard treatments for cancer may be given for non-malignant conditions. Follow back with the physician to clarify if needed.
- 2. It has been **six months or longer** since the negative biopsy, and the physician continues to call this a reportable disease. Accession the case.

Brain or CNS Neoplasms

A brain or a CNS neoplasm identified only by diagnostic imaging is reportable.

Neoplasm and **tumor** are **reportable** terms for brain and CNS because they are listed in ICD-O-3 with behavior codes of /0 and /1

Mass and **lesion** are **not** reportable terms for brain and CNS because they are **not** listed in ICD-O-3 with behavior codes of /0 or /1

Casefinding Lists

Current and previous <u>casefinding lists</u> are available on the SEER website. Use the casefinding lists to screen prospective cases and identify cancer cases for inclusion in the registry. It is important to include all casefinding sources when searching for reportable cases.

Sources include:

- Inpatient/Outpatient Admission/Discharge Documents
- Pathology/Cytology Pathology Reports
- Surgery Logs/Schedules
- Radiology
- Nuclear Medicine
- Radiation Therapy Logs
- Chemotherapy Outpatient Logs
- Emergency Room Records
- Autopsy Reports
- Pain Clinic Logs

A casefinding list is **not** the same as a <u>reportable list</u>. Casefinding lists are intended for searching a variety of cases so as not to miss any reportable cases.

Definition of **Casefinding** (case ascertainment): Process of identifying all reportable cases through review of source documents and case listings. Casefinding covers a range of cases that need to be assessed to determine whether or not they are reportable.

Ambiguous Terminology

Ambiguous terminology may originate in any source document, such as a pathology report, radiology report, or clinical report. The terms listed below are reportable when they are used with a term such as cancer, carcinoma, sarcoma, etc. Ambiguous terms not listed below are not reportable.

Cytology

Do **not** accession a case based ONLY on **suspicious** cytology. Follow back on cytology diagnoses using ambiguous terminology is strongly recommended.

Note: "Suspicious cytology" means any cytology report diagnosis that uses an ambiguous term, including ambiguous terms that are listed as reportable in this manual.

Exception: This is a change to previous instructions. The date of a suspicious cytology may be used as the date of diagnosis when a definitive diagnosis follows the suspicious cytology. See Date of Diagnosis for more information.

Cytology refers to the microscopic examination of cells in body fluids obtained from aspirations, washings, scrapings, and smears; usually a function of the pathology department.

Important: Accession cases with cytology diagnoses that are positive for malignant cells.

Ambiguous Terms for Reportability

Apparent(ly)

Appears

Comparable with

Compatible with

Consistent with

Favor(s)

Malignant appearing

Most likely

Presumed

Probable

Suspect(ed)

Suspicious (for)

Typical (of)

Do not substitute synonyms such as "supposed" for presumed or "equal" for comparable. Do not substitute "likely" for "most likely."

There may be ambiguous terms preceded by a modifier, such as "mildly" suspicious. In general, ignore modifiers or other adjectives and accept the reportable ambiguous term.

Ambiguous Terminology Lists: References of Last Resort

This section clarifies the use of Ambiguous Terminology as listed in *STORE: 2018* for case reportability and staging in Commission on Cancer (CoC)-accredited programs. When abstracting, registrars are to use the "Ambiguous Terms at Diagnosis" list with respect to case reportability, and the "Ambiguous Terms Describing Tumor Spread" list with respect to tumor spread for staging purposes. However, these lists need 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 lists 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.

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 lists continue to be used in CoC-accredited programs and maintained by CoC as "references of last resort."

How to Use Ambiguous Terminology for Case Ascertainment

- 1. **In Situ and Invasive** (Behavior codes /2 and /3)
 - a. If any of the reportable **ambiguous terms precede** a word that is **synonymous** with an in situ or invasive tumor (e.g., cancer, carcinoma, malignant neoplasm, etc.), accession the case.

Example: The pathology report says: Prostate biopsy with markedly abnormal cells that are typical of adenocarcinoma. Accession the case.

Negative Example: The final diagnosis on the outpatient report reads: Rule out pancreatic cancer. Do not accession the case.

- b. Discrepancies
 - i. Accession the case based on the reportable ambiguous term when there are reportable and non-reportable ambiguous terms in the medical record
 - Do not accession a case when the original source document used a nonreportable ambiguous term and subsequent documents refer to history of cancer

Example: Report from the dermatologist is "possible melanoma." Patient admitted later for unrelated procedure and physician listed history of melanoma. Give priority to the information from the dermatologist and do not report this case. "Possible" is **not** a reportable ambiguous term. The later information is less reliable in this case.

ii. Accept the reportable term and accession the case when there is a single report in which both reportable and non-reportable terms are used

Example: Abdominal CT reveals a 1 cm liver lesion. "The lesion is consistent with hepatocellular carcinoma" appears in the discussion section of the report. The final diagnosis is "1 cm liver lesion, possibly hepatocellular carcinoma." Accession the

case. "Consistent with" is a reportable ambiguous term. Accept "consistent with" over the non-reportable term "possibly."

c. Do **not** accession a case based ONLY on **suspicious** cytology

Note: "Suspicious cytology" means any cytology report diagnosis that uses an ambiguous term, including ambiguous terms that are listed as reportable on the preceding page.

Follow back on cytology diagnoses using ambiguous terminology is strongly recommended.

Cytology refers to the microscopic examination of cells in body fluids obtained from aspirations, washings, scrapings, and smears; usually a function of the pathology department.

Important: Accession cases with cytology diagnoses that are **positive** for malignant cells.

- d. Use the reportable ambiguous terms when **screening** diagnoses on pathology reports, operative reports, scans, mammograms, and other diagnostic testing with the exception of tumor markers
 - i. Do not accession a case when resection, excision, biopsy, cytology, or physician's statement proves the ambiguous diagnosis is not reportable
 - **Example 1:** Mammogram shows calcifications suspicious for intraductal carcinoma. The biopsy of the area surrounding the calcifications is negative for malignancy. Do not accession the case.
 - **Example 2:** CT report states "mass in the right kidney, highly suspicious for renal cell carcinoma." A malignant neoplasm cannot be excluded." Discharged back to the nursing home and no other information is available. Do not accession the case. The suspicious CT finding was biopsied and not proven to be malignant. "Suggestive of" is not a reportable ambiguous term.
 - **Example 3:** Stereotactic biopsy of the left breast is "focally suspicious for DCIS" and is followed by a negative needle localization excisional biopsy. Do not accession the case. The needle localization excisional biopsy was performed to further evaluate the suspicious stereotactic biopsy finding. The suspicious diagnosis was proven to be false.
 - **Example 4:** Esophageal biopsy with diagnosis of "focal areas suspicious for adenocarcinoma in situ." Diagnosis on partial esophagectomy specimen "with foci of high grade dysplasia; no invasive carcinoma identified." Do not accession the case. The esophagectomy proved that the suspicious biopsy result was false.
- 2. **Benign** and **borderline** primary **intracranial** and **CNS** tumors
 - a. Use the "Ambiguous terms that are reportable" list above to identify benign and borderline primary intracranial and CNS tumors that are reportable
 - b. **Neoplasm** and **tumor** are **reportable** terms for brain and CNS because they are listed in ICD-O-3 with behavior codes of /0 and /1
 - c. Accession the case when any of the reportable **ambiguous terms precede** either the word "**tumor**" or the word "**neoplasm**"
 - *Example:* The mass on the CT scan is consistent with pituitary tumor. Accession the case.
 - d. Mass and lesion are not reportable terms for brain and CNS because they are not listed in ICD-O-3 with behavior codes of /0 or /1
 - e. **Discrepancies**

- i. Accession the case based on the reportable ambiguous term when there are reportable and non-reportable ambiguous terms in the medical record
 - 1. Do not accession a case when subsequent documents refer to history of tumor and the original source document used a **non-reportable** ambiguous term
- ii. Accept the reportable term and accession the case when there is a single report and one section of a report uses a reportable term such as "apparently" and another section of the same report uses a term that is not on the reportable list

Exception: Do not accession a case based ONLY on ambiguous **cytology** (the reportable term is preceded by an ambiguous term such as apparently, appears, compatible with, etc.).

- f. Use these terms when **screening** diagnoses on pathology reports, scans, ultrasounds, and other diagnostic testing other than tumor markers
 - Do not accession the case when resection, excision, biopsy, cytology or physician's statement proves the ambiguous diagnosis is not reportable

Instructions for Hematopoietic and Lymphoid Neoplasms

See the Reportability Instructions in the <u>Hematopoietic and Lymphoid Neoplasm Coding Manual and</u> Database.

Changing Information on the Abstract

The information originally collected on the abstract should be changed or modified under the following circumstances

- 1. To **correct** coding or abstracting **errors** (for example, errors found during quality control activities)
- 2. When clarifications or rule changes retroactively affect data item code.

Example: SEER adds codes to a data item and asks the registries to review a set of cases and update using the new codes.

- 3. **When better information** is available later
 - **Example 1:** Consults from specialty labs, pathology report addenda or comments or other information have been added to the chart. Reports done during the diagnostic workup and placed on the chart after the registrar abstracted the information may contain valuable information. Whenever these later reports give better information about the histology, grade of tumor, primary site, etc., change the codes to reflect the better information.
 - **Example 2:** The primary site was recorded as unknown at the time of diagnosis. At a later date, the physician determines that the cancer is primary to the testis. Change the primary site from unknown to testis.
 - **Example 3:** The original diagnosis was in situ. Metastases are diagnosed at a later date. Change the behavior code for the original diagnosis from in situ to invasive when **no new primary has been diagnosed** in the interim.
 - **Example 4:** Patient seen in Hospital A. The pathologic diagnosis was negative for malignancy. Patient goes to Hospital B and the slides from Hospital A are re-read. The diagnosis at Hospital B is reportable. Hospital B sends their slide report back to Hospital A. Hospital A reports the case based on the info from Hospital B. Enter supporting documentation in a text field.
 - **Example 5:** Rectal polyps excised and found to have adenocarcinoma in situ in a tubulovillous adenoma and a tubulovillous adenoma with focal carcinoma in situ. The behavior code is in situ (/2). Eight months later, a rectal polyp is removed and diagnosed as adenocarcinoma with mucinous features, infiltrating into submucosa, seen in a background of tubulovillous adenoma. Change the behavior code to malignant (/3).
- 4. When the date of diagnosis is confirmed in retrospect to be earlier than the original date abstracted

Example: Patient has surgery for a benign argentaffin carcinoid (8240/1) of the sigmoid colon in May 2017. In January 2018, the patient is admitted with widespread metastasis consistent with malignant argentaffin carcinoid. The registrar accessions the malignant argentaffin carcinoid as a 2018 diagnosis. Two months later, the pathologist reviews the slides from the May 2017 surgery and concludes that the carcinoid diagnosed in 2017 was malignant. Change the date of diagnosis to May 2017 and histology to 8241 and the behavior code to malignant (/3).

Determining Multiple Primaries

Solid Tumors

Apply the general instructions and site-specific instructions for determining multiple primaries in the 2018 Solid Tumor Rules.

Apply the site-specific multiple primary rules in the 2018 Solid Tumor Rules.

Site-specific multiple primary rules cover the following

Primary Site	Topography Codes
Head and Neck	C000-C148, C300-C329, C410, C411, C442
Colon, Rectosigmoid, Rectum	C180-C189, C199, C209
Lung	C340-C349
Cutaneous Melanoma	C440-C449 with Histology 8720-8780
Breast	C500-C506, C508-C509
Kidney	C649
Urinary Sites	C659, C669, C670-C679, C680-C681, C688-C689
Non-malignant CNS	C700, C701, C709, C710-C719, C720-C725, C728, C729, C751-C753
Malignant CNS and Peripheral	C470-C479, C700, C701, C709, C710-C719, C720-C725, C728, C729,
Nerves	C751-C753
Other Sites	Excludes Head and Neck, Colon, Rectosigmoid, Rectum, Lung,
	Cutaneous Melanoma, Breast, Kidney, Urinary Sites, Peripheral Nerves,
	CNS

The General rules do not apply to hematopoietic primaries (lymphoma and leukemia) of any site or to the reportable benign or borderline intracranial or CNS tumors. The head and neck, colon, rectosigmoid and rectum, breast, kidney, urinary sites, and malignant CNS and peripheral nerves rules exclude lymphoma and leukemia (M9590-M9992) and Kaposi sarcoma (M9140). All other sites rules exclude lymphoma and leukemia (M9590-M9992).

Hematopoietic and Lymphoid Neoplasms

Updates to the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database* have been made for 2018 cases. The updates reflect changes based on updates of the WHO Classification of Tumors (Blue Books), AJCC 8th Edition Staging Manual, and clarifications to current rules. Apply the Multiple Primary Rules in the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database*.

Transplants

Transplanted organs or tissue may originate from

- a. organs or tissue from the patient's own body (called autograft) or
- b. another human donor (homograft or allograft)

Accession a new primary in the transplanted organ as you would any new primary, applying the 2018 Solid Tumor Rules. Code the primary site to the location of the transplanted organ, i.e., code the malignancy where it resides/lies.

Example: Diagnosis of malignancy in transplanted section of colon serving as esophagus. Code the primary site as esophagus. Document the situation in a text field.



Section I Basic Record Identification

The Basic Record Identification fields provide a unique identifier for individual records or a set of records for each person and tumor in the SEER data system. The coded identifiers protect data confidentiality.

Note: For San Francisco, Los Angeles, San Jose/Monterey, and Greater California, the patient identifier identifies a unique patient across the entire state.

The combination of the SEER Participant Number, Patient ID Number, and Record Number identifies a unique patient record and tumor within a specific geographic location at diagnosis.



SEER Participant

Item Length: 10 NAACCR Item #: 40 NAACCR Name: Registry ID

A unique code assigned to each SEER participating registry. The number identifies the registry sending the record and what population the data are based upon.

			Year SEER	
Code	Participant	Area Covered	Reporting Started	Name
0000001501	Cancer Prevention	5 counties	1973	San Francisco-
	Institute of California			Oakland SMSA
0000001502	Connecticut	Entire state	1973	Connecticut
	Department of Public			
	Health			
0000001521	Research Corporation	Entire state	1973	Hawaii
	of Hawaii			
0000001522	University of Iowa	Entire state	1973	Iowa
0000001523	University of New	Entire state	1973	New Mexico
	Mexico			
0000001525	Fred Hutchinson	13 counties	1974	Seattle-Puget Sound
	Cancer Research			
	Center			
0000001526	University of Utah	Entire state	1973	Utah
0000001527	Emory University	5 counties	1975	Metropolitan Atlanta
0000001529	Alaska Native	Native American	1984	Alaska Native
		population of Alaska		
0000001531	Cancer Prevention	4 counties	1992	San Jose-Monterey
	Institute of California			
0000001533	University of New	Native American	1973	Arizona Indians
	Mexico	population of		
		Arizona		
0000001535	University of	1 county	1992	Los Angeles
	Southern California			
0000001537	Emory University	10 Counties	1978	Rural Georgia
0000001541	Public Health	California except	2000	Greater California
	Institute, California	Los Angeles, San		
		Francisco-Oakland,		
		and San Jose-		
0000001510	TY I I C	Monterey	2000	Y7 . 1
0000001542	University of	Entire state	2000	Kentucky
	Kentucky Research			
0000001542	Foundation	T di di	2000	т
0000001543	Louisiana State	Entire state	2000	Louisiana
0000001547	University HSC	T () ()	2010	G . G .
0000001547	Emory University	Entire state other	2010	Greater Georgia
		than metropolitan		
		Atlanta and rural		
0000001551	Cherokee Nation –	Georgia Native American	1007	Cherokee Nation
0000001551			1997	Cherokee Nation
TDD	Oklahoma	population	2010	Taba
TBD	Idaho Cancer Data	Entire state	2018	Idaho
	Registry			

SEER Program Coding and Staging Manual 2018

Code	Participant	Area Covered	Year SEER Reporting Started	Name
TBD	Massachusetts Cancer	Entire state	2018	Massachusetts
	Registry			
TBD	New York State	Entire state	2018	New York
	Cancer Registry			
TBD	Wisconsin Cancer	Entire state	2018	Wisconsin
	Reporting System			



Patient ID Number

Item Length: 8 NAACCR Item #: 20 NAACCR Name: Patient ID Number

The participating SEER registry generates a unique number and assigns that number to one patient. The SEER registry will assign this same number to all of the patient's subsequent tumors (records). Enter preceding zeros if the number is less than 8 digits.

Example: Patient # 7034 would be entered as 00007034.

Note: For the state of California, the patient ID number is assigned for the entire state, not for the individual registries within the state.



Record Type

Item Length: 1 NAACCR Item #: 10 NAACCR Name: Record Type

This is a computer-generated field that identifies the type of record that is being transmitted. A file should have records of only one type.

Code	Description
I	Incidence-only record type (non-confidential coded data) Length = 4048
C	Confidential record type (incidence record plus confidential data) Length = 6154
A	Full case Abstract record type (incidence and confidential data plus text summaries; used for reporting to central registries) Length = 24194
U	Correction/Update record type (short format record used to submit corrections to data already submitted) Length = 1543
M	Record Modified since previous submission to central registry (identical in format to the "A" record type) Length = 24194
L	Pathology Laboratory

SEER Record Number

Item Length: 2 NAACCR Item #: 2190 NAACCR Name: SEER Record Number

The Record Number is a unique sequential number. The highest number for each patient identifies the number of records that have been submitted to SEER for that particular patient. This data item is helpful in record linkage.

The record number is generated by the computer system for each SEER submission. The record numbers are sequential, starting with the number 01; the highest allowable number is 99. The highest number assigned represents the total number of records submitted to SEER for that particular patient. Tumor record number does not change.

Code	Description	
01	One or first of more than one record for person	
02	Second record for the person	
••		
nn	Last of nn records for person	



SEER Coding System--Original

Item Length: 1 NAACCR Item #: 2130 NAACCR Name: SEER Coding Sys--Original

SEER Coding System -- Original records the SEER coding system best describing the way the majority of SEER items in the record were originally coded. This is a computer-generated field.

Code	Description
0	No SEER coding
1	Pre-1988 SEER Coding Manuals
2	1988 SEER Coding Manual
3	1989 SEER Coding Manual
4	1992 SEER Coding Manual
5	1998 SEER Coding Manual
6	2003 SEER Coding Manual
7	2004 SEER Coding Manual
8	2007 SEER Coding Manual
9	2007 SEER Coding Manual with 2008 changes
A	2010 SEER Coding Manual
В	2011 SEER Coding Manual
C	2012 SEER Coding Manual
D	2013 SEER Coding Manual
E	2014 SEER Coding Manual
F	2015 SEER Coding Manual
G	2016 SEER Coding Manual
Н	2018 SEER Coding Manual

Death certificate only (DCO) cases: Assign Code H.

SEER Coding System--Current

Item Length: 1 NAACCR Item #: 2120 NAACCR Name: SEER Coding Sys--Current

SEER Coding System -- Current records the SEER coding system best describing the majority of SEER items as they are in the record (after conversion). This is a computer-generated field.

Code	Description	
0	No SEER coding	
1	Pre-1988 SEER Coding Manuals	
2	1988 SEER Coding Manual	
3	1989 SEER Coding Manual	
4	1992 SEER Coding Manual	
5	1998 SEER Coding Manual	
6	2003 SEER Coding Manual	
7	2004 SEER Coding Manual	
8	2007 SEER Coding Manual	
9	2007 SEER Coding Manual with 2008 changes	
A	2010 SEER Coding Manual	
В	2011 SEER Coding Manual	
C	2012 SEER Coding Manual	
D	2013 SEER Coding Manual	
E	2014 SEER Coding Manual	
F	2015 SEER Coding Manual	
G	2016 SEER Coding Manual	
Н	2018 SEER Coding Manual	

Death certificate only (DCO) cases: Assign Code H.

Section II Information Source



Type of Reporting Source

Item Length: 1 NAACCR Item #: 500 NAACCR Name: Type of Reporting Source

The Type of Reporting Source identifies the source documents that provided the most complete information when abstracting the case. This is not necessarily the original document that identified the case; rather, it is the source that provided the most complete information.

Code	Description		
1	Hospital inpatient; Managed health plans with comprehensive, unified medical records (new		
	code definition effective with diagnosis on or after 01/01/2006)		
2	Radiation Treatment Centers or Medical Oncology Centers (hospital affiliated or independent)		
	(effective with diagnosis on or after 01/01/2006)		
3	Laboratory Only (hospital affiliated or independent)		
4	Physician's Office/Private Medical Practitioner (LMD)		
5	Nursing/Convalescent Home/Hospice		
6	Autopsy Only		
7	Death Certificate Only		
8	Other hospital outpatient units/surgery centers (effective with diagnosis on or after 01/01/2006)		

Definitions

Comprehensive, unified medical record

• A hospital or managed health care system that maintains a single record for each patient. That record includes all encounters in affiliated locations.

Stand-alone medical record

- An independent facility; a facility that is not a part of a hospital or managed care system
- An independent medical record containing only information from encounters with that specific facility

Managed health plan

- Any facility where all of the diagnostic and treatment information is maintained in one unit record (all records for the patient from all departments, clinics, offices, etc. in a single file with the same medical record number)
- The abstractor is able to use the unit record when abstracting the case

Examples of such facilities: HMOs or other health plan such as Kaiser, Veterans Administration, or military facilities

Physician office

 A physician office performs examinations and tests. Physician offices may perform limited surgical procedures.

Note: The category "physician's office" also includes facilities that are called surgery centers when surgical procedures under general anesthesia cannot be performed in these facilities.

Surgery center

- Surgery centers are equipped and staffed to perform surgical procedures under general anesthesia
- The patient usually does not stay overnight

Note: If the facility cannot perform surgical procedures under general anesthesia, code as physician's office.

Code	Label	Source Documents	Priority
1	Hospital inpatient; Managed health plans	Hospital inpatient Offices/facilities with a comprehensive, unified record	1
	with comprehensive,	HMO physician office or group	
	unified medical records	HMO-affiliated freestanding laboratory, surgery, radiation or oncology clinic	
		Includes outpatient services of HMOs and large multi- specialty physician group practices with unified records.	
2	Radiation Treatment Centers or Medical Oncology Centers (hospital-affiliated or independent)	Facilities with a stand-alone medical record • Radiation treatment centers	2
		 Medical oncology centers (hospital affiliated or independent) There were no source documents from code 1. 	
3	Laboratory Only (hospital-affiliated or independent)	Laboratory with a stand-alone medical record There were no source documents from codes 1, 2, 8, or 4.	5
4	Physician's Office/Private Medical Practitioner (LMD)	Physician's office that is NOT an HMO or large multi- specialty physician group practice There were no source documents from codes 1, 2, or 8.	4
5	Nursing/Convalescent Home/Hospice	Nursing or convalescent home or a hospice There were no source documents from codes 1, 2, 8, 4, or 3.	6
6	Autopsy Only	Autopsy The cancer was first diagnosed on autopsy. There were no source documents from codes 1, 2, 8, 4, 3, or 5.	7
7	Death Certificate Only	Death certificate Death certificate is the only source of information; follow-back activities did not identify source documents from codes 1, 2, 8, 4, 3, 5 or 6. If another source document is subsequently identified, the Type of Reporting Source code must be changed to the appropriate code in the range of 1, 2, 8, 4, 3, 5, or 6.	8
8	Other hospital outpatient units/surgery centers	Other hospital outpatient units/surgery centers Includes, but not limited to, outpatient surgery and nuclear medicine services. There were no source documents from codes 1 or 2.	3

Priority Order for Assigning Type of Reporting Source

Code the source that provided the best information used to abstract the case.

Example: The only patient record available for a physician office biopsy is the pathology report identified from a freestanding laboratory. Assign code 3 [Laboratory Only (hospital-affiliated or

independent)]. Reporting source should reflect the lab where this case was identified. The MD office added nothing to the case, not even a confirmation of malignancy.

When multiple source documents are used to abstract a case, use the following priority order to assign a code for Type of Reporting Source: Codes: 1, 2, 8, 4, 3, 5, 6, 7.

Note: Beginning with cases diagnosed 01/01/2006, the definitions for this field have been expanded. Codes 2 and 8 were added to identify outpatient sources that were previously grouped under code 1. Laboratory reports now have priority over nursing home reports. The source facilities included in the previous code 1 (hospital inpatient and outpatient) are split between codes 1, 2, and 8.

SEER recommends that you do **not** make changes to this field for historic cases in the central cancer registry database; i.e., cases diagnosed prior to January 1, 2006. Conversion of the old codes would be problematic and would require extensive and time-consuming review of original source documents.



CoC Accredited Flag

Item Length: 1 NAACCR Item #: 2152 NAACCR Name: COC Accredited Flag

The CoC Accredited Flag is new for 2018. This item identifies abstracts from CoC-accredited hospitals. Further, for those abstracts, the flag will designate analytic versus non-analytic abstracts.

Code	Description	
0	Abstract prepared at a facility WITHOUT CoC accreditation of its cancer program	
1	ANALYTIC abstract prepared at facility WITH CoC accreditation of its cancer program (Includes Class of Case codes 10-22)	
2	NON-ANALYTIC abstract prepared at facility WITH CoC accreditation of its cancer program (Includes Class of Case codes 30-43 and 99, plus code 00 which is analytic for CoC but not required to be staged)	
Blank	Not applicable; DCO	

Coding Instructions

Instructions for Hospital Cancer Registries

- 1. Assign at the time of data abstraction
- 2. Assign manually or automatically assign using registry software

Instructions for Central Cancer Registries

- 1. Set the flag to 1 when any of the facilities who contributed to the consolidated data for a cancer record set the CoC Accredited Flag to 1
- 2. Set the flag to 0 when all incoming records for the consolidated case have the CoC Accredited Flag set to 0
- 3. Flag remains blank for
 - a. DCO cases
 - b. Pathologic only cases
 - c. Autopsy only cases

Section III Demographic Information



First Name

Item Length: 40 NAACCR Item #: 2240 NAACCR Name: Name--First

First name is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

Coding Instructions

- 1. Truncate first name if longer than 40 characters
- 2. Blanks spaces, hyphens, and apostrophes are allowed; do **not** use other punctuation
- 3. Leave blank if the patient's first name is unknown
- 4. Update this field if the first name changes



Last Name

Item Length: 40 NAACCR Item #: 2230 NAACCR Name: Name--Last

Last name is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

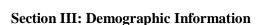
Coding Instructions

- 1. Truncate name if longer than 40 characters
- 2. Blank spaces, hyphens, and apostrophes are allowed; do **not** use other punctuation
- 3. Code UNKNOWN if the patient's last name is unknown; do not leave blank
- 4. Update this field if the last name changes

Examples:

Mc Donald: Recorded with space as Mc Donald O'Hara: Recorded with apostrophe as O'Hara

Smith-Jones: Janet Smith marries Fred Jones and changes her last name to Smith-Jones



Place of Residence at Diagnosis

SEER registries collect information on place of residence at diagnosis. Information relating to address is not transmitted to SEER. The SEER rules for determining residency at diagnosis are either identical or comparable to rules used by the U.S. Census Bureau, to ensure comparability of definitions of cases (numerator) and the population at risk (denominator).

Coding Priorities/Sources

- 1. Code the **street address** of usual residence as stated by the patient. Definition: U.S. Census Bureau Instructions: "The place where he or she lives and sleeps most of the time or the place the person says is his or her usual home." The residency rules of departments of vital statistics may differ from those of the U.S. Census Bureau/SEER.
- 2. **A post office box** is not a reliable source to identify the residency at diagnosis. Post office box addresses do not provide accurate geographical information for analyzing cancer incidence. Use the post office box address only if no street address information is available after follow-back.
- 3. Use residency information from a **death certificate** only when the residency from other sources is coded as unknown. Review each case carefully and apply the U.S. Census Bureau/SEER rules for determining residence.
 - a. For example, the death certificate may give the person's previous home address rather than the nursing home address as the place of residence. If the person was a resident of a nursing home at diagnosis, use the nursing home address as the place of residence.
- 4. Do not use **legal status** or **citizenship** to code residence

Persons with More than One Residence

- 1. Code the residence where the patient spends the majority of time (usual residence)
- 2. If the usual residence is not known or the information is not available, code the residence the patient specifies at the time of diagnosis

Examples: The above rules should be followed for "snowbirds" who live in the south for the winter months, "sunbirds" who live in the north during the summer months, and people with vacation residences that they occupy for a portion of the year.

Persons with No Usual Residence

Homeless people and transients are examples of persons with no usual residence. Code the patient's residence at the time of diagnosis such as the shelter or the hospital where diagnosis was confirmed.

Temporary Residents of SEER Area

Code the place of usual residence rather than the temporary address for

Migrant workers

Educators temporarily assigned to a university in the SEER area

Persons **temporarily residing** with family during cancer treatment

Military personnel on temporary duty assignments (TDY)

Boarding school students below college level (code the parent's residence)

Code the residence where the student is living while attending **college**.

SEER Program Coding and Staging Manual 2018

Code the address of the institution for **Persons in Institutions**.

Note: Code the physical address of the institution. Do not code the post office box.

U.S. Census Bureau definition: "Persons under formally authorized, supervised care or custody" are residents of the institution."

Persons who are incarcerated

Persons who are physically handicapped, mentally challenged, or mentally ill who are residents of homes, schools, hospitals or wards

Residents of nursing, convalescent, and rest homes

Long-term residents of other hospitals such as Veterans Administration (VA) hospitals

Persons in the Armed Forces and on Maritime Ships (including Merchant Marine)

Armed Forces

For military personnel and their family members, code the address of the military installation or surrounding community as stated by the patient.

Personnel Assigned to Navy, Coast Guard, and Maritime Ships

The U.S. Census Bureau has detailed rules for determining residency for personnel assigned to these ships. The rules refer to the ship's deployment, port of departure, destination, and its homeport. Refer to <u>U.S. Census Bureau Publications</u> for detailed rules.



County

Item Length: 3 NAACCR Item #: 90 NAACCR Name: County at DX Reported

Codes for county of residence for each SEER area are listed in Appendix A of this manual.

Use code 999 when it is known that a person is a resident of a particular SEER region, but the exact county is not known.



County at Diagnosis Geocode 1970/80/90

Item Length: 3 NAACCR Item #: 94

NAACCR Name: County at DX Geocode 1970/80/90

County at Diagnosis Geocode 1970/80/90 stores a computer generated geocoded value for the county of residence at the time of diagnosis. Codes in this field are based on the Census Boundary files from the 1990 Decennial Census.

Code	Description
001-997	County at diagnosis. Valid FIPS code
998	Known town, city, state, or country of residence but county code not known AND a resident outside of the state of reporting institution (must meet all criteria). Use this code for Canadian residents.
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.

Note: For U.S. residents, historically, standard codes are those of the FIPS publication "Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas." These FIPS codes (FIPS 6-4) have been replaced by INCITS standard codes, however, there is no impact on this variable as the codes align with the system the Census used for each decennial census and will automatically be accounted for during geocoding.

County at Diagnosis Geocode 2000

Item Length: 3 NAACCR Item #: 95

NAACCR Name: County at DX Geocode2000

County at Diagnosis Geocode 2000 stores a computer generated geocoded value for the county of residence at the time of diagnosis. Codes in this field are based on the Census Boundary files from the 2000 Decennial Census. This code should be used for county and county-based rates and analysis for all cases diagnosed in 2000-2009.

Code	Description
001-997	County at diagnosis. Valid FIPS code
998	Known town, city, state, or country of residence but county code not known AND a resident outside of the state of reporting institution (must meet all criteria). Use this code for Canadian residents.
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.

Note: For U.S. residents, historically, standard codes are those of the FIPS publication "Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas." FIPS codes (FIPS 6-4) have been replaced by INCITS standard codes, however, there is no impact on this variable as the codes align with the system the Census used for each decennial census and will automatically be accounted for during geocoding.

County at Diagnosis Geocode 2010

Item Length: 3 NAACCR Item #: 96

NAACCR Name: County at DX Geocode2010

County at Diagnosis Geocode 2010 stores a computer generated geocoded value for the county of residence at the time of diagnosis. Codes in this field are based on the Census Boundary files from the 2010 Decennial Census. This code should be used for county and county-based rates and analysis for all cases diagnosed in 2010-2019.

Code	Description
001-997	County at diagnosis. Valid FIPS code
998	Known town, city, state, or country of residence but county code not known AND a resident outside of the state of reporting institution (must meet all criteria). Use this code for Canadian residents.
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.

Note: For U.S. residents, historically, standard codes are those of the FIPS publication "Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas." These FIPS codes (FIPS 6-4) have been replaced by INCITS standard codes, however, there is no impact on this variable as the codes align with the system the Census used for each decennial census and will automatically be accounted for during geocoding.

County at Diagnosis Analysis

Item Length: 3 NAACCR Item #: 89

NAACCR Name: County at DX Analysis

County at Diagnosis Analysis is new for 2018 and is a derived variable to be used for county and county-based rates and analyses for all cases regardless of year of diagnosis.

Code	Description
001-997	County at diagnosis. Valid FIPS code
998	Known town, city, state, or country of residence but county code not known AND a resident outside of the state of reporting institution (must meet all criteria). Use this code for Canadian residents.
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.

Note: For U.S. residents, historically, standard codes are those of the FIPS publication "Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas." These FIPS codes (FIPS 6-4) have been replaced by INCITS standard codes, however, there is no impact on this variable as the codes align with the system the Census used for each decennial census and will automatically be accounted for during geocoding.

Address at Diagnosis--State

Item Length: 1 NAACCR Item #: 80 NAACCR Name: Addr at DX--State

This data item records the state of residence at the time of diagnosis. State is coded according to the United States Postal Service abbreviation for the state.

Coding Instructions

Assign the most specific code possible from Appendix B of this manual.



State at Diagnosis Geocode 1970/80/90

Item Length: 2 NAACCR Item #: 81

NAACCR Name: State at DX Geocode 1970/80/90

State at Diagnosis Geocode 1970/80/90 is new for 2018 and is the state of residence at the time of diagnosis. It is a derived (geocoded) variable based on Census Boundary files from 1970, 1980, or 1990 Decennial Census.

Codes for state of residence for each SEER area are listed in Appendix B of this manual.



State at Diagnosis Geocode 2000

Item Length: 2 NAACCR Item #: 82

NAACCR Name: State at DX Geocode 2000

State at Diagnosis Geocode 2000 is new for 2018 and is the state of residence at the time of diagnosis. It is a derived (geocoded) variable based on Census Boundary files from 2000 Decennial Census.

Codes for state of residence for each SEER area are listed in Appendix B of this manual.



State at Diagnosis Geocode 2010

Item Length: 2 NAACCR Item #: 83

NAACCR Name: State at DX Geocode 2010

State at Diagnosis Geocode 2010 is new for 2018 and is the state of residence at the time of diagnosis. It is a derived (geocoded) variable based on Census Boundary files from 2010 Decennial Census.

Codes for state of residence for each SEER area are listed in Appendix B of this manual.



Census Tract 2010

Item Length: 6 NAACCR Item #: 135 NAACCR Name: Census Tract 2010

Census Tract 2010 is coded by the central registry. It is computer generated using patient address information. Census Tract 2010 records the census tract of a patient's residence at the time of diagnosis. The codes are the same codes used by the U.S. Census Bureau for the Year 2010 census. This item is coded for cases diagnosed January 1, 2006 and forward. This field allows a central registry to add year 2010 Census tracts to cases diagnosed in previous years without losing the codes in the fields Census Tract 1970/80/90 and Census Tract 2000 which are only collected historically.

A census tract is a small statistical subdivision of a county that, in general, has between 2,500 and 8,000 residents. Local committees and the U.S. Census Bureau establish census tract boundaries and try to keep the same boundaries from census to census to maintain historical comparability, though this is not always possible. When populations increase or decrease, old tracts may be subdivided, disappear, or have their boundaries changed. Because the census tracts do change, it is important to know which census tract definition is used to code them.

Codes

Census tract codes 000100-999998

Special Codes

Code	Description
000000	Area not census-tracted
999999	Area census-tracted, but census tract is not available
Blank	Census Tract 2010 not coded

Coding Instructions

- 1. Code the Census tract of the patient's residence at the time of diagnosis
- 2. Census tract codes should be assigned based on a computer match (geocoding software)
- 3. Census tracts are identified by four-digit numbers ranging from 0001 to 9989 and a two-digit suffix
- 4. Assign code 999999 when an area does have an assigned census tract but the census tract is not available
- 5. Right justify the first four digits and zero fill to the left. Add the suffix as the fifth and sixth digits if it exists; otherwise, use 00 so all six positions are coded.

Example 1: Code census tract 516 and suffix 21 to 051621.

Example 2: Census tract 409 and suffix does not exist should be coded 040900.

Census Tract Certainty 2010

Item Length: 1 NAACCR Item #: 367 NAACCR Name: Census Tr Certainty 2010

Census tract certainty is coded by the central registry. Census tract certainty records how the 2010 census tract was assigned for an individual record. Most of the time, this information is provided by a geocoding vendor service. Central registry staff should code this field manually when geocoding is not available through a vendor service. This item is coded for cases diagnosed January 1, 2006 and forward.

Code	Description
1	Census tract based on complete and valid street address of residence
2	Census tract based on residence ZIP + 4
3	Census tract based on residence ZIP + 2
4	Census tract based on residence ZIP code only
5	Census tract based on ZIP code of post office box
6	Census tract/Block Numbering Area (BNA) based on residence city where city has only one census tract, or based on residence ZIP code where ZIP code has only one census tract
9	Not assigned, geocoding attempted
Blank	Not assigned, geocoding not attempted

Coding Priority

The codes are hierarchical with the numerically lower codes having priority except as noted in the following list

- 1. Code 1 has priority over codes 2-6 and 9
- 2. Codes 2 and 6 are of equal priority
- 3. Code 2 has priority over codes 3-5 and 9
- 4. Code 6 has priority over codes 3-5, and 9
- 5. Code 3 has priority over codes 4, 5, and 9
- 6. Code 4 has priority over codes 5 and 9
- 7. Code 5 has priority over code 9

Note: Codes 1-5 and 9 are usually assigned by a geocoding vendor, while code 6 is usually assigned through a special effort by the central registry.

Coding Instructions

Note: Avoid using the post office box mailing address to code the census tract whenever possible.

- 1. Assign code **1** when the census tract is assigned with certainty based on complete and valid street address
- 2. Assign codes **2-5** when the census tract is based on residence ZIP code
 - a. Assign code 2 when
 - i. Street address is incomplete or invalid, but ZIP + 4 code is known OR
 - ii. Only rural route number is available, but ZIP + 4 code is known
 - b. Assign code **3** when
 - i. Street address is incomplete or invalid, but ZIP + 2 code is known OR
 - ii. Only rural route number is available, but ZIP + 2 code is known
 - c. Assign code 4 when
 - i. Street address is incomplete or invalid, but ZIP code is known OR
 - ii. Only rural route number is available, but ZIP code is known
 - d. Assign code 5 when only the **post office box** ZIP code, ZIP +2, or ZIP + 4 is known
- 3. Assign code **6** when
 - a. Address is unknown or incomplete and city has only one census tract OR
 - b. Only ZIP code of residence is known, and ZIP code has only one census tract
- 4. Assign code **9** when
 - a. ZIP code is missing OR
 - b. The complete address of the patient is unknown or cannot be determined OR
 - c. There is insufficient information to assign a census code

Census Tract Poverty Indicator

Item Length: 1 NAACCR Item #: 145 NAACCR Name: Census Tr Poverty Indictr

Census Tract Poverty Indicator is a derived field that stores a code indicating the neighborhood poverty level based on the census tract of the address at diagnosis. Cases diagnosed between 1995 and 2004 are assigned a code based on the 2000 U.S. Census. Cases diagnosed since 2005 are assigned a code based on the American Community Survey data that is published annually using the diagnosis year.

Code	Description	
1	0% – <5% poverty	
2	5% – <10% poverty	
3	10% – <20% poverty	
4	20% – 100% poverty	
9	Unknown or not applicable	



Geo Location ID 1970/80/90

Item Length: 12 NAACCR Item #: 351

NAACCR Name: GeoLocationID - 1970/80/90

Geo Location ID 1970/80/90 is new for 2018 and is a combination of 1970/80/90 state, county, census tract, and census block group. The codes are derived (computer generated) through geocoding.



Geo Location ID 2000

Item Length: 12 NAACCR Item #: 352

NAACCR Name: GeoLocationID - 2000

Geo Location ID 2000 is new for 2018 and a combination of 2000 state, county, census tract, and census block group. The codes are derived (computer generated) through geocoding.



Geo Location ID 2010

Item Length: 12 NAACCR Item #: 353

NAACCR Name: GeoLocationID - 2010

Geo Location ID 2010 is new for 2018 and is a combination of 2010 state, county, census tract, and census block group. The codes are derived (computer generated) through geocoding.



Rural Urban Continuum 2013

Item Length: 2 NAACCR Item #: 3312

NAACCR Name: RuralUrban Continuum 2013

Rural Urban Continuum 2013 records a code reflecting the rural or urban composition of the county at diagnosis. The codes separate counties into metropolitan counties and non-metropolitan counties based on the population size, and on proximity to a metro area for nonmetropolitan counties.

Codes for this data item can be derived electronically using the state and county at diagnosis. FIPS state and county code mappings to Beale Codes data sets are available at: https://www.ers.usda.gov/data-products/rural-urban-continuum-codes//.

Code	Description	
Metropol	Metropolitan Counties (01-03)	
01	Counties in metro areas of 1 million population or more	
02	Counties in metro areas of 250,000 to 1 million population	
03	Counties in metro areas of fewer than 250,000 population	
Nonmetr	Nonmetropolitan Counties (04-09)	
04	Urban population of 20,000 or more, adjacent to a metro area	
05	Urban population of 20,000 or more, not adjacent to a metro area	
06	Urban population of 2,500 to 19,999, adjacent to a metro area	
07	Urban population of 2,500 to 19,999, not adjacent to a metro area	
08	Completely rural or less than 2,500 urban population, adjacent to a metro area	
09	Completely rural or less than 2,500 urban population, not adjacent to a metro area	
Other/Ur	Other/Unknown/Blank (98, 99, Blank)	
98	Program run, but: (1) area is not included in Rural-Urban Continuum code table, or (2) record is	
	for resident outside of state of reporting institution	
99	Unknown	
Blank	Program not run; record not coded	

Rural Urban Commuting Area--Tract Level 2000

Item Length: 1 NAACCR Item #: 339 NAACCR Name: RUCA 2000

Rural Urban Commuting Area--Tract Level 2000 is new for 2018 and indicates how close a patient is, based on their census tract at diagnosis, to large urban centers. This measure of accessibility to an urban center is based on the USDA identification of urban and rural commuting areas and can be an indicator of access to oncology specialists and cancer treatment facilities. The variable indicates whether the patient is in an urban commuting area or not.

Code	Description
1	Urban commuting area-RUCA codes 1.0, 1.1, 2.0, 2.1, 3.0, 4.1, 5.1, 7.1, 8.1, and 10.1
2	Not an urban commuting area-all other RUCA codes except 99
9	Unknown or not applicable-census tract not available or RUCA code = 99

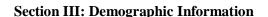


Rural Urban Commuting Area--Tract-Level 2010

Item Length: 1 NAACCR Item #: 341 NAACCR Name: RUCA 2010

Rural Urban Commuting Area--Tract Level 2010 is new for 2018 and indicates how close a patient is, based on their census tract at diagnosis, to large urban centers. This measure of accessibility to an urban center is based on the USDA identification of urban and rural commuting areas and can be an indicator of access to oncology specialists and cancer treatment facilities. The variable indicates whether the patient is in an urban commuting area or not.

Code	Description
1	Urban commuting area-RUCA codes 1.0, 1.1, 2.0, 2.1, 3.0, 4.1, 5.1, 7.1, 8.1, and 10.1
2	Not an urban commuting area-all other RUCA codes except 99
9	Unknown or not applicable-census tract not available or RUCA code = 99



Urban Rural Indicator Code--Tract Level 2000

Item Length: 1 NAACCR Item #: 345 NAACCR Name: URIC 2000

Urban Rural Indicator Code--Tract Level 2000 is new for 2018 and indicates the urban/rural nature of the place of residence based on the patient's census tract at diagnosis. This measure is based on the Census Bureau's identification of urban and rural areas (already collected at county-level). The variable can be an indicator of access to recreation, access to food stores, exposures to pollutants, crime levels, social cohesion, etc. Collecting the variable with each decennial census allows for retrospective and cross-sectional epidemiologic analysis.

Code	Description
1	All urban-the percent of the population in an urban area = 100%
2	Mostly urban-the percent of the population in an urban area $< 100\%$ and $\ge 50\%$
3	Mostly rural-the percent of the population in an urban area > 0% and < 50%
4	All rural-the percent of the population in an urban area $= 0\%$
9	Unknown or not applicable-census tract not available or RUCA code = 99



Urban Rural Indicator Code--Tract Level 2010

Item Length: 1 NAACCR Item #: 346 NAACCR Name: URIC 2010

Urban Rural Indicator Code--Tract Level 2010 is new for 2018 and indicates the urban/rural nature of the place of residence based on the patient's census tract at diagnosis. This measure is based on the Census Bureau's identification of urban and rural areas (already collected at county-level). The variable can be an indicator of access to recreation, access to food stores, exposures to pollutants, crime levels, social cohesion, etc. Collecting the variable with each decennial census allows for retrospective and cross-sectional epidemiologic analysis.

Code	Description
1	All urban-the percent of the population in an urban area = 100%
2	Mostly urban-the percent of the population in an urban area $< 100\%$ and $\ge 50\%$
3	Mostly rural-the percent of the population in an urban area $> 0\%$ and $< 50\%$
4	All rural-the percent of the population in an urban area = 0%
9	Unknown or not applicable-census tract not available or RUCA code = 99



Birthplace--State

Item Length: 3 NAACCR Item #: 252 NAACCR Name: Birthplace--State

For cases diagnosed 01/01/2013 and later, Birthplace--State (#252) and Birthplace--Country (#254) replace Place of Birth (NAACCR Item #250). See the <u>2013 NAACCR Implementation Guidelines</u> for further information.

Coding Instructions

Assign the most specific code possible from Appendix B of this manual.



Birthplace--Country

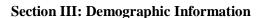
Item Length: 3 NAACCR Item #: 254

NAACCR Name: Birthplace--Country

For cases diagnosed 01/01/2013 and later, Birthplace--State (#252) and Birthplace--Country (#254) replace Place of Birth (NAACCR Item #250). See the <u>2013 NAACCR Implementation Guidelines</u> for further information.

Coding Instructions

Assign the most specific code possible from Appendix B of this manual.



Date of Birth

Item Length: 8 NAACCR Item #: 240 NAACCR Name: Date of Birth

Date of Birth identifies the month, day and year of the patient's birth. Transmit date fields in the year, month, day format (YYYYMMDD). Leave the year, month and/or day blank when they cannot be calculated or are unknown.

Common Formats

YYYYMMDD Complete date is known

YYYYMM Year and month are known/calculated; day is unknown

YYYY Year is known/calculated; month and day cannot be calculated or are unknown

Blank Year, month, and day cannot be estimated or are unknown

Transmit Instructions

1. Transmit date fields in the year, month, day format (YYYYMMDD)

- 2. Leave the year, month and/or day blank when they cannot be calculated or are unknown
 - a. Leave the year, month and day blank for death certificate only (DCO) cases when the date of birth is unknown and cannot be calculated
- 3. Most SEER registries collect the month, day, and year. When the full date (YYYYMMDD) is transmitted, the seventh and eighth digits (day) will be deleted when the data are received by SEER.

Codes for Year

Code the four-digit year

Codes for Month

Code	Description
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

Codes for Day

01

02

03

••

31

Coding Instructions

- 1. Code the date of birth
- 2. If the date of birth is unknown, but the Age at Diagnosis and Date of Diagnosis are known
 - a. Calculate the year of birth by subtracting the patient's age at diagnosis from the year of diagnosis
 - b. Leave the month and day blank

Note: A zero must precede a single-digit month and a single-digit day.

Example: September 5, 1970 would be transmitted as 19700905.



Date of Birth Flag

Item Length: 2 NAACCR Item #: 241 NAACCR Name: Date of Birth Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

Code	Label	Definition	
	Blank	A valid date value is provided in Date of Birth	
12	Unknown	A proper value is applicable but not known	

Coding Instructions

- 1. Leave this item blank when Date of Birth has a full or partial date recorded
- 2. Assign code 12 when the date of birth cannot be determined
 - a. Assign code 12 for death certificate only (DCO) cases when the date of birth is unknown and cannot be calculated



Place of Death--State

Item Length: 2 NAACCR Item #: 1942 NAACCR Name: Place of Death--State

Place of Death—State is new for 2018 and indicates the state where the patient died and where the certificate of death is filed.

Coding Instructions

Assign the most specific code possible from Appendix B of this manual.



Place of Death--Country

Item Length: 3 NAACCR Item #: 1944

NAACCR Name: Place of Death--Country

Place of Death--Country is new for 2018 and indicates the country where the patient died and where the certificate of death is filed.

Coding Instructions

Assign the most specific code possible from Appendix B of this manual.



Age at Diagnosis

Item Length: 3 NAACCR Item #: 230 NAACCR Name: Age at Diagnosis

This data item represents the age of the patient at diagnosis for this cancer.

Code	Description	
000	Less than one year old	
001	One year old, but less than two years old	
002	Two years old	
	(Actual age in years)	
101	One hundred one years old	
120	One hundred twenty years old	
999	Unknown age	

Coding Instructions

- 1. **Measure** the patient's age in **completed years** of life, i.e., age at the patient's **last** birthday
- 2. Generally, the registry software program calculates the Age at Diagnosis using the Date of Birth and Date of Diagnosis
- 3. Age at Diagnosis can be manually calculated using the Date of Birth and the Date of Diagnosis
- 4. If the patient's age is 100 years or older, check the accuracy of the date of birth and date of diagnosis, and document both in a text field

Cases Diagnosed In Utero

Record 000, less than one year old, for cases diagnosed in utero.

Generally, registry software programs calculate the Age at Diagnosis using the Date of Birth and Date of Diagnosis. The calculation may result in a negative number for a case diagnosed in utero – replace the negative number with 000. Code age 000 for all diagnoses within the first year of life or before.

Race 1, 2, 3, 4, 5

Item Length: 2 NAACCR Item #: 160, 161, 162, 163, 164 NAACCR Name: Race 1, Race 2, Race 3, Race 4, Race 5

Race and ethnicity are defined by specific physical, hereditary and cultural traditions or origins, not necessarily by birthplace, place of residence, or citizenship. 'Origin' is defined by the U.S. Census Bureau as the heritage, nationality group, lineage, or in some cases, the country of birth of the person or the person's parents or ancestors before their arrival in the United States.

The five race fields (Race 1 – Race 5) make it possible to code multiple races for one person, consistent with the 2000 Census. All resources in the facility, including the medical record, face sheet, physician and nursing notes, photographs, and any other sources, must be used to determine race. If a facility does not print race in the medical record but does maintain it in electronic form, the electronic data must also be reviewed.

Recommendation: Document how the race code(s) was (were) determined in a text field.

Code	Description
01	White
02	Black
03	American Indian, Aleutian, Alaskan Native or Eskimo (includes all indigenous populations of the western hemisphere)
04	Chinese
05	Japanese
06	Filipino
07	Hawaiian
08	Korean
10	Vietnamese
11	Laotian
12	Hmong
13	Kampuchean (including Khmer and Cambodian)
14	Thai
15	Asian Indian or Pakistani, NOS (Effective with 01/01/2010 dx)
16	Asian Indian (Effective with 01/01/2010 dx)
17	Pakistani (Effective with 01/01/2010 dx)
20	Micronesian, NOS
21	Chamorro/Chamoru
22	Guamanian, NOS
25	Polynesian, NOS
26	Tahitian
27	Samoan
28	Tongan
30	Melanesian, NOS
31	Fiji Islander
32	New Guinean
88	No additional races (Race 2 – Race 5)
96	Other Asian, including Asian, NOS and Oriental, NOS
97	Pacific Islander, NOS
98	Other
99	Unknown

Priorities for Coding Multiple Races

- 1. Code **07** takes priority over all other codes
 - *Example:* Patient is described as Japanese and Hawaiian. Code Race 1 as 07 (Hawaiian), Race 2 as 05 (Japanese).
- 2. Codes **02-32**, **96-98** take priority over code **01**
- 3. Code only the specific race when both a specific race code and a non-specific race code apply
 - a. Codes 04-17 take priority over code 96
 - b. Codes 16-17 take priority over code 15
 - c. Codes 20-32 take priority over code 97
 - d. Codes 02-32 and 96-97 take priority over code 98
 - e. Code 98 takes priority over code 99

Coding Instructions

- 1. Do **not** use patient name as the basis for coding race
 - a. See Coding Instruction 15, Exception, for the only situation in which name is taken into account when coding race
- 2. Code race using the highest priority source available according to the list below (a is the highest and c is the lowest) when race is reported differently by two or more sources

Sources in Priority Order

- a. The patient's self-declared identification
- b. Documentation in the medical record
- c. Death certificate
- 3. Assign the same race code(s) for all tumors for one patient
- 4. Code the race(s) of the patient in fields Race 1, Race 2, Race 3, Race 4, and Race 5
 - a. Code **88** for the remaining race fields (Race 2 Race 5) when at least one race, but fewer than five races, are reported
- 5. Use the associated text field to document
 - a. Why a particular race code was chosen when there are discrepancies in race information *Example:* The patient is identified as Black in nursing notes and White in a dictated

physical exam. Use a text field to document why one race was coded rather than the other.

- b. That no race information is available
- 6. Code as **01** (White) when
 - a. The race is described as White or Caucasian regardless of place of birth
 - b. There is a statement that the patient is Hispanic or Latino(a) and no further information is available

Example: Sabrina Fitzsimmons is a Latina. Code race as 01 (White).

Note 1: Do not code 98 (Other) in this situation.

Note 2: Persons of Spanish or Hispanic origin may be of any race, although persons of Mexican, Central American, South American, Puerto Rican, or Cuban origin are usually White.

- 7. Code race as **02** (Black) when the stated race is African-American, Black, or Negro
- 8. Assign code **03** for any person stated to be
 - a. Native American (western hemisphere) OR
 - b. Indian, whether from North, Central, South, or Latin America
- 9. Assign a specific code when a specific Asian race is stated. Do not use code 96 when a specific race is known.
 - *Example:* Patient is described as Asian in a consult note and as second generation Korean-American in the history. Code Race 1 as 08 (Korean) and Race 2 through Race 5 as 88.
 - *Note:* Do not code 96 (Other Asian including Asian, NOS and Oriental, NOS) in a subsequent race field when a specific Asian race has been coded.
- 10. Code the race based on birthplace information when the race is recorded as Oriental, Mongolian, or Asian and the place of birth is recorded as China, Japan, the Philippines, or another Asian nation
 - *Example 1:* Race is recorded as Asian and the place of birth is recorded as Japan. Code race as 05 (Japanese) because it is more specific than 96.
 - *Example 2:* The person describes himself as an Asian-American born in Laos. Code race as 11 (Laotian) because it is more specific than 96.
- 11. Use the appropriate non-specific code 96 (Other Asian including Asian, NOS and Oriental, NOS), 97 (Pacific Islander, NOS), or 98 (Other) when there is no race code for a specific race *Note*: Document the specified race in a text field.
- 12. Do not use code 96, 97, or 98 for "multi-racial." See Coding Examples below.
- 13. All race fields must be coded 99 (Unknown) when Race 1 is coded 99 (Unknown) *Note*: Assign code 99 in Race 2-5 *only when* Race 1 is coded 99.
- 14. Assign code 99 for death certificate only (DCO) cases when race is unknown
- 15. Refer to Appendix D "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" when race is unknown or not stated in the medical record and birth place is recorded
 - a. In some cases, race may be inferred from the nationality. Use Appendix D to identify nationalities from which race codes may be inferred.
 - **Example 1:** Record states: "this native of Portugal..." Code race as 01 (White) per the Appendix.
 - **Example 2:** Record states: "this patient was Nigerian..." Code race as 02 (Black) per the Appendix.
 - *Exception:* Code Race 1 through Race 5 as 99 (Unknown) when patient's name is incongruous with the race inferred on the basis of nationality. Do not code the inferred race when the patient's name is incongruent with the race inferred on the basis of nationality.
 - *Example 1:* Patient's name is Siddhartha Rao and birthplace is listed as England. Code Race 1 through Race 5 as 99 (Unknown).
 - *Example 2:* Patient's name is Ping Chen and birthplace is Ethiopia. Code Race 1 through Race 5 as 99 (Unknown).
- 16. When the patient face-sheet indicates "Race Other," look for other descriptions of the patient's race. When **no further race information is available**, code race as 99 (Unknown) and document that patient face-sheet indicates "Race Other," and no further race information is available.

- 17. Patient photographs may be used with caution to determine race in the absence of any other information
 - a. Use caution when interpreting a patient photograph to assist in determining race. Review the patient record for a statement to verify race. The use of photographs alone to determine race may lead to misclassification of race.
- 18. Code race in the order stated when no other priority applies

Coding Examples

- **Example 1:** Patient is stated to be Japanese. Code as 05 (Japanese).
- **Example 2:** Patient is stated to be German-Irish. Code as 01 (White).
- Example 3: Patient is described as Arabian. Code as 01 (White).
- Example 4: Patient described as a black female. Code as 02 (Black).
- *Example 5:* Patient states she has a Polynesian mother and Tahitian father. Code Race 1 as 25 (Polynesian), Race 2 as 26 (Tahitian) and Race 3 through Race 5 as 88.
- **Example 6:** Patient describes herself as multi-racial (nothing more specific) and nursing notes say "African-American." Code Race 1 as 02 (Black) and Race 2 through Race 5 as 88.
- **Example 7:** The patient is described as Asian-American with Korean parents. Code race as 08 (Korean) because it is more specific than 96 (Asian) [-American].
- *Example 8:* Race 1 through Race 5 in the cancer record are coded as 99 (Unknown). The death certificate states race as black. Change cancer record for Race 1 to 02 (Black) and Race 2 through Race 5 to 88.
- *Example 9:* Race 1 is coded in the cancer record as 96 (Asian). Death certificate gives birthplace as China. Change Race 1 in the cancer record to 04 (Chinese) and code Race 2 through Race 5 as 88.
- **Example 10:** Patient is stated to be Chinese and black. Code Race 1 as 04 (Chinese), code Race 2 as 02 (Black). Code in the order stated when no other priority applies.
- Example 4: Patient described as Middle Eastern. Code as 01 (White).
- **Example 4:** Patient described as Greek. Code as 01 (White).

History

- 1. Race 1 is the field used to compare with race data on cases diagnosed prior to January 1, 2000
- 2. Race codes must be identical on each record when the patient has multiple tumors
 - a. For cases with all diagnoses prior to January 1, 2000, Race 2 through Race 5 must be blank
 - b. For cases that have multiple tumors with at least one primary diagnosed **on or after January 1, 2000**, race codes in Race 1, Race 2, Race 3, Race 4, and Race 5 must be identical on all records
- 3. Codes **08-13** became effective with diagnoses on or after January 1, 1988
- 4. Code **09** was **retired** effective with diagnoses on or after January 1, 2010

- 5. Code **14** became effective with diagnoses on or after January 1, 1994
- 6. Codes 15, 16, and 17 became effective with diagnoses on or after January 1, 2010
- 7. Codes **20-97** became effective with diagnoses on or after January 1, 1991
- 8. San Francisco, San Jose-Monterey, and Los Angeles are permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1987; Greater California is permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1988. Other SEER registries may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 (Other Asian, including Asian, NOS and Oriental, NOS); 97 (Pacific Islander, NOS); 98 (Other); and 99 (Unknown).



Race--NAPIIA

Item Length: 2 NAACCR Item #: 193 NAACCR Name: Race--NAPIIA(derived API)

NAPIIA stands for NAACCR Asian and Pacific Islander Identification Algorithm. Race-NAPIIA recodes some single-race cases with a Race 1 [160] code of 96 to a more specific Asian race category, based on a computerized algorithm that uses the birthplace and name fields (first, last, and maiden names). For single-race cases with a code other than 96 in Race 1, the algorithm defaults to the code in Race 1. Race-NAPIIA will vary for multiple-race cases (those with information in Race 2 through Race 5, [NAACCR Items #161-164]) depending on the combination of race codes documented; refer to the technical documentation and update for specifics:

http://www.naaccr.org/LinkClick.aspx?fileticket=3HnBhlmhkBs%3d&tabid=118&mid=458 and https://www.naaccr.org/wp-content/uploads/2017/10/NHAPIIA-changes-for-NAAACR-Version-2017.pdf

In Version 1 of the algorithm, birth place can be used to indirectly assign a specific race to one of eight Asian race groups (Chinese, Japanese, Vietnamese, Korean, Asian Indian, Filipino, Thai, and Cambodian), and names can be used to indirectly assign a specific race to one of seven Asian groups (Chinese, Japanese, Vietnamese, Korean, Asian Indian, Filipino, and Hmong). Subsequent versions of NAPIIA may incorporate Pacific Islanders and may potentially incorporate name lists for Thai, Cambodian, and Laotians.

Note: Surname lists are just one component of the NAPIIA algorithm. A number of filters based on race, ethnicity, birthplace, or county of residence may preclude a patient from being assigned a race based on surname.

Code	Description
01	White
02	Black
03	American Indian, Aleutian, or Eskimo (includes all indigenous populations of the Western hemisphere)
04	Chinese
05	Japanese
06	Filipino
07	Hawaiian
08	Korean
10	Vietnamese
11	Laotian
12	Hmong
13	Kampuchean (Cambodian)
14	Thai
15	Asian Indian or Pakistani, NOS (Effective with 01/01/2010 dx)
16	Asian Indian (Effective with 01/01/2010 dx)
17	Pakistani (Effective with 01/01/2010 dx)
20	Micronesian, NOS
21	Chamorro/Chamoru
22	Guamanian, NOS
25	Polynesian, NOS
26	Tahitian
27	Samoan
28	Tongan

Code	Description
30	Melanesian, NOS
31	Fiji Islander
32	New Guinean
96	Other Asian, including Asian, NOS and Oriental, NOS
97	Pacific Islander, NOS
98	Other
99	Unknown

Note: Codes 20-97 were adopted for use effective with 1991 diagnoses. Code 14 was adopted for use effective with 1994 diagnoses. Codes 15-17 were adopted for use effective with 2010 diagnoses.



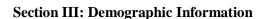
IHS Link

Item Length: 1 NAACCR Item #: 192 NAACCR Name: IHS Link

The Indian Health Service (IHS) Link reports the result of linkage between the registry database and the Indian Health Service patient registration database. This linkage identifies American Indians who were misclassified as non-Indian in the registry. The computer linkage program will automatically assign the code for this data item.

SEER requires the IHS Link for cases diagnosed January 1, 1988 and forward. IHS link may be submitted for cases diagnosed in earlier years. The field will be blank unless an attempt was made to link the case with the records from the Indian Health Service.

Code	Description	
0	Record sent for linkage, no IHS match	
1	Record sent for linkage, IHS match	
Blank	Record not sent for linkage or linkage result pending	



Spanish Surname or Origin

Item Length: 1 NAACCR Item #: 190 NAACCR Name: Spanish/Hispanic Origin

This data item is used to identify patients with Spanish/Hispanic surname or of Spanish origin. Persons of Spanish or Hispanic surname/origin may be of any race.

Code	Description
0	Non-Spanish/Non-Hispanic
1	Mexican (includes Chicano)
2	Puerto Rican
3	Cuban
4	South or Central American (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 of the categories 1-5.
7	Spanish surname only (effective with diagnosis on or after 01/01/1994)
	The only evidence of the person's Hispanic origin is the surname or maiden name and there is
	no evidence that he/she is not Hispanic.
8	Dominican Republic (effective with diagnosis on or after 01/01/2005)
9	Unknown whether Spanish/Hispanic or not

Coding Instructions

- 1. Coding Spanish Surname or Origin is not dependent on race. A person of Spanish descent may be white, black, or any other race.
- 2. Assign code **6** when there is more than one ethnicity/origin (multiple codes), such as Mexican (code 1) and Dominican Republic (code 8). There is no hierarchy among the codes 1-5 or 8.
- 3. Assign code **7** when the only evidence of the patient's Hispanic origin is a surname or maiden name and there is no evidence that the patient is not Hispanic. Code 7 is ordinarily for central registry use only.
- 4. Portuguese, Brazilians, and Filipinos are not presumed to be Spanish or non-Spanish
 - a. Assign code **7** when the patient is Portuguese, Brazilian, or Filipino and their name appears on a Hispanic surname list
 - b. Assign code **0** when the patient is Portuguese, Brazilian, or Filipino and their name does NOT appear on a Hispanic surname list
- 5. Use all information to determine the Spanish/Hispanic Origin including
 - a. The ethnicity stated in the medical record
 - b. Hispanic origin stated on the death certificate
 - c. Birthplace
 - d. Information about life history and/or language spoken found in the abstracting process
 - e. A last name or maiden name found on a list of Hispanic/Spanish names
- 6. Assign code 9 for death certificate only (DCO) cases when Spanish/Hispanic origin is unknown

Computed Ethnicity

Item Length: 1 NAACCR Item #: 200 NAACCR Name: Computed Ethnicity

Computed Ethnicity records the ethnicity based on last name and/or maiden name using a computer algorithm. The computer algorithm compares a list of names with the patient's surname and/or maiden name to test for Hispanic ethnicity. A computer algorithm must be used to compute ethnicity for all cases diagnosed January 1, 1994 and later. This data item is used in conjunction with the data item Computed Ethnicity Source.

The computer-derived ethnicity may differ from the manually assigned ethnicity (Spanish/Hispanic Origin).

Do not record results from NHIA in this field.

Code	Description
0	No match [linkage] was run (for 1994 and later cases)
1	Non-Hispanic last name and non-Hispanic maiden name
2	Non-Hispanic last name, did not check maiden name, or patient was male
3	Non-Hispanic last name, missing maiden name
4	Hispanic last name, non-Hispanic maiden name
5	Hispanic last name, did not check maiden name or patient was male
6	Hispanic last name, missing maiden name
7	Hispanic maiden name (females only) (regardless of last name)
Blank	1993 and earlier cases; no match [linkage] was run

Note: For SEER, blank is allowed only for tumors diagnosed in 1993 and earlier.

Computed Ethnicity Source

Item Length: 1 NAACCR Item #: 210 NAACCR Name: Computed Ethnicity Source

Computed Ethnicity Source identifies the database, method, or computer algorithm that was used to determine ethnicity as recorded in the Computed Ethnicity. The two fields are used together to describe computed ethnicity data.

Do not record results of NHIA in this field.

Code	Description
0	No match [linkage] was run for 1994 and later cases
1	Census Bureau list of Spanish surnames, NOS
2	1980 Census Bureau list of Spanish surnames
3	1990 Census Bureau list of Spanish surnames
4	GUESS program
5	Combination list including South Florida names
6	Combination of Census and other locally generated list
7	Combination of Census and GUESS, with or without other lists
8	Other type of match (Do not record results of NHIA in this field)
9	Unknown type of match
Blank	1993 and earlier cases, no match [linkage] was run

Note: For SEER, blank is allowed only for tumors diagnosed in 1993 and earlier.

NHIA Derived Hispanic Origin

Item Length: 1 NAACCR Item #: 191 NAACCR Name: NHIA Derived Hisp Origin

The NAACCR Hispanic Identification Algorithm (NHIA) is a computerized algorithm that uses a combination of variables to directly or indirectly classify cases as Hispanic for analytic purposes.

Note: Surname lists are just one component of the indirect assignment of ethnicity or race by NHIA. A number of filters based on race, ethnicity, birthplace, or county attribute may preclude a patient from ever being indirectly assigned based on surname. Also, if a patient is coded as non-Hispanic, the registry may elect NOT to run the case through NHIA. A female patient's last name could, however, be used to classify the case as Hispanic for the NHIA variable after making it through the filters and exclusions.

Persons are also included as Hispanic/Latino(a) when they are female cases with heavily Hispanic maiden names; female cases with missing maiden names and heavily Hispanic last names; female cases with generally Hispanic, moderately Hispanic, occasionally Hispanic, or indeterminate maiden names and heavily Hispanic last names.

Code	Description
0	Non-Hispanic
1	Mexican, by birthplace or other specific identifier
2	Puerto Rican, by birthplace or other specific identifier
3	Cuban, by birthplace or other specific identifier
4	South or Central American (except Brazil), by birthplace or other specific identifier
5	Other specified Spanish/Hispanic origin (includes European; excludes Dominican Republic), by birthplace or other specific identifier
6	Spanish, NOS; Hispanic, NOS; Latino, NOS
7	NHIA surname match only
8	Dominican Republic
Blank	Algorithm has not been run

Sex

Item Length: 1 NAACCR Item #: 220 NAACCR Name: Sex

Code the sex (gender) of the patient.

Code	Description
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/Unknown

Definitions

Intersex: A person born with ambiguous reproductive or sexual anatomy; chromosomal <u>genotype</u> and sexual <u>phenotype</u> other than <u>XY-male and XX-female</u>. A example is 45,X/46,XY mosaicism, also known as X0/XY mosaicism.

Transsexual: A person who was assigned one gender at birth based on physical characteristics but who self-identifies psychologically and emotionally as the other gender.

Coding Instructions

- 1. Assign code **3** for
 - a. Intersexed (persons with sex chromosome abnormalities)
 - b. Hermaphrodite
- 2. Codes 5 and 6 may be used for cases diagnosed prior to 2015
- 3. Codes 5 and 6 have priority over codes 1 and 2
- 4. Assign code **5** for transsexuals who are natally male or transsexuals with primary site of C600-C639
- 5. Assign code **6** for transsexuals who are natally female or transsexuals with primary site of C510-C589
- 6. Assign code **4** for transsexuals with unknown natal sex and primary site is not C510-C589 or C600-C639
- 7. When gender is not known
 - a. Assign code 1 when the primary site is C600-C639
 - b. Assign code **2** when the primary site is C510-C589
 - c. Assign code **9** for primary sites not included above

Marital Status at Diagnosis

Item Length: 1 NAACCR Item #: 150 NAACCR Name: Marital Status at DX

Code the patient's marital status at the time of diagnosis for the reportable tumor.

Code	Description
1	Single (never married)
2	Married (including common law)
3	Separated
4	Divorced
5	Widowed
6	Unmarried or Domestic Partner (same sex or opposite sex, registered or unregistered, other than common law marriage) (effective for cases diagnosed 01/01/11 and forward)
9	Unknown

Note: If the patient has multiple tumors, marital status may be different for each tumor.

Definition

Common Law Marriage. A couple living together for a period of time and declaring themselves as married to friends, family, and the community, having never gone through a formal ceremony or obtained a marriage license.

Coding Instructions

- 1. Assign code 2 [Married (including common law)] when the patient declares him/herself as married. Marriage is self-reported.
- 2. Assign code **6** when the patient is not married and is in a domestic partner relationship other than common law marriage
- 3. Assign code 9 for death certificate only (DCO) cases when marital status at the time of diagnosis is unknown

Justification for Continued Collection

Marital Status was evaluated for possible retirement (discontinuation of collection). It will not be retired at this time because it is readily available and provides important information not available from any other data item.

Primary Payer at Diagnosis

Item Length: 2 NAACCR Item # 630 NAACCR Name: Primary Payer at DX

Primary Payer at Diagnosis identifies the patient's primary health insurance carrier or method of payment at the time of initial diagnosis and/or treatment.

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 is unknown or other than 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 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 Medicaid described in code 35
35	Medicaid – administered through a Managed Care plan	Patient is enrolled in Medicaid through a Managed Care program (e.g., HMO or PPO). The managed care plan pays for all incurred costs.
60	Medicare/Medicare, NOS	Federal government funded insurance for persons who are 62 years of age or older, or are chronically disabled (social security insurance eligible). Includes Medicare without supplement. 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. (See also, codes 63 and 64.)
62	Medicare – Administered through a Managed Care Plan	Patient is enrolled in Medicare through a Managed Care plan (e.g., 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-administered Medicaid 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 Formerly known as CHAMPUS (Civilian Health and Medical Program
	Militarry	of the Uniformed Services).
66	Military	Military personnel or their dependents treated at a military facility
67 68	Veterans Affairs Indian/Public Health Service	Veterans treated in Department of Veterans Affairs facilities Patient receives care at an Indian Health Service facility or at another facility and 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

Code	Label	Definition
99	Insurance status	Patient's medical record does not indicate whether or not the patient is
	unknown	insured

Coding Instructions

- 1. Code the type of insurance reported on the patient's admission record
- 2. Code the **first** insurance mentioned when multiple insurance carriers are listed on one admission record
- 3. Code the type of insurance reported **closest to the date of diagnosis** when there are multiple insurance carriers reported for multiple admissions and/or multiple physician encounters
- 4. Code the patient's insurance at the time of **initial diagnosis and/or treatment**. Do not change the insurance information based on subsequent information.
- 5. Use code **02** when the only information available is "self-pay"
- 6. Use code **10** for prisoners when no further information is available
- 7. Assign code **99** for death certificate only (DCO) cases when the primary payer at diagnosis is unknown



Section IV Description of this Neoplasm



Date of Diagnosis

Item Length: 8 NAACCR Item #: 390 NAACCR Name: Date of Diagnosis

The date of diagnosis is the month, day, and year the reportable neoplasm was first identified, clinically or microscopically, by a recognized medical practitioner.

Date of diagnosis must be transmitted in the YYYYMMDD format. Date of diagnosis may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format. Regardless of the format, at least **Year** of diagnosis must be **known or estimated for cases transmitted to SEER**. Year of diagnosis **cannot be blank or unknown for cases transmitted to SEER**.

Transmitting Dates

Transmit date fields in the year, month, day format (YYYYMMDD). Transmit only known or estimated year of diagnosis, blanks will not be accepted. Leave the month, day and/or year* blank when they cannot be estimated or are unknown.

Common Formats

YYYYMMDD Complete date is known

YYYYMM Year and month are known/estimated; day is unknown

YYYYY Year is known/estimated; month and day cannot be estimated or are unknown

Blank Year*, month, and day cannot be estimated or are unknown

Transmit Instructions

- 1. Transmit date fields in the year, month, day format (YYYYMMDD)
- 2. Transmit only known or estimated year of diagnosis, blanks will not be accepted
- 3. Leave the month and/or day blank when they cannot be estimated or are unknown
- 4. Most SEER registries collect the month, day, and year of diagnosis. When the full date (YYYYMMDD) is transmitted, the seventh and eighth digits (day) will be held confidentially and only used for survival calculations when received by NCI SEER. The corresponding date flag is not affected (it will remain blank).

Instructions

Cases with an unknown year of diagnosis **cannot** be transmitted to NCI SEER. It is very important to do everything possible to determine the year of diagnosis.

Case transmitted to NCI SEER

1. Follow-back must be done to obtain the date of diagnosis. If no information can be found, follow instruction 2.

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^{*} Cases NOT transmitted to SEER only.

- 2. Date of diagnosis must be estimated. See the coding instructions below for estimating date of diagnosis.
 - a. For reports dated December or January of a given year, code the month of the report or the month of admission (instruction 10.a.viii.). Coding the month of the report or the month of admission results in a better estimate of the date of diagnosis than coding month as 99 and having the computer assign July as the month of diagnosis, for example.
 - b. When the diagnosis date is stated to be spring, summer, fall, or winter, follow instructions 10.a.i., ii., iii., and iv.

Case **NOT** transmitted to NCI SEER

- 1. Code the date of diagnosis if available
- 2. Code as unknown when there is no information available

Codes for Year

Code the four-digit year of diagnosis

Codes for Month

Code	Description
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

Codes for Day

01

02

03

••

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Coding Instructions

- 1. Code the month, day and year the tumor was first diagnosed, clinically or microscopically, by a recognized medical practitioner
 - a. When the first diagnosis includes reportable ambiguous terminology, record the date of that diagnosis

Example: Area of microcalcifications in breast suspicious for malignancy on 02/13/2018. Biopsy positive for ductal carcinoma on 02/28/2018. The date of diagnosis 02/13/2018.

- 2. When the **only** information available is a positive pathology or cytology report, code the date the biopsy was **done**, not the date the report was dictated or transcribed
- 3. The first diagnosis of cancer may be **clinical** (i.e., based on clinical findings or physician's documentation)

Note: Do **not** change the date of diagnosis when a clinical diagnosis is subsequently confirmed by positive histology or cytology.

Example: On May 15, 2018, physician states that patient has lung cancer based on clinical findings. The patient has a positive biopsy of the lung in June 3, 2018. The date of diagnosis remains May 15, 2018.

- 4. Positive **tumor markers** alone are **not** diagnostic of cancer. Use the date of clinical, histologic, or positive cytologic confirmation as the date of diagnosis.
 - **Example 1:** The patient has an elevated PSA and the physical examination is negative. The physician documents only that the patient is referred for a needle biopsy of the prostate. The biopsy is positive for adenocarcinoma. The date of diagnosis is the date of the biopsy (do not code the date of the PSA or the date the procedure was dictated or transcribed).
 - **Example 2:** The patient has an elevated PSA and the physical examination is negative. The physician documents that he/she suspects that the patient has prostatic cancer and is referring the patient for a needle biopsy. The needle biopsy is positive, confirming the physician's suspicion of cancer. The date of diagnosis is the date the physician documented that he/she **suspects** that the patient has prostatic cancer.

Note: Positive tumor markers alone are never used for case ascertainment.

- 5. Do **not** use cytology as a basis for diagnosis when **ambiguous terms** are used. **Ambiguous cytology** is **not** diagnostic of cancer. Use the date of clinical, histologic, or **positive** cytologic confirmation as the date of diagnosis.
 - *Note 1:* "Ambiguous" cytology means that the diagnosis is preceded by an <u>ambiguous term</u> such as apparently, appears, compatible with, etc.
 - *Note 2:* Do **not** use ambiguous cytology alone for case ascertainment.

Exception: Use the date of the suspicious cytology when the diagnosis is proven by subsequent biopsy.

Example: Cytology suspicious for malignancy 01/12/2018. Diagnosis of carcinoma per biopsy on 02/06/2018. Record 01/12/2018 as the date of diagnosis.

- 6. Code the **earlier date** as the date of diagnosis when
 - a. A recognized medical practitioner says that, in **retrospect**, the patient had cancer at an earlier date or
 - b. The original slides are reviewed and the pathologist documents that cancer was present. Code the date of the original procedure as the diagnosis date.

Example: The patient had an excision of a benign fibrous histiocytoma in January 2018. Six months later, a wide re-excision was positive for malignant fibrous histiocytoma. The physician

documents in the chart that the previous tumor must have been malignant. Code the diagnosis date as January 2018.

Note: Do **not** back-date the diagnosis when

- a. The information on the previous tumor is unclear **AND/OR**
- b. There is **no review** of previous slides **AND/OR**
- c. There is **no physician's statement** that, in retrospect, the previous tumor was malignant

Example: The patient had a total hysterectomy and a bilateral salpingo-oophorectomy (BSO) in June 2018 with pathology diagnosis of papillary cystadenoma of the ovaries. In December 2018, the patient is diagnosed with widespread metastatic papillary cystadenocarcinoma. The slides from June 2018 are not reviewed and there is no physician statement saying the previous tumor was malignant. The date of diagnosis is December 2018.

- 7. Code the **date of death** as the date of diagnosis for autopsy-only cases
- 8. Death certificate only (DCO) Cases
 - a. Use information on the death certificate to estimate the date of diagnosis
 - b. Record the date of death as the date of diagnosis when there is not enough information available to estimate the date of diagnosis; for example, the time from onset to the date of death is described as 'years'
 - c. If no information is available, record the date of death as the date of diagnosis
- 9. **Estimate the date of diagnosis** if an exact date is not available. Use all information available to calculate the month and year of diagnosis.
 - a. Estimating the **month**
 - i. Code "spring" to April
 - ii. Code "summer" or "middle of the year" to July
 - iii. Code "fall" or "autumn" as October
 - iv. For "winter" try to determine whether the physician means the first of the year or the end of the year and code January or December as appropriate. If no determination can be made, use whatever information is available to calculate the month of diagnosis.
 - v. Code "early in year" to January
 - vi. Code "late in year" to December
 - vii. Use whatever information is available to calculate the month of diagnosis

Example 1: Admitted October 2018. History states that the patient was diagnosed 7 months ago. Subtract 7 from the month of admission and code date of diagnosis to March 2018.

- *Example 2:* Outpatient bone scan done January 2018 that states history of prostate cancer. The physician says the patient was diagnosed in 2018. Assume bone scan was part of initial work-up and code date of diagnosis to January 2018.
- viii. Code the month of admission when there is no basis for estimation
- ix. Leave month blank (or convert 99 to blank) if there is no basis for approximation
- b. Estimating the **year**
 - i. Code "a couple of years" to two years earlier
 - ii. Code "a few years" to three years earlier

- iii. Use whatever information is available to calculate the year of diagnosis
- iv. Code the year of admission when there is no basis for estimation
- 10. If **no information** about the date of diagnosis is available
 - a. Case transmitted to NCI SEER
 - i. Use the date of admission as the date of diagnosis
 - ii. In the absence of an admission date, code the date of first treatment as the date of diagnosis
 - b. Case **NOT** transmitted to NCI SEER
 - i. Code month and year as unknown

Nursing Home and Hospice Residents (Not hospitalized for their cancer; no information other than nursing home or hospice records and/or death certificate)

- 1. Use the **best approximation** for the date of diagnosis when the only information available is that the patient **had cancer while in the nursing home** and it is unknown whether the patient had cancer when admitted
- 2. Code the date of admission to the nursing home as the date of diagnosis when
 - a. The **only information available** is that the patient had cancer when admitted to the nursing home
 - b. The **only information available** is that the patient had cancer while in the nursing home, it is unknown whether the patient had cancer when admitted, and there is **no basis for approximation**

Cases Diagnosed Before Birth

Record the actual date of diagnosis for diagnoses made in utero even though this date will precede the date of birth.

Example: Fetal intrahepatic mass consistent with hepatoblastoma diagnosed via ultrasound at 39 weeks gestation (01/30/2018). Live birth by C-section 02/04/2018. Code the date of diagnosis as 01/30/2018.

Note: Prenatal diagnoses are reportable when there is a live birth.

Date of Diagnosis Flag

Item Length: 2 NAACCR Item #: 391

NAACCR Name: Date of Diagnosis Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that had been transmitted in date fields.

Code	Label	Definition
	Blank	A valid date value is provided in Date of Diagnosis
12	Unknown	A proper value is applicable but not known (e.g., date of diagnosis is
		unknown). (Cases not transmitted to SEER only.)

Coding Instructions

Case transmitted to SEER

1. Always leave blank. Date of Diagnosis will always have a full or partial date recorded.

Case **not** transmitted to SEER

- 1. Leave this item blank when Date of Diagnosis has a full or partial date recorded
- 2. Assign code 12 when the date of diagnosis cannot be determined

Sequence Number--Central

Item Length: 2 NAACCR Item #: 380 NAACCR Name: Sequence Number--Central

Sequence Number-Central describes the number and sequence of all reportable malignant, in situ, benign, and borderline primary tumors that occur over the lifetime of a patient.

This sequence number counts all tumors that were reportable in the year they were diagnosed even if the tumors occurred before the registry existed or before the registry participated in the SEER Program. See coding instructions below.

While the Sequence Number--Hospital (NAACCR Item #560) may be useful in determining Sequence Number--Central, the two sequence numbers do not have to be identical.

Rules for Determining Multiple Primaries and the reportability requirements for each diagnosis year should be used to decide which primaries need to be sequenced.

In Situ/Malignant as Federally Required based on Diagnosis Year

Code	Description
00	One primary in the patient's lifetime
01	First of two or more primaries
02	Second of two or more primaries
	(Actual number of this primary)
	··
59	Fifty-ninth or higher of fifty-nine or more primaries
99	Unspecified or unknown sequence number of Federally required in situ or malignant tumors.
	Sequence number 99 can be used if there is a malignant tumor and its sequence number is
	unknown. (If there is known to be more than one malignant tumor, then the tumors must be
	sequenced.)

Non-malignant Tumor as Federally Required based on Diagnosis Year

Code	Description
60	Only one non-malignant tumor or central registry-defined neoplasm
61	First of two or more non-malignant tumors or central registry-defined neoplasms
62	Second of two or more non-malignant tumors or central registry-defined neoplasms
	··
87	Twenty-seventh of twenty-seven
88	Unspecified or unknown sequence number of non-malignant tumor or central-registry defined neoplasms. (Sequence number 88 can be used if there is a non-malignant tumor and its sequence number is unknown. If there is known to be more than one non-malignant tumor, then the tumors must be sequenced.)
98	Cervix carcinoma in situ (CIS/CIN III, Diagnosis Years 1996-2002) <i>Note</i> : Submission of cervical carcinoma in situ is no longer required as of 2018 NCI SEER data submission.

Type of Neoplasm/Sequence Number Series

Neoplasm	Sequence NumberCentral Numeric Series
Series 1: In situ/malignant as Federally required	00-59,99
All in situ (behavior code 2):	00-59
Cervix CIS, CIN III (diagnosis year before 1996) <i>Note</i> : Submission of	
cervical carcinoma in situ is no longer required as of 2018 NCI SEER data	
submission.	
All other in situ including VIN III, VAIN III, AIN III	
Malignant (behavior code 3)	
Juvenile astrocytoma (diagnosis year 2001 and later)*	
Invasive following in situ – new primary defined by SEER	
Unspecified Federally required sequence number or unknown	99
Series 2: Non-malignant tumor as Federally required or state or	60-87,88
regional registry defined**	
Examples	
Non-malignant tumor/benign brain	60-87
Borderline ovarian (diagnosis year 2001+)	60-87
Other borderline/benign	60-87
Skin SCC/BCC	60-87
PIN III (diagnosis year 2001+)	60-87
Cervix CIS/CIN III (diagnosis year 2003+) Note: Submission of cervical	60-87
carcinoma in situ is no longer required as of 2018 NCI SEER data	
submission.	>
Unspecified non-malignant tumor or central registry-defined sequence	88
number	
Cervix CIS/CIN III (diagnosis year 1996-2002) Note: Submission of	98
cervical carcinoma in situ is no longer required as of 2018 NCI SEER	
data submission.	

^{*}Juvenile astrocytomas should be reported as 9421/3.

Note: Conversion Guidance: The sequence numbers for neoplasms whose histology codes were associated with behavior codes that changed from in situ/malignant to benign/borderline or vice versa during the conversion from ICD-O-2 to ICD-O-3 should not be changed.

In situ/Malignant Coding Instructions

- 1. Count all previous and current in situ/malignant reportable primaries which occur(red) over the lifetime of the patient, regardless of where he/she lived at diagnosis
 - a. A 'reportable' primary refers to the site/histology/behavior of the tumor and the years when reporting was required. Review of the reportability requirements in effect during the diagnosis year will be needed.
- 2. Code **00** when there is only **one** primary in the patient's lifetime

^{**}Series 2 – The only tumors in Series 2 that SEER requires are benign/borderline intracranial and central nervous system (CNS) tumors.

- 3. Sequence in situ/malignant primaries chronologically as 01 (first of one or more), 02 (second primary), 03 (third primary), and assign the appropriate sequence number to all primaries in the database when there are multiple primaries
 - **Example 1:** The patient has a history of breast cancer in 1999. She has colon cancer in 2010. Assign sequence number 02 to the colon cancer and change the sequence number on the breast cancer from 00 to 01.
 - **Example 2:** In 1987, patient was diagnosed and treated for childhood leukemia in another state. After becoming a resident of a SEER region, the patient develops bladder cancer. The SEER registry assigns a sequence number of 02 to the bladder cancer. Document the first diagnosis in a text field.
 - a. Change the sequence number of the first primary from 00 to 01 when one patient has a primary with sequence 00 and then develops another reportable /2 or /3 primary
 - b. *Exception*: There are certain cancers that were only reportable for some years. The following are some examples (not a complete list)
 - Borderline tumors of the ovary were reported for 1992-2000
 - o Sequence 00-59
 - Reporting cervix in situ was required only before 1996 diagnosis year.
 Note: Submission of cervical carcinoma in situ is no longer required as of 2018 NCI SEER data submission.
 - Refractory anemia is reported only for 2001+
 - Myelodysplastic syndromes are reported only for 2001+
 - Three newly reportable hematopoietic neoplasms as of 01/01/2010

Example 1: The patient was diagnosed with carcinoma in situ of the cervix in 1994. In 2018, the patient was diagnosed with lung cancer. The SEER registry assigns a sequence number of 01 to the carcinoma in situ of the cervix and a sequence number of 02 to the lung cancer.

Note: Submission of cervical carcinoma in situ is no longer required as of 2018 NCI SEER data submission.

Example 2: The patient was diagnosed with carcinoma in situ of the cervix in 2003. In 2018, the patient was diagnosed with lung cancer. The SEER registry is not required to collect the 2003 carcinoma in situ of the cervix and assigns a sequence number of 00 to the lung cancer.

Note: Submission of cervical carcinoma in situ is no longer required as of 2018 NCI SEER data submission.

- 4. Assign the lower sequence number to the primary with the worse prognosis when **two primaries are diagnosed simultaneously**
 - a. Base the prognosis decision on the primary site, histology, and extent of disease for each of the primaries
 - b. If there is no difference in prognosis, the sequence numbers may be assigned in any order

Non-Malignant Coding Instructions

- 1. Include all non-malignant primary tumors of the brain/CNS diagnosed in 2004 and forward regardless of where the patient lived at diagnosis
- 2. Assign sequence number **60** when there are no prior or subsequent non-malignant brain/CNS tumors
 - a. The sequence number is 60 when a patient has **no** prior reportable non-malignant tumors. If a tumor has a sequence 60 and there is another reportable non-malignant tumor, change the sequence number of the first primary from 60 to 61.
- 3. Assign sequence numbers in chronological order according to the order in which they occur(red). Reportable benign and borderline brain tumors are restricted to primary site codes C700-C729, C751-C753 with behavior codes of /0 or /1.
- 4. Sequence multiple non-malignant tumors chronologically as 61 (first of two or more), 62 (second), etc.
- 5. Sequence a non-malignant brain/CNS tumor and a malignant brain/CNS tumor (/2 or /3) independently when one patient has both. The non-malignant tumor has a sequence number of 60 and the malignant (/2 or /3) tumor has a sequence number of 00.
- 6. Sequence tumors other than those required by SEER in the 60-87 range when a registry chooses to collect non-reportable tumors. These non-reportable tumors are often referred to as "Reportable by agreement."

Example: Cervix in situ was diagnosed in 2003 and lung cancer was diagnosed in 2018. The cervix in situ, if collected by the registry, would be a sequence number 60 and the lung would be assigned a sequence number of 00.

Note: Submission of cervical carcinoma in situ is no longer required as of 2018 NCI SEER data submission.



Primary Site

Item Length: 4 NAACCR Item #: 400 NAACCR Name: Primary Site

For cases diagnosed 01/01/2001 and later, code the primary site using the topography codes listed in the *International Classification of Diseases for Oncology*, Third Edition (ICD-O-3). The 2018 Solid Tumor Rules contain additional coding instructions for some primary sites, including Head and Neck, Lung, and Urinary.

The ICD-O-3 has topography codes listed in two sections; the first is a numeric listing by code number, the second is an alphabetic listing by anatomic site. The topography code consists of a lead character (the letter 'C') followed by two numeric digits, a decimal point, and then one additional numeric digit. The decimal point is not entered as part of the code.

Example: The pathology report says the primary site is the cardia of the stomach. The code C16.0 is found in the Alphabetic Index under either "stomach" or "cardia." Enter the code as C160; do not record the decimal point.

Coding Instructions for Solid Tumors

See the Coding Guidelines for Topography and Morphology in the introduction of the ICD-O-3 for additional details. Refer also to the 2018 Solid Tumor Rules for selected primary site coding instructions.

- 1. Unless otherwise instructed, use all available information in the medical record to code the site
- 2. Code the site in which the primary tumor originated, even if it extends onto/into an adjacent subsite
 - **Example 1:** Final diagnosis is adenocarcinoma of the upper lobe of the right lung. Code the topography to lung, upper lobe (C341).
 - **Example 2:** The patient has a 4 cm tumor in the right breast. The tumor originated in the upper inner quadrant and extends into the lower inner quadrant. Code the primary site to upper inner quadrant of breast (C502).
 - **Example 3:** Patient has a right branchial cleft cyst; the pathology report identifies an adenocarcinoma arising in an ectopic focus of thyroid tissue within the branchial cleft cyst. Thyroidectomy pathology is negative. Code the primary site to branchial cleft (C104).
 - **Example 4:** The patient had a total hysterectomy with a bilateral salpingo-oophorectomy ten years ago for non-cancer reasons. She now has widespread cystadenocarcinoma in the peritoneum. Code the primary site to peritoneum, NOS (C482). (The chart may or may not state that the patient has extra-ovarian carcinoma.)
 - **Example 5:** Pathology report shows adenocarcinoma arising in a patch of endometriosis on the sigmoid colon. Code the primary site to sigmoid colon (C187), the site in which the cancer originated.
- 3. Code the last digit of the primary site code to '8' when a **single tumor overlaps** an adjacent **subsite**(s) of an organ and the point of origin cannot be determined
 - **Example:** The patient has a primary tumor of the cervicothoracic esophagus and the point of origin is unknown. Code the primary site to C158.

- 4. Code the site of the invasive tumor when there is an invasive tumor and in situ tumor in different subsites of the same anatomic site
 - **Example 1:** Patient has an invasive breast tumor in the upper-outer quadrant of the left breast and in situ tumor in multiple quadrants of the left breast. Code the primary site to C504 (upper outer quadrant of breast).
 - **Example 2:** Patient has in situ Paget disease of the right nipple and invasive duct carcinoma of the lower inner quadrant of the right breast. Code the primary site to C503 (lower inner quadrant).
- 5. Code the last digit of the primary site code to '9' for **single primaries**, when **multiple tumors arise** in **different subsites** of the same anatomic site and the point of origin cannot be determined
 - **Example 1:** During a transurethral resection of the bladder (TURB), the physician describes multiple papillary tumors in the bladder neck (C675) and the lateral wall of the bladder (C672). Code the primary site as bladder, NOS (C679).
 - **Example 2:** Patient has an infiltrating duct tumor in the upper outer quadrant (C504) of the right breast and another infiltrating duct carcinoma in the lower inner (C503) quadrant of the right breast. Code the primary site as breast, NOS (C509).
- 6. Some histology/behavior terms in ICD-O-3 have a **related site code** in parentheses; for example, hepatoma (C220)
 - a. Code the site as documented in the medical record and ignore the suggested ICD-O-3 code when a primary site is specified in the medical record
 - *Example:* The pathology report says "infiltrating duct carcinoma of the head of the pancreas." The listing in ICD-O-3 is infiltrating duct carcinoma 8500/3 (C50_). Code the primary site to head of pancreas (C250), NOT to breast (C50_) as suggested by the ICD-O-3.
 - b. Use the site code suggested by ICD-O-3 when the primary site is the same as the site code suggested or the primary site is unknown
 - **Example 1:** The biopsy is positive for hepatoma, and no information is available about the primary site. Code the primary site to liver (C220) as suggested by ICD-O-3.
 - **Example 2:** An excision of the right axillary nodes reveals metastatic infiltrating duct carcinoma. The right breast is negative. The ICD-O-3 shows infiltrating duct carcinoma (8500) with a suggested site of breast (C50_). Code the primary site as breast, NOS (C509).
 - c. Use the site code suggested by ICD-O-3 when there is no information available indicating a different primary site
 - **Example:** Biopsy of lymph node diagnosed as metastatic non-small cell carcinoma. Patient expired and there is no information available about the primary site. Assign C349 based on the site code suggested in ICD-O-3.
- 7. Code the primary site, not the metastatic site. If a tumor is metastatic and the primary site is unknown, code the primary site as unknown (C809).
- 8. See the site-specific coding guidelines in <u>Appendix C</u> for primary site coding guidelines for the following sites

Bladder Kaposi Sarcoma of All Sites

Breast Lung

<u>Colon</u> <u>Rectosigmoid Junction</u>

Esophagus

- 9. See section below for primary site coding guidelines for sarcoma
- 10. Angiosarcoma:
 - a. Code C422 (spleen) as the primary site for angiosarcoma of spleen
 - b. Code C50_ (breast) for angiosarcoma of breast. Although angiosarcoma actually originates in the lining of the blood vessels, an angiosarcoma originating in the breast has a poorer prognosis than many other breast tumors.
- 11. Gastrointestinal Stromal Tumors (GIST): Code the primary site to the location where the malignant GIST originated
- 12. Transplants
 - a. Code the primary site to the location of the transplanted organ when a malignancy arises in a transplanted organ, i.e., code the primary site to where the malignancy resides or lies
 - *Example*: There is a diagnosis of malignancy in transplanted section of colon serving as esophagus. Code the primary site as esophagus. Document the situation in a text field.
 - b. For information about organ or tissue transplants, see the section <u>Determining Multiple Primaries</u>
 - c. For additional information about hematopoietic-related transplants, refer to the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database*
- 13. In the *absence of any additional information* about the primary site, assign the codes listed for these primary sites/histologies

Primary Site/Histology	Code
Anal margin	C445
Anal verge	C211
Angle of the stomach	C162
Angular incisura of stomach	C163
Book-leaf lesion (mouth)	C068
Colored / lipstick portion of upper lip	C000
Cutaneous leiomyosarcoma	C44
Distal conus	C720
Edge of tongue	C021
Frontoparietal (brain)	C718
Gastric angular notch (incisura)	C163
Glossotonsillar sulcus	C109
Incisura, incisura angularis	C163
Infrahilar area of lung	C349
Leptomeninges	C709
Masticatory space	C069
Melanoma, NOS	C449
Nail bed, thumb	C446
Pancreatobiliary	C269
Parapharyngeal space	C490
Perihilar bile duct	C240
Testis, descended post orchiopexy	C621

- 14. When the medical record does **not** contain **enough information** to assign a primary
 - a. Consult a physician advisor to assign the site code
 - b. Use the NOS category for the organ system or the Ill-Defined Sites (C760-C768) if the physician advisor cannot identify a primary site
 - c. Assign the NOS code for the body system when there are two or more possible primary sites documented and all are within the same system

Example: Two possible sites are documented in the GI system such as colon and small intestine; code to the GI tract, NOS (C269). Document the possible primary sites in a text field.

For lymph node biopsy positive for squamous cell carcinoma deemed to be a head and neck primary with no head and neck tumor found, see the Schema Discriminator in the SSDI manual

- d. Code unknown primary site when there is a physician statement of unknown primary site **ONLY** when **none of the above instructions can be applied**
- e. Code Unknown Primary Site (C809) if there is not enough information to assign an NOS or Ill-Defined Site category

Sarcoma

The majority of sarcomas arise in mesenchymal or connective tissues that are located in the musculoskeletal system, which includes the fat, muscles, blood vessels, deep skin tissues, nerves, bones, and cartilage. The default code for sarcomas of unknown primary site is **C499** rather than C809.

Sarcomas may also arise in the walls of hollow organs and in the viscera covering an organ. Code the primary site to the organ of origin.

Example 1: The pathology identifies a carcinosarcoma of the uterine corpus. Code the primary site to corpus uteri (C549).

Example 2: Rhabdomyosarcoma of ethmoid sinus. Code primary site to C311.

Coding Instructions for Hematopoietic and Lymphoid Neoplasms (9590/3-9992/3)

See the <u>Hematopoietic and Lymphoid Neoplasm Coding Manual and Database</u> for instructions on coding the primary site for hematopoietic and lymphoid neoplasms.

Laterality

Item Length: 1 NAACCR Item #: 410 NAACCR Name: Laterality

Laterality describes the side of a paired organ or side of the body on which the reportable tumor originated. Determine whether laterality should be coded for each primary.

Starting with cases diagnosed January 1, 2004 and later, laterality is coded for select invasive, benign, and borderline primary intracranial and CNS tumors.

Code	Description
0	Not a paired site
1	Right: origin of primary
2	Left: origin of primary
3	Only one side involved, right or left origin unspecified
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 (effective with 01/01/2010 dx)
9	Paired site, but no information concerning laterality

Coding Instructions

- 1. Assign code **0** when
 - a. Primary site is unknown (C809), or
 - b. Laterality is unknown for a death certificate only (DCO) case and the primary site is NOT C079-C081, C090-C091, C098-C099, C301, C310, C312, C341-C349, C384, C400-C403, C441-C443, C445-C447, C471-C472, C491-C492, C500-C509, C569, C570, C620-C629 C630-C631, C649, C659, C669, C690-C699, C700, C710-C714, C722-C725, C740-C749, or C754
- 2. Code laterality using codes **1-9** for all sites listed in the table: **Sites for Which Laterality Codes Must Be Recorded**
 - a. Laterality may be coded for sites other than those required; for example, thyroid
- 3. Code the side where the primary tumor **originated**
 - a. Assign code 3 if the laterality is not known but the tumor is confined to a single side of the paired organ

Example: Pathology report: Patient has a 2 cm carcinoma in the upper pole of the kidney. Code laterality as 3 because there is documentation that the disease exists in only one kidney, but it is unknown if the disease originated in the right or left kidney.

- 4. Code **4** is seldom used EXCEPT for the following
 - a. Both ovaries involved **simultaneously with a** single histology, or **epithelial** histologies (8000-8799)
 - b. Diffuse bilateral lung nodules
 - c. Bilateral retinoblastomas
 - d. Bilateral Wilms tumors

- 5. Assign code **5** when the tumor originates in the midline of a site listed in 5.a
 - a. C700, C710-C714, C722-C725, C443, C445
 - i. Do not assign code 5 to sites **not** listed in 5.a
 - **Example 1:** Patient has an excision of a melanoma located just above the umbilicus (C445, laterality 5).
 - **Example 2:** Patient has a midline meningioma of the cerebral meninges (C700, laterality 5).
- 6. Assign code **9** when
 - a. The neoplasm originated in a paired site and
 - i. Laterality is unknown, AND
 - ii. There is no statement that only one side of the paired organ is involved
 - **Example 1:** Admitting history says patient was diagnosed with lung cancer based on positive sputum cytology. Patient is treated for painful bony metastases. There is no information about laterality in the diagnosis of this lung cancer.
 - **Example 2:** Widely metastatic ovarian carcinoma surgically debulked. Ovaries could not be identified in the specimen.
 - b. Laterality is unknown for a death certificate only (DCO) case with primary site C079-C081, C090-C091, C098-C099, C301, C310, C312, C341-C349, C384, C400-C403, C441-C443, C445-C447, C471-C472, C491-C492, C500-C509, C569, C570, C620-C629 C630-C631, C649, C659, C669, C690-C699, C700, C710-C714, C722-C725, C740- C749, or C754
- 7. Document the laterality in a text field

Sites for Which Laterality Codes Must Be Recorded

ICD-O-3 Code	Site or Subsite
C079	Parotid gland
C080	Submandibular gland
C081	Sublingual gland
C098	Overlapping lesion of tonsil
C099	Tonsil, NOS
C300	Nasal cavity (excluding nasal cartilage, nasal septum)
C301	Middle ear
C310	Maxillary sinus
C312	Frontal sinus
C340	Main bronchus (excluding carina)
C341-C349	Lung
C384	Pleura
C400	Long bones of upper limb, scapula, and associated joints
C401	Short bones of upper limb and associated joints
C402	Long bones of lower limb and associated joints
C403	Short bones of lower limb and associated joints
C413	Rib, clavicle (excluding sternum)
C414	Pelvic bones (excluding sacrum, coccyx, symphysis pubis)
C441	Skin of the eyelid
C442	Skin of the external ear

SEER Program Coding and Staging Manual 2018		
ICD-O-3 Code	Site or Subsite	
C443	Skin of other and unspecific parts of the face	
C445	Skin of the trunk	
C446	Skin of upper limb and shoulder	
C447	Skin of the lower limb and hip	
C471	Peripheral nerves and autonomic nervous system of upper limb and shoulder	
C472	Peripheral nerves and autonomic nervous system of the lower limb and hip	
C491	Connective, subcutaneous, and other soft tissues of upper limb and shoulder	
C492	Connective, subcutaneous, and other soft tissues of the lower limb and hip	
C500-C509	Breast	
C569	Ovary	
C570	Fallopian tube	
C620-C629	Testis	
C630	Epididymis	
C631	Spermatic cord	
C649	Kidney, NOS	
C659	Renal pelvis	
C669	Ureter	
C690-C699	Eye and adnexa	
C700	Cerebral meninges, NOS (Effective with cases diagnosed 01/01/2004)	
C710	Cerebrum (Effective with cases diagnosed 01/01/2004)	
C711	Frontal lobe (Effective with cases diagnosed 01/01/2004)	
C712	Temporal lobe (Effective with cases diagnosed 01/01/2004)	
C713	Parietal lobe (Effective with cases diagnosed 01/01/2004)	
C714	Occipital lobe (Effective with cases diagnosed 01/01/2004)	
C722	Olfactory nerve (Effective with cases diagnosed 01/01/2004)	
C723	Optic nerve (Effective with cases diagnosed 01/01/2004)	
C724	Acoustic nerve (Effective with cases diagnosed 01/01/2004)	
C725	Cranial nerve, NOS (Effective with cases diagnosed 01/01/2004)	
C740-C749	Adrenal gland	
C754	Carotid body	

Note: A laterality code other than 0 must be assigned for the sites listed in the table above. Note that there is an effective date for assigning laterality for some of the sites. If the site is not listed on the table, code 0 may be assigned for laterality. Laterality **may** be coded for sites other than those required above. For example: Code 2 may be assigned for a tumor originating in the left lobe of thyroid.

Diagnostic Confirmation

Item Length: 1 NAACCR Item #: 490 NAACCR Name: Diagnostic Confirmation

This data item records the best method used to confirm the presence of the cancer being reported. The best method could occur at any time throughout the entire course of the disease. It is not limited to the confirmation at the time of initial diagnosis.

Note: The codes and instructions for hematopoietic and lymphoid neoplasms are different from the codes for solid tumors. **Codes and instructions for solid tumors follow**. See the section Codes for Hematopoietic and Lymphoid Neoplasms for hematopoietic and lymphoid neoplasms diagnostic confirmation codes.

Codes for Solid Tumors

Microscopically Confirmed

Code	Description
1	Positive histology
2	Positive cytology
4	Positive microscopic confirmation, method not specified

Not Microscopically Confirmed

Code	Description
5	Positive laboratory test/marker study
6	Direct visualization without microscopic confirmation
7	Radiology and other imaging techniques without microscopic confirmation
8	Clinical diagnosis only (other than 5, 6, or 7)

Confirmation Unknown

Code	Description
9	Unknown whether or not microscopically confirmed; death certificate only

Coding Instructions for Solid Tumors

- 1. 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.
- 2. Change to a lower code, if at ANY TIME during the course of disease the patient has a diagnostic confirmation with a higher priority

Example: Benign brain tumor diagnosed on MRI. Assign diagnostic confirmation code 7. Patient later becomes symptomatic and the tumor is surgically removed. Change diagnostic confirmation code to 1.

- 3. Assign code 1 when the microscopic diagnosis is based on
 - a. Tissue specimens from fine needle aspirate, biopsy, surgery, autopsy, or D&C
 - b. Bone marrow specimens (aspiration and biopsy)

- 4. Assign code 2 when the microscopic diagnosis is based on
 - a. Examination of cells (rather than tissue) including but not limited to: sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears, or vaginal smears
 - b. Paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid
- 5. Assign code **4** when there is information that the diagnosis of cancer was microscopically confirmed, but the type of confirmation is unknown
- 6. Assign code **5** when the diagnosis of cancer is based on laboratory tests or tumor marker studies that are clinically diagnostic for that specific cancer

Example: If the workup for a prostate cancer patient is limited to a highly elevated PSA and the physician **diagnoses and/or treats** the patient based only on that PSA, code the diagnostic confirmation to 5.

Note: For tests and tumor markers that may be used to help diagnose cancer, see http://www.cancer.gov/cancertopics/factsheet/detection/tumor-markers

- 7. Assign code **6** when the diagnosis is based only on
 - a. The surgeon's operative report from a surgical exploration or endoscopy such as colonoscopy, mediastinoscopy, or peritoneoscopy and no tissue was examined
 - b. Gross autopsy findings (no tissue or cytologic confirmation)
- 8. Assign code 7 when the only confirmation of malignancy was diagnostic imaging such as computerized axial tomography (CT scans), magnetic resonance imaging (MRI scans), or ultrasounds/sonography
- 9. Assign code 8 when the case was diagnosed by any clinical method not mentioned in preceding codes. The diagnostic confirmation is coded 8 when the only confirmation of disease is a physician's clinical diagnosis.

Example: CT diagnosis is possible lung cancer. Patient returns to the nursing home with a Do Not Resuscitate (DNR) order. Physician enters a diagnosis of lung cancer in the medical record. Code the diagnostic confirmation to 8: there is a physician's clinical diagnosis – clinical diagnosis made by the physician using the information available for the case.

- 10. Assign code 9
 - a. When it is unknown if the diagnosis was confirmed microscopically
 - b. For death certificate only case

Codes for Hematopoietic and Lymphoid Neoplasms (9590/3-9992/3)

Microscopically Confirmed

Code	Description
1	Positive histology
2	Positive cytology
3	Positive histology PLUS:
	 Positive immunophenotyping AND/OR
	Positive genetic studies
	(effective for cases diagnosed 01/01/2010 and later)
4	Positive microscopic confirmation, method not specified

Not Microscopically Confirmed

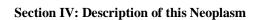
Code	Description
5	Positive laboratory test/marker study
6	Direct visualization without microscopic confirmation
7	Radiology and other imaging techniques without microscopic confirmation
8	Clinical diagnosis only (other than 5, 6, or 7)

Confirmation Unknown

Code	Description
9	Unknown whether or not microscopically confirmed; death certificate only

Coding Instructions for Hematopoietic and Lymphoid Neoplasms (9590/3-9992/3)

See the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database* for coding instructions.



Morphology

Item Length: 5 NAACCR Item #: 521

NAACCR Name: Morph--Type&Behav ICD-O-3

This data item combines Histologic Type ICD-O-3 [NAACCR Item #522] with Behavior Code [NAACCR Item #523] for cases diagnosed after 01/01/2001. See the detailed instructions for data items Histologic Type ICD-O-3 (#522) and Behavior Code (#523) in this manual.



Histologic Type ICD-O-3

Item Length: 4 NAACCR Item #: 522

NAACCR Name: Histologic Type ICD-O-3

The data item Histologic Type ICD-O-3 describes the microscopic composition of cells and/or tissue for a specific primary.

The <u>2018 Solid Tumor Rules</u>, the <u>Hematopoietic and Lymphoid Neoplasm Coding Manual</u>, the <u>Hematopoietic and Lymphoid Neoplasm Database</u>, and the <u>International Classification of Diseases for Oncology</u>, Third Edition (ICD-O-3) are the standard references for histology codes.

2018 ICD-O-3 Update

There are new codes, changes in behavior codes, and new terms associated with current codes for all cases diagnosed January 1, 2018 and later. These changes reflect updates to the WHO Classifications for Tumors (Blue Books). The new codes, new terms, and codes with changes to behavior are available at: https://www.naaccr.org/2018-implementation.

ICD-O-3.1

The International Classification of Diseases for Oncology, Third Edition, First Revision has not been approved for use in the United States. This revision was published in 2013. It includes codes and terms which are **not** approved for use at this time.

2016 ICD-O-3 Update

Standard setters agreed to postpone the implementation of new histology terms and codes for ICD-O-3. See the <u>NAACCR Guidelines for ICD-O-3 Update Implementation</u> for the appropriate ICD-O-3 histology codes to assign for new terms.

2015 ICD-O-3 Update

Effective for 2015 diagnoses, code 8240/1 for Carcinoid tumor, NOS, of appendix (C181) is **obsolete**. Code Carcinoid tumor, NOS, of appendix to 8240/3 as this is reportable (behavior code 3) for diagnoses beginning in 2015.

Effective for 2015 diagnoses, two histology codes are **obsolete**

8157/1 Enteroglucagonoma, NOS

8157/3 Enteroglucagonoma, malignant

Use histology codes 8152/1 for Enteroglucagonoma, NOS, and 8152/3 for Enteroglucagonoma, malignant as Enteroglucagonoma is now a related term for glucagonoma.

Histology Coding for Solid Tumors

Apply the general instructions and instructions for coding histologic type in the 2018 Solid Tumor Rules.

Apply the site-specific histology coding rules in the 2018 Solid Tumor Rules.

Site-specific histology coding rules cover the following

Primary Site	Topography	
Head and Neck	C000-C148, C300-C329, C410, C411, C442	
Colon, Rectosigmoid, Rectum	C180-C189, C199, C209	
Lung	C340-C349	
Cutaneous Melanoma	C440-C449 with Histology 8720-8780	
Breast	C500-C506, C508-C509	
Kidney	C649	
Urinary Sites	C659, C669, C670-C679, C680-C681, C688-C689	
Non-malignant CNS	C700, C701, C709, C710-C719, C720-C725, C728, C729, C751-C753	
Malignant CNS and Peripheral	C470-C479, C700, C701, C709, C710-C719, C720-C725, C728, C729,	
Nerves	C751-C753	
Other Sites	Excludes Head and Neck, Colon, Rectosigmoid, Rectum, Lung,	
	Cutaneous Melanoma, Breast, Kidney, Urinary Sites, Peripheral	
	Nerves, CNS	

Histology Coding for Hematopoietic and Lymphatic Primaries

Apply the Histology Coding Rules in the <u>Hematopoietic and Lymphoid Neoplasm Coding Manual and Database</u>. See also the <u>NAACCR 2015 Implementation Guidelines and Recommendations: The Hematopoietic Conversion Documentation</u>.

Behavior Code

Item Length: 1 NAACCR Item #: 523 NAACCR Name: Behavior Code ICD-O-3

The data item Behavior Code describes the malignant potential of the tumor, ranging from /0 benign to /3 malignant (invasive).

Code	Description
0	Benign (Reportable for intracranial and CNS sites only)
1	Uncertain whether benign or malignant, borderline malignancy, low malignant potential, and uncertain malignant potential (Reportable for intracranial and CNS sites only)
2	Carcinoma in situ; intraepithelial; noninfiltrating; non-invasive (carcinoma)
3	Malignant, primary site (invasive)

Coding Instructions

Intracranial and CNS tumors

Intracranial and CNS tumors with behavior codes 0 (benign) and 1 (borderline malignancy) are reportable beginning with January 1, 2004 diagnoses.

Code the behavior from CT scan, Magnetic Resonance Imaging (MRI), or Positron Emission Tomography (PET) report when there is no tissue diagnosis (pathology or cytology report). Code the behavior listed on the scan. Do not use the WHO grade to code behavior.

Metastatic or Non-primary Sites

Cases reported to SEER cannot have a metastatic (/6) behavior code. If the only pathologic specimen is from a **metastatic** site, code the appropriate histology code and the malignant behavior code (/3). The primary site and its metastatic site(s) have the same histology.

Code the behavior as malignant (/3) when malignant metastasis is present. Metastasis could be regional, nodal, or distant. The exception is with in situ breast cancer; code as non-invasive (/2) in the presence of isolated tumor cells or if cells are artifactually displaced from a previous procedure.

Example: GIST with lymph nodes positive for malignancy. Code the behavior as malignant (/3).

In Situ

Clinical evidence alone cannot identify the behavior as in situ; a behavior code of /2 (in situ) must be based on pathologic examination.

In Situ and Invasive

Code the behavior as malignant (/3) if any portion of the primary tumor is invasive no matter how limited, i.e., microinvasion.

Example: Pathology from mastectomy: Large mass composed of intraductal carcinoma with a single focus of invasion. Code the behavior as malignant (/3).

Re-code the behavior as malignant (/3) when metastases are attributed to a tumor originally thought to be in situ.

Example: Right colon biopsy reveals tubulovillous adenoma with microfocal carcinoma in situ; right hemicolectomy is negative for residual disease. Later core liver biopsy consistent with metastatic adenocarcinoma of gastrointestinal origin. Oncologist states most likely colon primary. Change the behavior code for the colon primary from /2 to /3. There were no other colon primaries in this case.

ICD-O-3 Histology/Behavior Code Listing

Behavior is the fifth digit of the morphology code after the slash (/). The standard reference for coding behavior is the ICD-O-3. Pages 27 through 30 discuss behavior. The following general rules are found on pages 29-30.

- Usually a histologic term carries a clear indication of the likely behavior of the tumor, whether malignant or benign, and this is reflected in the behavior code assigned to it in the ICD-O
- Although only a few histologic types of in situ neoplasms are actually listed in the ICD-O, the behavior code /2 could be attached to any histology code if an in situ form of the neoplasm is diagnosed
- If the pathologist disagrees with the ICD-O behavior assignment in a particular case, code the behavior according to the pathologist's description of the behavior even if that histology/behavior combination is not listed in the ICD-O

The pathologist has the final say on the behavior of the tumor. ICD-O-3 may have only one behavior code, in situ (/2) or malignant (/3), listed for a specific histology. If the pathology report describes the histology as in situ and the ICD-O-3 histology code is listed only with a malignant behavior code (/3), assign the in situ behavior code (/2). If the pathology report describes histology as malignant and the ICD-O-3 histology code is listed only with an in situ behavior code (/2), assign the malignant behavior code (/3). See the Morphology and Behavior Code Matrix discussion on page 29 in ICD-O-3.

Example: The pathology report says large cell carcinoma in situ. The ICD-O-3 lists large cell carcinoma only with a malignant behavior (8012/3). Code the histology and behavior as 8012/2 as specified by the pathologist.

Synonyms for In Situ

Behavior code '2'

Bowen disease (not reportable for C440-C449)

Clark level I for melanoma (limited to epithelium)

Confined to epithelium

Hutchinson melanotic freckle, NOS (C44_)

Intracystic, noninfiltrating (carcinoma)

Intraductal (carcinoma)

Intraepidermal, NOS (carcinoma)

Intraepithelial neoplasia, Grade III (e.g., AIN III, LIN III, SIN III, VAIN III, VIN III)

Intraepithelial, NOS (carcinoma)

Involvement up to, but not including the basement membrane

Lentigo maligna (C44_)

Lobular, noninfiltrating (C50_) (carcinoma)

Noninfiltrating (carcinoma)

Non-invasive (carcinoma)

No stromal invasion/involvement

Papillary, noninfiltrating or intraductal (carcinoma)

Precancerous melanosis (C44_)

Queyrat erythroplasia (C60_)

Stage 0 (except Paget's disease (8540/3) of breast and colon or rectal tumors confined to the lamina propria)



Grade Clinical

Item Length: 1 NAACCR Item #: 3843 NAACCR Name: Grade Clinical

Grade Clinical is new for 2018. This data item records the grade of a solid primary tumor before any treatment (surgical resection or initiation of any treatment including neoadjuvant). For some sites, grade is required to assign the clinical stage group.

For cases diagnosed January 1, 2018 and later, this data item, along with Grade Pathological and Grade Post Therapy, replaces the data item Grade [NAACCR Item #440] as well as site specific factors for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Refer to the most recent version of the <u>Grade Coding Instructions and Tables</u> for additional site-specific instructions.



Grade Pathological

Item Length: 1 NAACCR Item #: 3844 NAACCR Name: Grade Pathological

Grade Pathological is new for 2018. 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. For some sites, grade is required to assign the pathological stage group.

For cases diagnosed January 1, 2018 and later, this data item, along with Grade Clinical and Grade Post Therapy, replaces the data item Grade [NAACCR Item #440] as well as site specific factors for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Refer to the most recent version of the <u>Grade Coding Instructions and Tables</u> for additional site-specific instructions.



Grade Post Therapy

Item Length: 1 NAACCR Item #: 3845 NAACCR Name: Grade Post Therapy

Grade, Post Therapy is new for 2018 and while not required by NCI SEER, it is allowed for collection and transmission for 2018. 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. For some sites, grade is required to assign the post-neoadjuvant stage group.

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 and Grade Pathological, replaces the data item Grade [NAACCR #440] as well as site specific factors for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Refer to the most recent version of the <u>Grade Coding Instructions and Tables</u> for additional site-specific instructions.



Tumor Size--Clinical

Item Length: 3 NAACCR Item #: 752 NAACCR Name: Tumor Size Clinical

Description

This data item records the size of a solid primary tumor **before any treatment** (surgical resection or initiation of any treatment including neoadjuvant). Clinical classification is composed of diagnostic workup prior to first treatment, including physical examination, imaging, pathological findings (gross and microscopic measurements), and surgical exploration without resection.

Rationale

Clinical tumor size (pre-treatment size) is essential for treatment decision making and prognosis determination for many types of cancer.

Code	Description		
000	No mass/tumor found		
001	1 mm or described as less than 1 mm (0.1 cm or less than 0.1 cm)		
002-988	Exact size in millimeters (2 mm to 988 mm) (0.2 to 98.8 cm)		
989	989 millimeters or larger (98.9 cm or larger)		
990	Microscopic focus or foci only and no size of focus is given		
998	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: three-fourths 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 patient record		
	Size of tumor cannot be assessed		
	The only measurement(s) describes pieces or chips		
	Not applicable (See Instruction for 999 below)		

Coding Instructions

Note: Record tumor size only in millimeters (mm). Convert to millimeters from centimeters when size of tumor is measured in centimeters. Often measurements are given in centimeters and must be converted to millimeters, such as 2 cm, which is 20 mm.

- 1. Record size in specified order using
 - a. The largest measurement of the primary tumor from physical exam, imaging, or other diagnostic procedures **before any form of treatment**. **See priority order below.**
 - b. The largest size from all information available within four months of the date of diagnosis, in the absence of disease progression when no treatment is administered
 - c. Record the size of the primary tumor, including contiguous tumor tissue extension, at the time of diagnosis
- 2. Tumor size is the **largest dimension** of the tumor, **not the depth or thickness** of the tumor
- 3. Code the largest size of the primary tumor before neoadjuvant treatment. Use code 999 if size is unknown.

Example: Patient has a 2.2 cm (22 mm) mass in the oropharynx; fine needle aspiration of mass confirms squamous cell carcinoma. Patient receives a course of neoadjuvant combination chemotherapy. Pathologic size of tumor after total resection is 2.8 cm (28 mm). Record clinical tumor size as 022 (22 mm) as that is the largest tumor size that was recorded before treatment occurred, since the pathologic resection is after the neoadjuvant therapy.

- 4. Record 'less than' OR 'greater than' tumor size
 - a. Record the tumor size as **one mm less than stated** when tumor size is reported as "less than x mm or less than x cm"
 - i. For example, if size is < 10 mm, code size as 009
 - ii. Often measurements are given in centimeters and must be converted to millimeters, such as < 1 cm (<10 mm), which is coded as 009; or < 2 cm (<20 mm), which is coded as 019
 - iii. Code 001 when stated as less than 1 mm
 - b. Record the tumor size as **one mm more than stated when** tumor size is reported as "more than x mm" or "more than x cm"
 - i. For example, if size is > 10 mm, code size as 011
 - ii. Often measurements are given in centimeters and must be converted to millimeters such as: > 1 cm (> 10 mm), code as 011; or > 2 cm (> 20 mm), code as 021
 - iii. Code 989 when described as anything greater than 989 mm (98.9 cm)
- 5. Record "between" tumor sizes as the midpoint between the two measurements when tumor size is reported to be between two sizes; i.e., add the two sizes together and divide by two

Example: Tumor size is "between 2 and 3 cm." Code size as 025 since 2 + 3 = 5 divided by 2 = 2.5 cm (25 mm).

SEER Program Coding and Staging Manual 2018

- 6. **Round decimals:** Round the tumor size when it is described in fractions (decimals) of millimeters as follows
 - *Note 1:* Record tumor size as 001 (do not round down to 000) when the largest dimension of a tumor is less than 1 millimeter (greater than 0 mm and less than 1 mm).
 - *Note* 2: Code 001 when tumor size is 1 mm.

Exception to rounding rules for BREAST primaries: Round tumor sizes greater than 1.0 mm and up to 2.4 mm to 2 mm (002). The purpose of this exception is so that the size recorded in the Tumor Size field will derive the correct AJCC TNM Primary Tumor (T) category for breast primaries. Do *not* apply this instruction to any other site.

a. When tumor size is greater than 1 millimeter, 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.

Examples

Breast cancer described as 6.5 millimeters in size. Round up to 7 mm and code as 007.

2.3 millimeters cancer in a polyp. Round down to 2 mm and code as 002.

Focus of cancer described as 1.4 mm in size. Round down to 1 mm and code as 001.

- 5.2 cm breast cancer. Convert to millimeters (52 mm) and do not round; code as 052 millimeters.
- 2.5 cm rectal cancer. Do not round, record as 025 millimeters.
- b. Do not round tumor size expressed in centimeters to the nearest whole centimeter; rather, convert the measurement to millimeters by moving the decimal point one space to the right
- 7. **Priority of imaging/radiographic techniques:** Information on size from imaging/radiographic techniques can be used to code clinical size when there is no more specific size information from a biopsy or operative (surgical exploration) report. It should be taken as a lower priority, and over a physical exam.
- 8. **Tumor size discrepancies among imaging and radiographic reports:** Record the largest size in the record regardless of the imaging technique, when there is a difference in reported tumor size among imaging and radiographic techniques, unless the physician specifies the imaging that is most accurate.
- 9. Record size from an incisional biopsy. Use the clinical guidelines for TNM to determine if the biopsy was done during the clinical timeframe. Use the source that gives you the best size and take the largest size.

Note: An incisional biopsy that removed the whole tumor is actually an excisional biopsy. Record tumor size in Tumor Size – Pathologic.

- 10. Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastasis. However, when the tumor is described as a "cystic mass or polypoid mass," and only the size of the entire mass is given, code the size of the entire mass, since the cysts or polyps are part of the tumor itself.
- 11. **Multifocal/multicentric tumors:** Code the size of the largest invasive tumor, or the largest in situ tumor if all tumors are in situ, when the tumor is multi-focal or when multiple tumors are reported as a single primary.
- 12. Assign tumor size code 999 when size is unknown
- 13. Document the information in the appropriate text field of the abstract to support the clinical tumor size as coded.

Tumor Size--Pathologic

Item Length: 3 NAACCR Item #:754

NAACCR Name: Tumor Size Pathologic

Description

This data item records the size of a solid primary tumor that has been resected. Pathologic classification includes operative and pathological findings of the resected specimens, before initiation of adjuvant treatment.

Rationale

Pathologic tumor size is an important prognostic indicator and valuable for clinical practice and research on surgically treated patients for most cancers.

Code	Description
000	No mass/tumor found
001	1 mm or described as less than 1 mm
	(0.1 cm or less than 0.1 cm)
002-988	Exact size in millimeters (2 mm to 988 mm)
	(0.2 cm to 98.8 cm)
989	989 millimeters or larger
	(98.9 cm or larger)
990	Microscopic focus or foci only and no size of focus is given
998	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 on NOS
	Diffuse, entire lung or NOS Lung and main stem bronchus (C34.0-C34.3, C34.8-C34.9)
	Lung and main stem broneius (C34.0-C34.3, C34.6-C34.9)
	Diffuse
	Breast (C50.0-C50.6, C50.8-C50.9)
999	Unknown; size not stated
	Not documented in patient record
	Size of tumor cannot be assessed
	No excisional biopsy or tumor resection done (See #1 below)
	The only measurement(s) describes pieces or chips (See #14 below)
	Not applicable (See #16 below.)

Coding Instructions

Note: Record tumor size only in millimeters (mm). Convert to millimeters from centimeters when size of tumor is measured in centimeters (cm). Often measurements are given in centimeters and must be converted to millimeters, such as < 1 cm, code as 009; or < 2 cm, code as 019.

Record size

- 1. Code pathologic tumor size to 999 for unknown when there is no excisional biopsy or tumor resection
- 2. Record the size of the tumor. The tumor size may differ from the size of the specimen.
- 3. Record the size of the invasive component, if given
 - a. Record the size of the invasive component, even if it is smaller, when both an in situ and an invasive component are present and the invasive component is measured.
 - **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 (1.4 cm or 14 mm).
 - b. Record the size of the entire tumor from the surgical report or pathology report when the size of the invasive component is not given
 - *Example*: A breast tumor with infiltrating duct carcinoma with extensive in situ component; total size 2.3 cm. Record tumor size as 023 (2.3 cm or 23 mm).
 - *Example*: Duct carcinoma in situ measuring 1.9 cm with an area of invasive ductal carcinoma. Record tumor size as 019 (1.9 cm = 19 mm).
 - c. Record the size of the primary tumor, including contiguous tumor tissue extension, at the time of diagnosis
- 4. Code the largest size of the primary tumor measured on the surgical resection specimen when surgery is administered as part of the first definitive treatment

Note: This includes pathologic tumor size from surgery when there is neoadjuvant therapy.

- a. Code the size from the synoptic report (also known as CAP protocol or pathology report checklist) when there is a discrepancy among tumor size measurements in the various sections of the pathology report.
- b. Use final diagnosis, microscopic, or gross examination, in that order, when no synoptic report is available
- **Example 1:** Chest x-ray shows 3.5 cm mass. The pathology report from the lobectomy states RUL lung mass: 2.8 cm adenocarcinoma. Record pathologic tumor size as 028 (28 mm).
- **Example 2:** Pathology report states lung carcinoma is 2.1 cm x 3.2 cm x 1.4 cm. Record pathologic tumor size as 032 (32 mm).
- 5. Tumor size is the largest dimension of the tumor, not the depth or thickness of the tumor
- 6. Include pathologic information obtained **through completion of definitive surgery** when the surgery is part of the first course of treatment
- 7. Information on size from **imaging/radiographic techniques cannot be used** to code Tumor Size--Pathologic

- 8. Record 'less than' OR 'greater than' tumor size
 - a. Record the tumor size as one mm less than stated when tumor size is reported as "less than x mm" or "less than x cm"

Example: size is < 10 mm code size as 009.

- i. Often measurements are given in centimeters and must be converted to millimeters, such as < 1 cm, code as 009; or < 2 cm, code as 019.
- ii. Code 001 when stated as less than 1 mm.
- b. Record the tumor size as one mm more than stated when tumor size is reported as "more than x mm" or "more than x cm"
 - i. For example, if size is > 10 mm, code size as 011.
 - ii. Often measurements are given in centimeters and must be converted to millimeters, such as > 1 cm, code as 011; or > 2 cm, code as 021.
- c. Code 989 when tumor size is greater than 989 mm (98.9 cm).
- 9. Record "between" tumor sizes as the midpoint between the two measurements when tumor size is reported to be between two sizes; i.e., add the two sizes together and divide by two.

Example: "between 2 and 3 cm." Code size as 025 since 2 + 3 = 5 divided by 2 = 2.5 (or 025 mm).

- 10. **Round decimals:** Round the tumor size only if it is described in fractions of millimeters.
 - **Note 1:** Record tumor size as 001 (do not round down to 000) when the largest dimension of a tumor is less than 1 millimeter (between 0.1 and 0.9 mm).
 - *Note 2*: Code 001 when tumor size is 1 mm

Exception to rounding rules for BREAST primaries: Round tumor sizes greater than 1.0 mm and up to 2.4 mm to 2 mm (002). The purpose of this exception is so that the size recorded in the Tumor Size field will derive the correct AJCC TNM Primary Tumor (T) category for breast primaries. Do *not* apply this instruction to any other site.

Examples:

Breast cancer described as 6.5 millimeters in size. Round up to 7 mm and code as 007.

2.3 millimeters cancer in a polyp. Round down to 2 mm and code 002.

Focus of cancer described as 1.4 mm in size. Round down to 1 mm and code as 001.

- 5.2 cm breast cancer. Convert to millimeters and code 052.
- 2.5 cm rectal cancer. Do not round, record as 025 millimeters.
- a. Do not round tumor size expressed in centimeters to the nearest whole centimeter; rather, convert the measurement to millimeters by moving the decimal point one space to the right
- 11. Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastasis. The tumor size may differ from the size of the specimen. However, when the tumor is described as a "cystic mass" or "polypoid mass" and only the size of the entire mass is given, code the size of the entire mass, since the cysts or polyps are part of the tumor itself.
- 12. Record the largest dimension or diameter of tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor

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

13. Record the size as stated for purely in situ lesions

- 14. **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 field.
- 15. Record tumor size as 999 when the only measurement describes pieces or chips. **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, when the pathologist states an aggregate or composite size (determined by fitting the tumor pieces together and measuring the total size), record that size.
- 16. **Multifocal/multicentric tumors:** Code the size of the largest invasive tumor, or the largest in situ tumor if all tumors are in situ, when the tumor is multi-focal or when multiple tumors are reported as a single primary.
- 17. Assign tumor size code 999 when size is unknown
- 18. Document the information to support coded pathologic tumor size in the appropriate text field of the abstract



ICD-O-2 Conversion Flag

Item Length: 1 NAACCR Item #: 1980 NAACCR Name: ICD-O-2 Conversion Flag

For cases diagnosed 2001 and forward, this computer-generated code reflects how the conversion of site and morphology codes from ICD-O-3 to ICD-O-2 was accomplished. The original ICD-O-3 code is retained.

Code	Description
5	Morphology converted from ICD-O-3 to ICD-O-2 without review
6	Morphology converted from ICD-O-3 to ICD-O-2 with review
Blank	Not converted



ICD-O-3 Conversion Flag

Item Length: 1 NAACCR Item #: 2116 NAACCR Name: ICD-O-3 Conversion Flag

This is a computer-generated code specifying how the conversion of site and morphology codes from ICD-O-2 to ICD-O-3 was accomplished.

Code	Description	
0	Morphology (MorphType&Behav ICD-O-3) originally coded in ICD-O-3	
1	Morphology (MorphType&Behav ICD-O-3) converted from (MorphType&Behav ICD-O-2) without review	
3	Morphology (MorphType&Behav ICD-O-3) converted from (MorphType&Behav ICD-O-2) with review	
Blank	Not converted	

Coding Instructions

- 1. Code **0** is assigned for death certificate only (DCO) cases
- 2. Leave blank for cases coded in prior ICD-O version and not converted to ICD-O-3



Section V Stage of Disease at Diagnosis

Stage of Disease at Diagnosis data items contained within this manual fall under three categories: Stage Data Items, Extent of Disease, and Summary Stage.

For additional stage-related data items, refer to Section VI, Stage-related Data Items.



Stage Data Items

Seven data items are presented in this section. See the <u>Site-specific Data Item (SSDI) Manual</u> for data items not included in this section.



Lymph-vascular Invasion

Item Length: 1 NAACCR Item #: 1182 NAACCR Name: Lymph-vascular Invasion

Description

Lymph-vascular Invasion indicates whether lymphatic duct or blood vessel is identified in the pathology report.

Note: SEER requires Lymph-vascular Invasion (LVI) recorded for penis and testis cases only. SEER registries may submit LVI for other sites when available. Record 8 for sites other than penis and testis when LVI is not available or when not applicable (see #4).

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

Coding Instructions

- 1. **Code from pathology report(s).** If not available, code the absence or presence of lymph-vascular invasion as described in the medical record.
 - a. The primary sources of information about lymph-vascular 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 other sections of 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 lymph-vascular invasion is identified in any primary tumor specimen, code as present/identified.
 - e. LVI is impossible for benign, borderline, or in situ cases. These cases should be coded to 0.
 - f. For cases treated with neoadjuvant (preoperative) therapy, refer to table below to code this field. However, if documentation in the medical record conflicts with this table, code lymph-vascular invasion based on the documentation in the medical record.

LVI on pathology report PRIOR to neoadjuvant (preoperative) therapy	LVI on pathology report AFTER neoadjuvant (preoperative) 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

SEER Program Coding and Staging Manual 2018

LVI on pathology report PRIOR to neoadjuvant	LVI on pathology report AFTER neoadjuvant	
(preoperative) therapy	(preoperative) therapy	Code LVI to
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 **code 0** when the pathology report indicates that there is no lymph-vascular invasion. This includes cases of purely in situ carcinoma, which biologically do not access lymphatic or vascular channels below the basement membrane.
- 3. Use **code 1** when the pathology report or a physician's statement indicates that lymph-vascular invasion (or one of its synonyms) is present in the specimen.
 - a. **Synonyms** include, but are not limited to
 - i. Angiolymphatic invasion
 - ii. Blood vessel invasion
 - iii. Lymph vascular emboli
 - iv. Lymphatic invasion
 - v. Lymphovascular invasion
 - vi. Vascular invasion
- 4. Use **code 8** for the following schemas
 - a. Lymphoma
 - b. HemeRetic
 - c. Plasma Cell Myeloma
 - d. Schemas other than Penis and Testis if the registry has opted not to collect it
- 5. Use **code 9** when
 - a. There is no microscopic examination of a primary tissue specimen
 - b. The primary site specimen is cytology only or a fine needle aspiration
 - c. The biopsy is only a very small tissue sample
 - d. It is not possible to determine whether lymph-vascular invasion is present
 - e. The pathologist indicates the specimen is insufficient to determine lymph-vascular invasion
 - f. Lymph-vascular invasion is not mentioned in the pathology report
 - g. Primary site is unknown
- 6. Clarification between codes 8 and 9
 - a. Code 8 should only be used in the following situations
 - i. Standard-setter does not require this item and you are not collecting it
 - ii. Those histologies noted above described in code 8 for which LVI is always not applicable
 - b. For those cases where there is no information/documentation from the pathology report or other sources, use code 9

Mets at Diagnosis--Bone

Item Length: 1 NAACCR Item #: 1112 NAACCR Name: Mets at DX-Bone

Description

This field identifies whether bone is an involved metastatic site. The six Mets at Diagnosis-metastatic sites fields provide information on specific metastatic sites for data analysis.

Code	Description
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

Coding Instructions

1. **Code information about bone metastases only** (discontinuous or distant metastases to bone) identified at the time of diagnosis. Do *not* code bone marrow involvement in this field. Do not record contiguous bone invasion by primary tumor in this field.

Note: See code 1 in "Mets at Diagnosis--Other" for bone marrow involvement.

- a. Bone involvement may be single or multiple
- b. Information about bone involvement may be clinical or pathologic
- c. Code this field for bone metastases even if the patient had neoadjuvant (preoperative) systemic therapy
- d. Code this field for all solid tumors, Kaposi Sarcoma, Lymphomas, Unknown Primary Site, and Other and Ill-Defined Primary Sites
 - i. Code this field for Lymphomas (9590-9699, 9702-9727, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837) (All 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 metastasis to lung and liver but not bone.

- b. Use **code 1** when the medical record
 - i. Indicates that the patient has distant (discontinuous) metastases and bone is mentioned as an involved site

SEER Program Coding and Staging Manual 2018

- ii. Indicates that bone is the primary site and there are metastases in a different bone or bones
 - 1. Do *not* assign code 1 for a bone primary with multifocal bone involvement of the same bone
- iii. Indicates that the patient is diagnosed with an unknown primary (C80.9) and bone is mentioned as a distant metastatic site
- c. Use **code 8** (Not applicable) for the following site/histology combinations for which distant metastasis is not clinically relevant

ICD-O-3 Site	ICD-O-3 Histology	Description
C000-C809	9740-9809, 9840-9992	Mast cell, histiocytosis,
		immunoproliferative, leukemias
C000-C440,	9731, 9732, 9734, 9820,	Other hematopoietic neoplasm coded to
C442-C689,	9826, 9831-9834	any site except eyelid, conjunctiva,
C691-C694,		lacrimal gland, orbit, and eye overlapping
C698-C809		and NOS

d. Use **code 9** when it cannot be determined whether the patient specifically has bone metastases. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include bone.



Mets at Diagnosis--Brain

Item Length: 1 NAACCR Item #: 1113 NAACCR Name: Mets at DX-Brain

Description

This field identifies whether brain is an involved metastatic site. The six Mets at Diagnosis-metastatic sites fields provide information on specific metastatic sites for data analysis.

Code	Description	
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	

Coding Instructions

1. **Code information about brain metastases only** (discontinuous or distant metastases to brain) identified at the time of diagnosis. Do *not* code involvement of spinal cord or other parts of the central nervous system in this field.

Note: See **code 1** in "Mets at Diagnosis--Other" for mets to 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 pathologic
- c. Code this field whether or not the patient had neoadjuvant (preoperative) systemic therapy
- d. Code this field for all solid tumors, Kaposi sarcoma, Lymphomas, Unknown Primary Site, and Other and Ill-Defined Primary Sites
 - i. Code this field for Lymphomas (9590-9699, 9702-9727, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837) (All 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 metastasis to lung and liver but not brain.

- b. Use **code 1** when the medical record
 - i. Indicates that the patient has distant (discontinuous) metastases and brain is mentioned as an involved site

SEER Program Coding and Staging Manual 2018

- ii. Indicates that the patient is diagnosed with an unknown primary (C809) and brain is mentioned as a distant metastatic site
- c. Use **code 8** (Not applicable) for the following site/histology combinations for which distant metastasis is not clinically relevant

ICD-O-3 Site	ICD-O-3 Histology	Description	
C000-C809	9740-9809, 9840-9992	Mast cell, histiocytosis,	
		immunoproliferative, leukemias	
C000-C440,	9731, 9732, 9734, 9820,	Other hematopoietic neoplasm coded to	
C442-C689,	9826, 9831-9834	any site except eyelid, conjunctiva,	
C691-C694,		lacrimal gland, orbit, and eye overlapping	
C698-C809		and NOS	

d. Use **code 9** when it cannot be determined whether the patient specifically has brain metastases. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include brain.



Mets at Diagnosis--Liver

Item Length: 1 NAACCR Item #: 1115 NAACCR Name: Mets at DX-Liver

Description

This field identifies whether liver is an involved metastatic site. The six Mets at Diagnosis-metastatic sites fields provide information on specific metastatic sites for data analysis.

Code	Description	
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	

Coding Instructions

- 1. **Code information about liver metastases only** (discontinuous or distant metastases to liver) identified at the time of diagnosis. Do not record contiguous involvement of liver by primary tumor in this data item.
 - a. Liver involvement may be single or multiple
 - b. Information about liver involvement may be clinical or pathologic
 - c. Code this field whether or not the patient had neoadjuvant (preoperative) systemic therapy
 - d. Code this field for all solid tumors, Kaposi Sarcoma, Lymphomas, Unknown Primary Site, and Other and Ill-Defined Primary Sites
 - i. Code this field for Lymphomas (9590-9699, 9702-9727, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837) (All 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 metastasis to lung and brain but not liver.

- b. 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 with an unknown primary (C80.9) and liver is mentioned as a distant metastatic site

SEER Program Coding and Staging Manual 2018

c. Use **code 8** (Not applicable) for the following site/histology combinations for which distant metastasis is not clinically relevant

ICD-O-3 Site	ICD-O-3 Histology	Description	
C000-C809	9740-9809, 9840-9992	Mast cell, histiocytosis,	
		immunoproliferative, leukemias	
C000-C440,	9731, 9732, 9734, 9820,	Other hematopoietic neoplasm coded to	
C442-C689,	9826, 9831-9834	any site except eyelid, conjunctiva,	
C691-C694,		lacrimal gland, orbit, and eye overlapping	
C698-C809		and NOS	

d. Use **code 9** when it cannot be determined whether the patient specifically has liver metastases. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include liver.



Mets at Diagnosis--Lung

Item Length: 1 NAACCR Item #: 1116 NAACCR Name: Mets at DX-Lung

Description

This field identifies whether lung is an involved metastatic site. The six Mets at Diagnosis-metastatic sites fields provide information on specific metastatic sites for data analysis.

Code	Description	
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	

Coding Instructions

1. **Code information about lung metastases only** (discontinuous or distant metastases to lung) identified at the time of diagnosis. Do *not* code pleural or pleural fluid involvement in this field.

Note: See **code 1** in "Mets at Diagnosis--Other" for pleural nodules, malignant pleural or pericardial effusion.

- a. Lung involvement may be single or multiple
- b. Information about lung involvement may be clinical or pathologic
- c. Code this field whether or not the patient had neoadjuvant (preoperative) systemic therapy unless determined to be disease progression
- d. This field should be coded for all solid tumors, Kaposi sarcoma, Lymphomas, Unknown Primary Site, and Other and Ill-Defined Primary Sites
 - i. Code this field for Lymphomas (9590-9699, 9702-9727, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837) (All sites)
- 2. **Use of codes:** Assign the code that best describes whether the case has lung 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 lung metastases
 - iii. Includes imaging reports that are negative for lung metastases
 - iv. Indicates that the patient has distant (discontinuous) metastases but lung is not mentioned as an involved site

Note: A single tumor in each lung is two primaries, unless proven to be metastatic (see Solid Tumor Rules for Lung).

Example: Use code 0 when the patient has metastasis to liver and brain but not lung.

- b. 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. Indicates that the patient is diagnosed with an unknown primary (C809) and lung is mentioned as a distant metastatic site

Note: Do *not* assign **code 1** for a lung primary with multifocal involvement of the same lung.

c. Use **code 8** (Not applicable) for the following site/histology combinations for which distant metastasis is not clinically relevant

ICD-O-3 Site	ICD-O-3 Site ICD-O-3 Histology Description		
C000-C809	9740-9809, 9840-9992	Mast cell, histiocytosis,	
	immunoproliferative, leukemias		
C000-C440,	9731, 9732, 9734, 9820,	Other hematopoietic neoplasm coded to	
C442-C689,	9826, 9831-9834	any site except eyelid, conjunctiva,	
C691-C694,		lacrimal gland, orbit, and eye overlapping	
C698-C809		and NOS	

d. Use **code 9** when it cannot be determined whether the patient specifically has lung metastases. In other words, use code 9 when there are known distant metastases but it is not known whether the distant metastases include lung.



Mets at Diagnosis--Distant Lymph Node(s)

Item Length: 1 NAACCR Item #: 1114

NAACCR Name: Mets at DX-Distant LN

Description

This field identifies whether distant lymph node(s) are an involved metastatic site. The six Mets at Diagnosis-metastatic sites fields provide information on specific metastatic sites for data analysis.

Code	Description
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

Coding Instructions

- *Note 1*: Use AJCC TNM to determine regional versus distant lymph nodes.
- *Note* 2: Assign **code** 0 (None) for unknown primaries, unless involved lymph nodes are stated to be distant lymph nodes.
- *Note 3*: Placental lymph node involvement for placental primaries is classified as distant lymph node involvement (M1) and recorded in this field.
- 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 pathologic
 - c. Code this field whether or not the patient had neoadjuvant (preoperative) systemic therapy
 - d. Do *not* code this field for regional lymph node involvement
 - e. Code this field for all solid tumors, Kaposi sarcoma, Lymphomas, Unknown Primary Site, and Other and Ill-Defined Primary Sites

Note: Code 0 for all lymphomas. Lymph node involvement is recorded in stage group and is based on involvement above and below the diaphragm. The distinction between regional and distant lymph nodes is not relevant.

- i. Code this field for Lymphomas (9590-9699, 9702-9727, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837) (All 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

SEER Program Coding and Staging Manual 2018

- iv. Indicates lymph nodes are involved, but there is no indication whether they are regional or distant
- v. 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 metastasis to lung and liver but not distant lymph node(s).

- b. 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
- c. Use **code 8** (Not applicable) for the following site/histology combinations for which distant metastasis is not clinically relevant

ICD-O-3 Site	ICD-O-3 Histology	Description	
C000-C809	9740-9809, 9840-9992	Mast cell, histiocytosis,	
		immunoproliferative, leukemias	
C000-C440,	9731, 9732, 9734, 9820,	Other hematopoietic neoplasm coded to	
C442-C689,	9826, 9831-9834	any site except eyelid, conjunctiva,	
C691-C694,		lacrimal gland, orbit, and eye overlapping	
C698-C809		and NOS	

d. Use **code 9** when it cannot be determined whether the patient specifically has distant lymph node metastases. 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).



Mets at Diagnosis--Other

Item Length: 1 NAACCR Item #: 1117 NAACCR Name: Mets at DX-Other

Description

The six Mets at Diagnosis-metastatic sites fields provide information on metastases for data analysis. This field 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.

Code	Description
0	None; no other metastases
1	Yes; distant metastases in known site(s) other than bone, brain, liver, lung or distant lymph nodes Note: includes bone marrow involvement for lymphomas
2	Generalized metastases such as carcinomatosis
8	Not applicable
9	Unknown whether any other metastatic site or generalized metastases Not documented in patient record

Coding Instructions

- Code information about other metastases only (discontinuous or distant metastases)
 identified at the time of diagnosis. This field 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 pathologic
 - c. Code this field whether or not the patient had any preoperative (neoadjuvant) systemic therapy
 - d. Code this field for all solid tumors, Kaposi Sarcoma, Lymphomas, Unknown Primary Site, and Other and Ill-Defined Primary Sites
 - i. Code this field for Lymphomas (9590-9699, 9702-9727, 9735, 9737-9738, 9811-9818, 9823, 9827, 9837) (All 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 metastasis to lung and liver only.

- b. Use **code 1** when the medical record indicates
 - i. Distant (discontinuous) metastases in any site(s) other than bone, brain, liver, lung or distant lymph node(s)
 - 1. Includes, but not limited to, the adrenal gland, bone marrow, pleura, malignant pleural effusion, peritoneum and skin
 - ii. Lymphomas with bone marrow involvement (Stage IV disease)

Note: Does *not* include lymphomas or lymphoma/leukemias where primary site is C421 (bone marrow).

- c. Use **code 2** when the medical record
 - i. Indicates that the patient has carcinomatosis
 - 1. Carcinomatosis is a condition in which cancer is spread widely throughout the body, or, in some cases, to a relatively large region of the body

Note: It is possible to have metastatic disease to a specific organ AND also have carcinomatosis. If a patient has metastatic disease to bone, brain, liver, lung or distant nodes AND carcinomatosis, use code 1 for the appropriate field (bone, brain, liver, lung, or distant nodes) and use code 2 for carcinomatosis. If a patient has metastatic disease to a site other than bone, brain, liver, lung or distant nodes AND carcinomatosis, assign code 2 for carcinomatosis. Code 2 for carcinomatosis takes priority.

Example 1: Patient with breast cancer noted to have mets to the liver and carcinomatosis. Code "Mets at Diagnosis--Liver" as 1 and "Mets at Diagnosis--Other" as 2.

Example 2: Patient with colon cancer noted to have mets to the stomach and carcinomatosis. Code "Mets at Diagnosis--Other" as 2 for carcinomatosis.

d. Use **code 8** (Not applicable) for the following site/histology combinations for which distant metastasis is not clinically relevant

ICD-O-3 Site	ICD-O-3 Site ICD-O-3 Histology Description		
C000-C809	9740-9809, 9840-9992	Mast cell, histiocytosis,	
		immunoproliferative, leukemias	
C000-C440,	9731, 9732, 9734, 9820,	0, Other hematopoietic neoplasm coded to	
C442-C689,	9826, 9831-9834	any site except eyelid, conjunctiva,	
C691-C694,	lacrimal gland, orbit, and eye overlapping		
C698-C809		and NOS	

e. Use **code 9** when it cannot be determined whether the patient has metastases other than bone, brain, liver, lung, and distant lymph node(s)

Extent of Disease Data Items

Three Extent of Disease (EOD) Data Items are presented in this manual. For additional information about EOD, refer to the separate SEER Registrar Staging Assistant (SEER*RSA) located at https://staging.seer.cancer.gov.



Extent of Disease Primary Tumor

Item Length: 3 NAACCR Item #: 772

NAACCR Name: EOD Primary Tumor

Description

Extent of Disease Primary Tumor is new for 2018. EOD Primary Tumor is part of the EOD 2018 data collection system and is used to classify contiguous growth (extension) of the primary tumor within the organ of origin or its direct extension into neighboring organs at the time of diagnosis. See also EOD Regional Nodes and EOD Metastases. Effective for cases diagnosed January 1, 2018 and later.

See the most current version of EOD (https://staging.seer.cancer.gov) for rules and site-specific codes and coding structures.

Codes (In addition to schema-specific codes where needed)

Special Codes

Code	Description
000	In situ, intraepithelial, noninvasive
800	No evidence of primary tumor
999	Unknown; primary tumor not stated
	Primary tumor cannot be assessed
	Not documented in patient record
	Death certificate only (DCO)

Extent of Disease Regional Nodes

Item Length: 3 NAACCR Item #: 774 NAACCR Name: EOD Regional Nodes

Extent of Disease Regional Nodes is new for 2018. EOD Regional Nodes is part of the EOD 2018 data collection system and is used to classify the regional lymph nodes involved with cancer at the time of diagnosis. See also EOD Primary Tumor and EOD Metastases. Effective for cases diagnosed January 1, 2018 and later.

See the most current version of EOD (https://staging.seer.cancer.gov) for rules and site-specific codes and coding structures.

Codes (In addition to schema-specific codes)

Special Codes

Code	Description	
000	None	
800	Regional lymph node(s), NOS	
	Lymph node(s), NOS	
888	Not applicable–e.g., CNS, hematopoietic	
999	Unknown	

Extent of Disease Metastases

Item Length: 2 NAACCR Item #: 776 NAACCR Name: EOD Mets

Extent of Disease Metastases is new for 2018. EOD Metastases is part of the EOD 2018 data collection system and is used to classify the distant site(s) of metastatic involvement at time of diagnosis. See also EOD Primary Tumor and EOD Regional Nodes. Effective for cases diagnosed January 1, 2018 and later.

See the most current version of EOD (https://staging.seer.cancer.gov) for rules and site-specific codes and coding structures.

Codes (In addition to schema-specific codes)

Special Codes

Code	Description
00	None
	No distant metastasis
	Unknown if distant metastasis
88	Not applicable: Information not collected for this schema
	Use for these sites only: HemeRetic;
	Ill Defined Other (includes unknown primary site);
	Kaposi Sarcoma;
	Lymphoma;
	Lymphoma-CLL/SLL;
	Myeloma Plasma Cell Disorder
99	Death certificate only (DCO)



Summary Stage

Two Summary Stage data items are presented in this manual. For additional information on Summary Stage, see <u>SEER*RSA</u>.



Summary Stage 2018

Item Length: 1 NAACCR Item #: 764

NAACCR Name: Summary Stage 2018

Description

Summary Stage 2018 is new for 2018 and stores the directly assigned Summary Stage 2018. Effective for cases diagnosed January 1, 2018 and later. Refer to **SEER*RSA** for additional information.

Code	Description
0	In situ
1	Localized only
2	Regional by direct extension only
3	Regional regional lymph nodes only
4	Regional by BOTH direct extension AND regional lymph nodes
7	Distant site(s)/node(s) involved
8	Benign, borderline*
9	Unknown if extension or metastasis (unstaged, unknown, or unspecified)
	Death certificate only case

^{*}Applicable for the following Summary Stage 2018 chapters: Brain, CNS Other, Intracranial Gland.

Derived Summary Stage 2018

Item Length: 1 NAACCR Item #: 762

NAACCR Name: Derived Summary Stage 2018

Description

Derived Summary Stage 2018 is new for 2018. Derived Summary Stage 2018 is derived using the EOD data collection system (EOD Primary Tumor, EOD Regional Nodes, and EOD Metastases) algorithm. Other data items may be included in the derivation process. Effective for cases diagnosed January 1, 2018 and later.

Code	Description
0	In situ
1	Localized
2	Regional, direct extension only
3	Regional, regional lymph nodes only
4	Regional, direct extension and regional lymph nodes
7	Distant
8	Benign, borderline
9	Unknown if extension or metastasis (unstaged, unknown, or unspecified)
	Death certificate only case



Section VI Stage-related Data Items

See the Site-specific Data Item (SSDI) Manual for data items not included in this section.



SEER Site-specific Factor 1

Item Length: 1 NAACCR Item #: 3700 NAACCR Name: SEER SSF1

SEER Site-specific Factor 1 is new for 2018. This data item is reserved for human papilloma virus (HPV) status. This data item only applies to the schemas:

- Oropharynx (p16+): C019, C024, C051-C052, C090-C091, C098-C099, C100, C102-C103, C108-C109, C111
- Oropharynx (p16-) and Hypopharynx: C019, C024, C051-C052, C090-C091, C098-C099, C100, C102-C103, C108-C109, C111, C129, C130-C132, C138-C139
- Lip and Oral Cavity: C000-C009, C020-C023, C028-C029, C030-C031, C039, C040-C041, C048-C049, C050, C058-C059, C060-C062, C068-C069

There is evidence that human papilloma virus (HPV) plays a role in the pathogenesis of some cancers. HPV testing may be performed for prognostic purposes; testing may also be performed on metastatic sites to aid in determination of the primary site.

Code	Description
0	HPV negative for viral DNA by ISH test
1	HPV positive for viral DNA by ISH test
2	HPV negative for viral DNA by PCR test
3	HPV positive for viral DNA by PCR test
4	HPV negative by ISH E6/E7 RNA test
5	HPV positive by ISH E6/E7 RNA test
6	HPV negative by RT-PCR E6/E7 RNA test
7	HPV positive by RT-PCR E6/E7 RNA test
8	HPV status reported in medical records as positive or negative but test type is unknown
9	Unknown if HPV test detecting viral DNA and or RNA was performed

- 1. Codes 0-7 are hierarchical; use the highest code that applies (0 is highest, 7 is lowest)
- 2. This data item is only for HPV status determined by tests designed to detect viral DNA or RNA. Tests based on ISH, PCR, RT-PCR technologies detect the viral DNA or RNA.
- 3. Do not record the results of IHC p16 expression in this field
 - a. There are several methods for determination of HPV status. The most frequently used test is IHC for p16 expression which is a surrogate marker for HPV infection and is **not** to be recorded in this field.
 - b. HPV-type 16 refers to **virus type** and is different from p16 overexpression (p16+)
- 4. Record the results of HPV testing performed on pathologic specimens including surgical and cytological (from cell blocks) tissue from the primary tumor or a metastatic site, including lymph nodes
- 5. Do not record the results of blood tests or serology
- 6. Leave blank when no applicable test is performed

Additional Stage-related Data Items for 2018

Site-specific Data Items (SSDIs)

Each Site-Specific Data Item (SSDI) applies only to selected primary sites, histologies, and years of diagnosis. Depending on applicability and standard-setter requirements, SSDIs may be left blank.

SEER has developed a staging tool referred to as <u>SEER*RSA</u> that provides information (primary site/histology/other factors defined) about each cancer schema. The following tables lists the site-specific schema discriminators and site-specific data items (SSDIs) that are new and are required for collection in 2018.

The first table lists schema discriminators with the corresponding NAACCR item number and description. The second table lists SSDIs required for staging. For additional required data items, see NAACCR Version 18 Required Status Table and the SSDI Manual. Refer to SEER*RSA and the SSDI manual for codes and coding instructions.

Table 1.

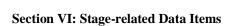
Schema Discriminator	NAACCR Item#	New Data Items for 2018
Schema Discriminator 1	3926	Occult Head and Neck Lymph Nodes
Schema Discriminator 1	3926	Nasopharynx/Pharyngeal Tonsil
Schema Discriminator 2	3927	Oropharyngeal p16
Schema Discriminator 1	3926	EsophagusGEJunction (EGJ)/Stomach
Schema Discriminator 2	3927	Histology Discriminator for 8020/3
Schema Discriminator 1	3926	BileDuctsDistal/BileDuctsPerihilar/CysticDuct
Schema Discriminator 1	3926	Primary Peritoneum Tumor
Schema Discriminator 1	3926	Urethra/Prostatic Urethra
Schema Discriminator 1	3926	Melanoma Ciliary Body/Melanoma Iris
Schema Discriminator 1	3926	Lacrimal Gland/Sac
Schema Discriminator 1	3926	Thyroid Gland/Thyroglossal Duct
Schema Discriminator 1	3926	Plasma Cell Myeloma Terminology
Schema Discriminator 1	3926	Histology Discriminator for 9591/3

Table 2.

Schema	NAACCR Item#	SSDI
Breast	3882	LN Positive Axillary Level I-II
Breast	3827	Estrogen Receptor Summary
Breast	3855	HER2 Overall Summary
Breast	3904	Oncotype Dx Recurrence Score-Invasive
Breast	3915	Progesterone Receptor Summary
Corpus Adenosarcoma	3911	Peritoneal Cytology
Corpus Carcinoma and Carcinosarcoma	3911	Peritoneal Cytology
Corpus Sarcoma	3911	Peritoneal Cytology
Esophagus and Esophagus GE Junction (Squamous)	3829	Esophagus and EGJ Tumor Epicenter
Melanoma Choroid and Ciliary Body	3887	Measured Basal Diameter
Melanoma Choroid and Ciliary Body	3888	Measured Thickness
Melanoma Iris	3887	Measured Basal Diameter

SEER Program Coding and Staging Manual 2018

Schema	NAACCR Item#	SSDI
Melanoma Iris	3888	Measured Thickness
Melanoma Skin	3869	LDH Pretreatment Level
Mycosis Fungoides	3910	Peripheral Blood Involvement
Oropharynx HPV-Mediated (p16+)	3883	LN Size
Placenta	3837	Gestational Trophoblastic Prognostic Scoring Index
Prostate	3920	PSA (Prostatic Specific Antigen) Lab Value
Testis	3923	S Category Clinical
Testis	3924	S Category Pathological
Breast	3882	LN Positive Axillary Level I-II
Breast	3827	Estrogen Receptor Summary
Breast	3855	HER2 Overall Summary
Breast	3904	Oncotype Dx Recurrence Score-Invasive
Breast	3915	Progesterone Receptor Summary



Section VII First Course of Therapy



First Course of Therapy

This section applies to all neoplasms (including benign and borderline intracranial and CNS tumors) <u>except</u> hematopoietic and lymphoid neoplasms. For information regarding first course of therapy for hematopoietic and lymphoid neoplasms, refer to the NCI SEER *Hematopoietic and Lymphoid Neoplasm Coding Manual* at: http://seer.cancer.gov/tools/heme/index.html.

Definitions

Active surveillance: A treatment plan that involves closely watching a patient's condition but not giving any treatment unless there are changes in test results that show the condition is getting worse. Active surveillance may be used to avoid or delay the need for treatments such as radiation therapy or surgery, which can cause side effects or other problems. During active surveillance, certain exams and tests are done on a regular schedule. It may be used in the treatment of certain types of cancer, such as prostate cancer, urethral cancer, and intraocular (eye) melanoma. It is a type of expectant management. (Source: http://www.cancer.gov/dictionary?CdrID=616060)

Cancer tissue: Proliferating malignant cells; an area of active production of malignant cells. Cancer tissue includes primary tumor and metastatic sites where cancer tissue grows. Cells in fluid such as pleural fluid or ascitic fluid are not "cancer tissue" because the cells do not grow and proliferate in the fluid.

Concurrent therapy: A treatment that is given at the same time as another.

Example: Chemotherapy and radiation therapy

Deferred therapy: Closely watching a patient's condition but not giving treatment unless symptoms appear or change, or there are changes in test results. Deferred therapy avoids problems that may be caused by treatments such as radiation or surgery. It is used to find early signs that the condition is getting worse. During deferred therapy, patients may be given certain exams and tests. It is sometimes used in prostate cancer. Also called expectant management. (Source: http://www.cancer.gov/dictionary?CdrID=667618)

Disease recurrence: For solid tumors, see the <u>Solid Tumor Rules</u> and for hematopoietic and lymphoid neoplasms see the <u>Hematopoietic and Lymphoid Neoplasm Coding Manual and Database</u> to determine disease recurrence.

Expectant management: Closely watching a patient's condition but not giving treatment unless symptoms appear or change, or there are changes in test results. Expectant management avoids problems that may be caused by treatments such as radiation or surgery. It is used to find early signs that the condition is getting worse. During expectant management, patients may be given certain exams and tests. It is sometimes used in prostate cancer. Also called deferred therapy. (Source: http://www.cancer.gov/dictionary?CdrID=616061)

First course of therapy: All treatments administered to the patient after the original diagnosis of cancer in an attempt to **destroy or modify the cancer tissue**. See below for detailed information on timing and treatment plan documentation requirements.

Hospice: A program that provides special care for people who are near the end of life and for their families, either at home, in freestanding facilities, or within hospitals. Hospice care **may** include treatment that destroys or modifies cancer tissue. If performed as part of the first course, treatment that destroys or modifies cancer tissue is collected when given in a hospice setting. "Hospice, NOS" is not specific enough to be included as first course treatment.

Neoadjuvant therapy: Systemic therapy or radiation therapy given prior to surgery to shrink the tumor.

Palliative treatment: The World Health Organization describes palliative care as treatment that improves the quality of life by preventing or relieving suffering.

Note: Palliative therapy is part of the first course of therapy when it destroys or modifies cancer tissue.

Example: The patient was diagnosed with stage IV cancer of the prostate with painful bone metastases. The patient starts radiation treatment intended to shrink the tumor in the bone and relieve the intense pain. The radiation treatments are palliative because they relieve the bone pain; the radiation is also first course of therapy because it destroys proliferating cancer tissue.

Surgical procedure: Any surgical procedure coded in the fields Surgery of Primary Site, Scope of Regional Lymph Node Surgery, or Surgery of Other Regional or Distant Sites.

Treatment: Procedures that destroy or modify primary (primary site) or secondary (metastatic) cancer tissue.

Treatment failure: The treatment modalities did not destroy or modify the cancer cells. The tumor either became larger (disease progression) or stayed the same size after treatment.

Watchful waiting: Closely watching a patient's condition but not giving treatment unless symptoms appear or change. Watchful waiting is sometimes used in conditions that progress slowly. It is also used when the risks of treatment are greater than the possible benefits. During watchful waiting, patients may be given certain tests and exams. Watchful waiting is sometimes used in prostate cancer. It is a type of expectant management. (Source: http://www.cancer.gov/dictionary?CdrID=45942)

Treatment Timing

Use the following instructions in hierarchical order

- 1. Use the **documented** first course of therapy (treatment plan) from the medical record. First course of therapy ends when the treatment plan is **completed** no matter how long it takes to complete the plan.
 - **Example:** Hormonal therapy (e.g., Tamoxifen) after surgery, radiation, and chemotherapy. First course ends when hormonal therapy is completed, even if this takes years, unless there is documentation of disease progression, recurrence, or treatment failure (see #2 below).
- 2. First course of therapy ends when there is documentation of **disease progression**, **recurrence**, **or treatment failure**
 - **Example 1:** The documented treatment plan for sarcoma is pre-operative (neoadjuvant) chemotherapy, followed by surgery, then radiation or chemotherapy depending upon the pathology from surgery. Scans show the tumor is not regressing after pre-operative chemotherapy. Plans for surgery are cancelled, radiation was not administered, and a different type of chemotherapy is started. Code only the first chemotherapy as first course. Do **not** code the second chemotherapy as first course because it is administered after documented treatment failure.
 - **Example 2:** The documented treatment plan for a patient with locally advanced breast cancer includes mastectomy, chemotherapy, radiation to the chest wall and axilla, and hormone therapy. The patient has the mastectomy and completes chemotherapy. During the course of radiation therapy, the liver enzymes are rising. Workup proves liver metastases. The physician stops the radiation and does not continue with hormone therapy (the treatment plan is altered). The patient is placed on a clinical trial to receive Herceptin for metastatic breast cancer. Code the mastectomy, chemotherapy, and radiation as first course of treatment. Do not code the

- Herceptin as first course of therapy because it is administered after documented disease progression.
- 3. When there is **no documentation** of a treatment plan or progression, recurrence or a treatment failure, first course of therapy ends one year after the date of diagnosis. **Any treatment given after one year is second course of therapy in the absence of a documented treatment plan or a standard of treatment.**

- 1. Code all treatment fields to 0 or 00 (Not done) when the physician opts for **active surveillance**. When the disease progresses or the patient becomes symptomatic, any prescribed treatment is second course.
 - a. Code Treatment Status (RX Summ--Treatment Status) to 2
- 2. Code the treatment as first course of therapy if the patient refuses treatment but changes his/her mind and **the prescribed treatment is implemented less than one year** from the date of diagnosis, AND there is no evidence of disease progression
- 3. The first course of therapy is **no treatment** when the patient **refuses** all treatment. Code all treatment fields to Refused.
 - a. Keep the refused codes even if the patient later changes his/her mind and decides to have the prescribed treatment
 - i. more than one year after diagnosis, or
 - ii. when there is evidence of disease progression before treatment is implemented
- 4. Code all treatment that was started and administered, whether completed or not. Document treatment discontinuation in text fields.
 - *Example:* The patient completed only the first dose of a planned 30-day chemotherapy regimen. Code chemotherapy as administered.
- 5. Code the treatment on each abstract when a patient has multiple primaries and the treatment given for one primary also affects/treats another primary
 - **Example 1:** The patient had prostate and bladder cancer. The bladder cancer was treated with a TURB. The prostate cancer was treated with radiation to the prostate and pelvis. The pelvic radiation includes the regional lymph nodes for the bladder. Code the radiation as treatment for both the bladder and prostate cases.
 - **Example 2:** The patient had a hysterectomy for ovarian cancer. The pathology report reveals a previously unsuspected microinvasive cancer of the cervix. Code the hysterectomy as surgical treatment for both the ovarian and cervix primaries.
- 6. Code the treatments only for the site that is affected when a patient has multiple primaries and the treatment affects only one of the primaries
 - *Example:* The patient has colon and tonsil primaries. The colon cancer is treated with a hemicolectomy and the tonsil primary is treated with radiation to the tonsil and regional nodes. Do not code the radiation for the colon. Do not code the hemicolectomy for the tonsil.

7. Code the treatment given as first course even if the correct primary is identified later when a patient is diagnosed with an unknown primary

Example: The patient is diagnosed with metastatic carcinoma, unknown primary site. After a full course of chemotherapy, the primary site is identified as prostate. Code the chemotherapy as first course of treatment.

a. Do not code treatment added to the plan when the primary site is discovered as first course. This is a change in the treatment plan.

Example: The patient is diagnosed with metastatic carcinoma, unknown primary site. After a full course of chemotherapy, the primary site is identified as prostate. Hormonal treatment is started. Code the chemotherapy as first course of treatment. The hormone therapy is second course because it was not part of the initial treatment plan.

8. For information regarding first course of therapy for hematopoietic and lymphoid neoplasms, refer to the NCI, SEER *Hematopoietic and Lymphoid Neoplasm Coding Manual* at: http://seer.cancer.gov/tools/heme/index.html



Date Therapy Initiated

Item Length: 8 NAACCR Item #: 1260 NAACCR Name: Date Initial RX SEER

Record the start date of the first course of therapy. This is the start date of any type of treatment for this tumor; surgery, chemotherapy, radiation therapy, or other types of therapy. Treatment may be given in a hospital or non-hospital setting.

Date Therapy Initiated must be transmitted in the YYYYMMDD format. Date Therapy Initiated may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

Transmitting Dates

Transmit date fields in the year, month, day format (YYYYMMDD). Leave the year, month and/or day blank when they cannot be estimated or are unknown.

Common Formats

VVVVVMMDD

IIIIMMDD	Complete date is known
YYYYMM	Year and month are known/estimated; day is unknown
YYYY	Year is known/estimated; month and day cannot be estimated or are unknown
Blank	Year, month, and day cannot be estimated or are unknown

Transmit Instructions

1. Transmit date fields in the year, month, day format (YYYYMMDD)

Complete data is Impres

- 2. Leave the year, month and/or day blank when they cannot be estimated or are unknown
 - a. Leave the year, month and day blank for death certificate only (DCO) cases when the date of therapy is unknown and cannot be estimated
- 3. Most SEER registries collect the month, day, and year for date therapy initiated. When the full date (YYYYMMDD) is transmitted, the seventh and eighth digits (day) will be deleted when the data are received by SEER.

Codes for Year

Code the four-digit year of date therapy initiated

Codes for Month

Code	Description
01	January
02	February
03	March
04	April
05	May

Code	Description
06	June
07	July
08	August
09	September
10	October
11	November
12	December

Codes for Day

01

02

03

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31

Coding Instructions

- 1. Code the **start date** of the first therapy. The first therapy may be recorded in the following data items
 - Surgery of Primary Site
 - Scope of Regional Lymph Node Surgery
 - Surgical Procedure of Other Site
 - Radiation Therapy
 - Chemotherapy
 - Hormone Therapy
 - Immunotherapy
 - Hematologic Transplant and Endocrine Procedures
 - Other Therapy
- 2. Code the date of **excisional biopsy** as the **date therapy initiated** when it is the first treatment. Code the date of a biopsy documented as incisional when further surgery reveals no residual or only microscopic residual.

Example: Breast biopsy with diagnosis of infiltrating duct carcinoma; subsequent re-excision with no residual tumor noted. Code the date of the biopsy as the date therapy initiated.

- 3. Record the actual date of treatment when treatment is performed prior to birth. Record the type of treatment in the appropriate data item, for example, Surgery of Primary Site, or Radiation.
 - *Example*: On 01/03/2018, fetus is diagnosed with malignant teratoma. The teratoma is resected in utero on 01/10/2018. Live birth on 04/18/2018. Code the date therapy initiated as January 10, 2018 (20180110).
- 4. Code the **date** unproven therapy was initiated as the date therapy initiated
- 5. Code the date of admission to the hospital for inpatient or outpatient treatment when the exact date of the first treatment is **unknown**

- 6. Leave blank
 - a. When no treatment is given during the first course
 - b. When Treatment Status is coded 2, Active surveillance/watchful waiting
 - c. When it is known the patient had first course therapy, but it is impossible to estimate the date
 - d. When it is unknown whether the patient had treatment
 - e. For death certificate only (DCO) cases when the date is unknown and cannot be estimated
 - f. Autopsy only cases

Estimating Dates

Estimating the **month**

- 1. Code "spring of" to April
- 2. Code "summer" or "middle of the year" to July
- 3. Code "fall" or "autumn" as October
- 4. For "winter of," try to determine whether the physician means the first of the year or the end of the year and code January or December as appropriate. If no determination can be made, use whatever information is available to calculate the month.
- 5. Code "early in year" to January
- 6. Code "late in year" to December
- 7. Use whatever information is available to calculate the month
- 8. Code the month of admission when there is no basis for estimation
- 9. Leave month blank if there is no basis for approximation

Estimating the year

- 1. Code "a couple of years" to two years earlier
- 2. Code "a few years" to three years earlier
- 3. Use whatever information is available to calculate the year
- 4. Code the year of admission when there is no basis for estimation

Date Therapy Initiated Flag

Item Length: 2 NAACCR Item #: 1261

NAACCR Name: Date Initial RX SEER Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

Code	Label	Definition	
	Blank	A valid date value is provided in Date of Initial Treatment	
10	No information	No information whatsoever can be inferred	
11	Not applicable	No proper value is applicable in this context	
12	Unknown	A proper value is applicable but not known	

- 1. Leave this item blank if Date Therapy Initiated has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any treatment was administered
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** when no treatment is given during the first course, the first course is active surveillance/watchful waiting, or the initial diagnosis was at autopsy
- 4. Assign code 12 if the Date Therapy Initiated cannot be determined, and the patient did receive first course treatment

Treatment Status

Item Length: 1 NAACCR Item #: 1285 NAACCR Name: RX Summ--Treatment Status

Treatment Status documents active surveillance/watchful waiting. Before this data item was implemented, active surveillance or watchful waiting was deduced from the codes in each of the treatment fields.

This data item is effective for cases diagnosed January 1, 2010 and later.

Code	Label	Definition
0	No treatment given	The patient did not receive any treatment
1	Treatment given	The patient received treatment
2	Active surveillance (watchful waiting)	The patient was under active surveillance or watchful waiting during the first course of treatment
9	Unknown if treatment given	It is unknown whether or not the patient received treatment

- 1. Assign code 1 when the patient receives treatment collected in any of the following fields
 - a. Surgery of Primary Site
 - b. Scope of Regional Lymph Node Surgery
 - c. Surgical Procedure of Other Site
 - d. Radiation
 - e. Chemotherapy
 - f. Hormone Therapy
 - g. Immunotherapy
 - h. Hematologic Transplant and Endocrine Procedures
 - i. Other Therapy
- 2. Assign code 9 for death certificate only (DCO) cases
- 3. Leave blank for cases diagnosed prior to January 1, 2010

Date of First Surgical Procedure

Item Length: 8 NAACCR Item #: 1200 NAACCR Name: RX Date Surgery

Date of First Surgical Procedure is the date the first surgery was performed as part of first course of therapy. This is either the date of the Surgery of Primary Site, Scope of Regional Lymph Node Surgery, or Surgical Procedure of Other Site, whichever is earliest.

Date of First Surgical Procedure must be transmitted in the YYYYMMDD format. Date of First Surgical Procedure may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the first/earliest surgery if Surgery of Primary Site, Scope of Regional Lymph Node Surgery, or Surgical Procedure of Other Site was recorded as part of the first course of therapy
- 2. Surgery date should be the same as the Date Therapy Initiated when surgery is the only treatment administered
- 3. Transmit date fields in the year, month, day format (YYYYMMDD)
- 4. Record the polypectomy date as the date of first surgical procedure when a surgical procedure to remove polyps is performed without removing the entire tumor, and a subsequent surgery is performed.
 - a. When reportable tumor is found in the specimen, polypectomies are surgery for the purposes of cancer registry data collection regardless of whether or not there is residual tumor after the polypectomy

Date of First Surgical Procedure Flag

Item Length: 2 NAACCR Item #: 1201

NAACCR Name: RX Date Surgery Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition
	Blank	A valid date value is provided in Date of First Surgical Procedure
10	No information	No information whatsoever can be inferred
11	Not applicable	No proper value is applicable in this context
12	Unknown	A proper value is applicable but not known

- 1. Leave this item blank if Date of First Surgical Procedure has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether the patient had any surgery
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** when no surgical procedure was performed as part of the first course of therapy or the initial diagnosis was at autopsy
- 4. Assign code **12** when the Date of First Surgical Procedure cannot be determined, and surgery was performed

Date of Most Definitive Surgical Resection of the Primary Site

Item Length: 8 NAACCR Item #: 3170 NAACCR Name: RX Date Mst Defn Srg

Date of Most Definitive Surgical Resection of the Primary Site is new for 2018. This data item captures the date of the most definitive surgical procedure of the primary site performed as part of the first course of therapy.

Date of Most Definitive Surgical Resection of the Primary Site must be transmitted in the YYYYMMDD format. Date of Most Definitive Surgical Resection of the Primary Site may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the most invasive, extensive, or definitive surgery when Surgery of Primary Site was recorded as part of the first course of therapy
 - a. This is the date of the procedure coded in Surgery of Primary Site
- 2. Transmit date fields in the year, month, day format (YYYYMMDD)



Date of Most Definitive Surgical Resection of the Primary Site Flag

Item Length: 2 NAACCR Item #: 3171 NAACCR Name: RX Date Mst Defn Srg Flag

Date of Most Definitive Surgical Resection of the Primary site Flag is new for 2018 and explains why there is no appropriate value in the corresponding date data item, Date of Most Definitive Surgical Resection of the Primary Site Flag [NAACCR Item #3170].

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition
	Blank	A valid date value is provided in Date of Most Definitive Surgical
		Resection of the Primary Site
10	No information	No information whatsoever can be inferred
11	Not applicable	No proper value is applicable in this context
12	Unknown	A proper value is applicable but not known

- 1. Leave this item blank if Date of Most Definitive Surgical Resection of the Primary Site has a full or partial date recorded
- 2. Assign code **10**
 - a. When it is unknown whether the patient had any surgery
 - b. For death certificate only (DCO) cases
- 3. Assign code 11 when no surgical procedure was performed as part of the first course of therapy or the initial diagnosis was at autopsy
- 4. Assign code **12** when the Date of Most Definitive Surgical Resection of the Primary Site cannot be determined, and first course surgery was performed

Surgery of Primary Site

Item Length: 2 NAACCR Item #: 1290 NAACCR Name: RX Summ--Surg Prim Site

Surgery of Primary Site describes a surgical procedure that removes and/or destroys tissue of the primary site that is performed as part of the initial diagnostic and staging work-up or first course of therapy. Site-specific surgery codes are included under Appendix C of this manual.

General Coding Structure

(See Appendix C for site-specific codes)

Code	Description	
00	None; no surgical procedure of primary site; diagnosed at autopsy only	
10-19	Site-specific codes. Tumor destruction; no pathologic specimen or unknown whether there is a pathologic specimen	
20-80	Site-specific codes. Resection; pathologic specimen	
90	Surgery, NOS. A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided.	
98	Special codes for hematopoietic neoplasms; ill-defined sites; and unknown primaries (See site-specific codes for the sites and histologies), except death certificate only	
99	Unknown if surgery performed	

- 1. Code **00** when
 - a. No surgery was performed on the primary site, **OR**
 - b. First course of treatment was active surveillance/watchful waiting, **OR**
 - c. Case was diagnosed at autopsy
 - *Note:* Code 00 excludes all sites and histologies that would be coded as 98. (See Coding Instruction 10 below.)
- 2. Use the site-specific coding scheme corresponding to the primary site or histology
- 3. Code the most **invasive**, **extensive**, **or definitive** surgery if the patient has multiple surgical procedures of the primary site even if there is no residual tumor found in the pathologic specimen from the more extensive surgery
 - **Example:** Patient has a needle biopsy of prostate that is positive for adenocarcinoma. The patient chooses to have a radical prostatectomy. The pathologic examination of the prostatectomy specimen shows no residual tumor. Code the radical prostatectomy.
- 4. Code an **excisional biopsy**, even when documented as **incisional**, when
 - a. All disease is removed (margins free), OR
 - b. All gross disease is removed and there is only microscopic residual at the margin
 - **Note 1:** Do **not** code an excisional biopsy when there is macroscopic residual disease.
 - **Note 2:** Shave or punch biopsies are most often diagnostic. Code as a surgical procedure **only** when the entire tumor is removed and margins are clear.

- 5. Code total **removal of the primary site** when a previous procedure resected a portion of the site and the current surgery removed the rest of the organ. The previous procedure may have been cancer directed or non-cancer directed surgery.
- 6. Code the removal of regional or distant **tissue/organs** when they are resected in continuity with the primary site (**en bloc**) and that regional organ/tissue is listed in the Surgery of Primary Site codes. Specimens from an en bloc resection may be submitted to pathology separately.
 - *Example:* Code an en bloc removal when the patient has a hysterectomy and an omentectomy.
- 7. Code surgery for extra-lymphatic lymphoma using the **site-specific** surgery coding scheme for the primary site. Do **not** use the lymph node scheme.
- 8. Assign the surgery code(s) that best represents the extent of the surgical procedure that was actually carried out when surgery is aborted. If the procedure was aborted before anything took place, assign code 00. See 1.a. above.
- 9. Code **80** or **90** only when there is no specific information
- 10. Code **98** for the following sites unless the case is death certificate only:
 - a. Hematopoietic neoplasms
 - i. Primary site: C421 (all histologies)
 - ii. Histologies: 9740, 9751, 9754-9759, 9762, 9930
 - b. Unknown or ill-defined sites (C760-C768, C809) (all histologies)
- 11. Code **99** for death certificate only (DCO) cases



Surgical Margins of the Primary Site

Item Length: 1 NAACCR Item #: 1320 NAACCR Name: RX Summ--Surgical Margins

Surgical Margins of the Primary Site describes the final status of the surgical margins after resection of the primary tumor.

This item serves as a quality measure for pathology reports, is used for staging, and may be a prognostic factor in recurrence. It applies to all cases that have a surgical procedure of the primary site.

Code	Description	
0	No residual tumor	
1	Residual tumor, NOS	
2	Microscopic residual tumor	
3	Macroscopic residual tumor	
7	Margins not evaluable	
8	No primary site surgery	
9	Unknown or not applicable	

Note: Codes were site-specific from 1998 to 2002, and have been changed to be generic across all disease sites.

- 1. Assign code $\bf 0$ when all margins are negative both microscopically and macroscopically (grossly)
- 2. Codes 0-3 are hierarchical
 - a. Assign the numerically higher code if two codes describe the margin status
- 3. Assign code 1 for involvement of margins but not otherwise specified
- 4. Assign code **2** for involvement of margins microscopically but not grossly (cannot be seen by the naked eye). Use the Margins section of the CAP protocol or the Microscopic Description from the pathology report to identify microscopic findings.
- 5. Assign code **3** for involvement of margins grossly (seen by the naked eye). Use the Margins section of the CAP protocol or the Gross Description from the pathology report to identify macroscopic findings.
- 6. Assign code 7 if the pathology report indicates the margins could not be determined
- 7. Assign code **9**
 - a. When it is unknown whether a surgical procedure of the primary site was performed or there is no mention in the pathology report or no tissue was sent to pathology
 - b. For death certificate only (DCO) cases
 - c. For lymphomas with a lymph node primary site
 - d. For hematopoietic neoplasms
 - e. When there is an unknown or ill-defined primary

Scope of Regional Lymph Node Surgery

Item Length: 1 NAACCR Item #: 1292 NAACCR Name: RX Summ--Scope Reg LN Sur

Scope of Regional Lymph Node Surgery describes the procedure of removal, biopsy, or aspiration of **regional** lymph nodes performed during the initial work-up or first course of therapy.

Instructions for coding **sentinel lymph node biopsies** (SLNBx) have been clarified for 2012 and later, diagnoses.

Additional instructions for **breast** primaries (C500-C509) are described below, following the general coding instructions.

Code	Description	
0	No regional lymph nodes removed or aspirated; diagnosed at autopsy.	
1	Biopsy or aspiration of regional lymph node, NOS	
2	Sentinel lymph node biopsy [only]	
3	Number of regional lymph nodes removed unknown, not stated; regional lymph nodes removed, NOS	
4	1 to 3 regional lymph nodes removed	
5	4 or more regional lymph nodes removed	
6	Sentinel node biopsy and code 3, 4, or 5 at same time or timing not noted	
7	Sentinel node biopsy and code 3, 4, or 5 at different times	
9	Unknown or not applicable	

Coding Instructions

- 1. Use the **operative report** as the primary source document to determine whether the operative procedure was a 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.
- 2. Code regional lymph node procedures in this data item. Record distant lymph node removal in Surgical Procedure of Other Site.
 - a. Include lymph nodes that are regional in the current AJCC Staging Manual or EOD 2018
- 3. Record all surgical procedures that remove, biopsy, or aspirate regional lymph node(s) whether or not there were any surgical procedures of the primary site. The regional lymph node surgical procedure(s) may be done to **diagnose** cancer, **stage** the disease, or as a part of the initial **treatment**.

Example: Patient has a sentinel node biopsy of a single lymph node. Assign code 2 (Sentinel lymph node biopsy [only]).

- 4. Include lymph nodes obtained or biopsied during any procedure within the first course of treatment. A separate lymph node surgery is not required.
 - a. Code the removal of intra-organ lymph nodes in Scope of Regional Lymph Node Surgery *Example:* Local excision of breast cancer. Specimen includes an intra-mammary lymph node. Assign code 4 (1 to 3 regional lymph nodes removed).
- 5. Add the number of all of the lymph nodes removed during each surgical procedure performed as part of the first course of treatment. The Scope of Regional Lymph Node field is **cumulative**.

Example: Patient has excision of a positive cervical node. The pathology report from a subsequent node dissection identifies three cervical nodes. Assign code 5 (4 or more regional lymph nodes removed).

- a. Lymph node aspirations
 - i. Do not double-count when a regional lymph node is aspirated and that node is in the resection field. Do not add the aspirated node to the total number.
 - ii. Count as an additional node when a regional lymph node is aspirated and that node is NOT in the resection field. Add it to the total number.
- 6. Code the removal of regional nodes for both primaries when the patient has **two primaries with common regional lymph nodes**

Example: Patient has a cystoprostatectomy and pelvic lymph node dissection for bladder cancer. Pathology identifies prostate cancer as well as the bladder cancer and 4/21 nodes positive for metastatic adenocarcinoma. Code Scope of Regional Lymph Node Surgery to 5 (4 or more regional lymph nodes removed) for both primaries.

- 7. Assign code **0** when
 - a. Regional lymph node removal procedure was **not** performed

Note: Excludes all sites and histologies that would be coded 9. (See Coding Instruction #12 below.)

OR

b. First course of treatment was active surveillance/watchful waiting,

OR

- c. The operative report lists a lymph node dissection, but no nodes were found by the pathologist
- 8. Assign code **2** when
 - a. The operative report states that a **SLNBx was performed**,

OR

b. 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

Note: When a SLNBx is performed, additional non-sentinel nodes can be taken during the same operative procedure. These additional non-sentinel nodes may be discovered by the pathologist or selectively removed (or harvested) as part of the SLNBx procedure by the surgeon. 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**.

- 9. Codes **3, 4, and 5**: 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)
 - a. Code 3: 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)

- b. Code **4** should be used infrequently. Review the operative report to ensure the procedure was **not** a SLNBx only.
- c. Code **5:** 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).

Note: 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.

- 10. Code **6**: SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known
 - a. 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.
 - b. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only
 - c. 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**.
- 11. Code 7: SLNBx and regional lymph node dissection (code 3, 4, or 5) in separate surgical events
 - a. 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.
 - b. If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only
- 12. Code **9:** The status of regional lymph node evaluation should be known for surgically treated cases (i.e., cases coded 19-90 in the data item Surgery of Primary Site [NAACCR Item #1290]). Review surgically treated cases coded as 9 in Scope of Regional Lymph Node Surgery to confirm the code.
 - a. Assign code **9** for
 - i. Primary sites
 - Brain (C700-C709), OR
 - Spinal cord (C710-C719), OR
 - Cranial nerves and other parts of the central nervous system (C720-C729, C75.1-C75.3)
 - Unknown or ill-defined sites (C760-C768, C809) (all histologies) (including cases diagnosed at autopsy)
 - ii. Lymphoma with primary site in lymph nodes (C770-C779) AND
 - 9590, 9726, 9735-9738, OR
 - 9727, 9811-9818, 9823, 9827, 9837 (leukemia/lymphoma histologies)

- iii. Hematopoietic neoplasms
 - Primary site: C421 (all histologies)
 - Histologies: 9740, 9751, 9754-9759, 9762, 9930
- iv. Death certificate only (DCO) cases

Coding Instructions – Sentinel lymph node biopsy (SLNBx), breast primary C500-C509

1. Use the **operative report** as the primary source document to determine whether the operative procedure was a SLNBx, an axillary 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.

2. Code **1**

a. Excisional biopsy or aspiration of regional lymph nodes for breast cancer is uncommon. Review the operative report 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.

3. Code **2**

- a. 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)
- b. 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. Use code 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 (NAACCR Item #830) and Regional Lymph Nodes Positive (NAACCR Item #820).
- 4. Codes **3**, **4**, and **5**: 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).

5. Code **6**

- a. 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.
- b. 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

6. Code **7**

a. 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.

b. 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



Date of Sentinel Lymph Node Biopsy

Item Length: 8 NAACCR Item #: 832 NAACCR Name: Date of Sentinel Lymph Node Biopsy

Date of Sentinel Lymph Node Biopsy is new for 2018 and records the date of the sentinel lymph node biopsy procedure. This data item is required for breast and melanoma cases only.

Date of Sentinel Lymph Node Biopsy must be transmitted in the YYYYMMDD format. Date of Sentinel Lymph Node Biopsy may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

- 1. Record the date of the sentinel lymph node biopsy procedure documented in the Sentinel Lymph Node Examined data item [NAACCR Item #834]
- 2. This data item documents the date of sentinel node <u>biopsy</u>. Do not record the date of lymph node aspiration, fine needle aspiration, fine needle aspiration biopsy, core needle biopsy, or core biopsy.
- 3. 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 of First Surgical Procedure data item [NAACCR Item #1200]
- 4. If both a sentinel node biopsy procedure and a 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 of Regional Lymph Node Dissection data item [NAACCR Item #682]

Date of Sentinel Lymph Node Biopsy Flag

Item Length: 2 NAACCR Item #: 833

NAACCR Name: Date Sentinel Lymph Nodes Biopsy Flag

Date of Sentinel Lymph Node Biopsy Flag is new for 2018 and explains why there is no appropriate value in the corresponding date data item, Date of Sentinel Lymph Node Biopsy [NAACCR Item #832]. **This data item is required for breast and melanoma cases only.**

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition
	Blank	A valid date value is provided in item Date of Sentinel Lymph Node Biopsy [NAACCR Item #832]. Case was diagnosed prior to January 1, 2018.
10	No information	No information whatsoever can be inferred from this exceptional value (that is, unknown if any sentinel lymph node biopsy was performed)
11	Not applicable	No proper value is applicable in this context (for example, no sentinel lymph node biopsy performed; autopsy only cases)
12	Unknown	A proper value is applicable but not known. This event occurred, but the date is unknown (for example, sentinel lymph node biopsy performed but date is unknown).

- 1. Leave this item blank if Date of Sentinel Lymph Node Biopsy [NAACCR Item #832] has a full or partial date recorded
- 2. Code 10 if it is unknown whether sentinel lymph nodes were biopsied
- 3. Code 11 if no sentinel lymph node biopsy was performed
- 4. Code 12 if the Date of Sentinel Lymph Node Biopsy [NAACCR Item #832] cannot be determined, but a sentinel lymph node biopsy was performed

Sentinel Lymph Nodes Examined

Item Length: 2 NAACCR Item #: 834

NAACCR Name: Sentinel Lymph Nodes Examined

Sentinel Lymph Nodes Examined is new for 2018 and records the total number of lymph nodes sampled during the sentinel node biopsy and examined by the pathologist. **This data item is required for breast and melanoma cases only.**

Code	Description
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 stated in patient record

- 1. If <u>both sentinel</u> and <u>non-sentinel</u> nodes are sampled during the sentinel node biopsy procedure, 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 procedure regardless of sentinel node status
- 2. If both a sentinel node biopsy procedure and a subsequent 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 [NAACCR Item #830]
- 3. The number of sentinel lymph nodes biopsied 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.
- 4. 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 [NAACCR Item #830] data item

Sentinel Lymph Nodes Positive

Item Length: 2 NAACCR Item #: 835 NAACCR Name: Sentinel Lymph Nodes Positive

Sentinel Lymph Nodes Positive is new for 2018 and records the exact number of sentinel lymph nodes found to contain metastases. **This data item is required for breast and melanoma cases only.**

Code	Description	
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	
98	No sentinel nodes were biopsied	
99	It is unknown whether sentinel nodes are positive; not applicable; not stated in patient record	

- 1. If both sentinel and additional regional nodes are examined via sentinel node biopsy and subsequent regional node dissection, record the number of **positive sentinel nodes** biopsied in this data item, and record the <u>total number</u> of positive regional (<u>which includes sentinel</u>) lymph nodes biopsied/dissected in Regional Lymph Nodes Positive [NAACCR Item #820]
- 2. 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.
- 3. The number of sentinel nodes positive should be less than or equal to than the total number of Regional Nodes Positive [NAACCR Item #820]
- 4. For carcinoma of the breast, if only positive Isolated Tumor Cells (ITCs) are identified the sentinel lymph nodes are **negative**
- 5. For melanoma, if only positive Isolated Tumor Cells (ITCs) are identified the sentinel lymph nodes are **positive**
- 6. MIC (microscopic or micro mets) sentinel lymph nodes are positive

Date of Regional Lymph Node Dissection

Item Length: 8
NAACCR Item #: 682
NAACCR Name: Date Regional Lymph Node Dissection

Date of Regional Lymph Node Dissection is new for 2018 and records the date non-sentinel regional node dissection was performed.

Date of Regional Lymph Node Dissection must be transmitted in the YYYYMMDD format. Date of Regional Lymph Node Dissection may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

- 1. Record the date of regional lymph node dissection documented in the Regional Lymph Nodes Examined data item [NAACCR Item #830]
- 2. If both a sentinel node biopsy procedure and a subsequent 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 [NAACCR Item #832]



Date of Regional Lymph Node Dissection Flag

Item Length: 2 NAACCR Item #: 683 NAACCR Name: Date Regional Lymph Node Dissection Flag

Date of Regional Node Dissection Flag is new for 2018 and explains why there is no appropriate value in the corresponding date data item, Date of Regional Lymph Node Dissection [NAACCR Item #682].

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition
	Blank	A valid date value is provided in item Date of Regional Lymph Node
		Dissection [NAACCR Item #682]. Case was diagnosed prior to January 1, 2018.
10	No information	No information whatsoever can be inferred from this exceptional value (that is, unknown if any regional lymph node dissection was performed)
11	Not applicable	No proper value is applicable in this context (for example, no regional lymph node dissection was performed; autopsy only cases)
12	Unknown	A proper value is applicable but not known. This event occurred, but the date is unknown (for example, regional lymph node dissection was performed but date is unknown).

- 1. Leave this item blank if Date of Regional Lymph Node Dissection [NAACCR Item #682] has a full or partial date recorded
- 2. Code 10 if it is unknown whether regional lymph nodes were dissected
- 3. Code 11 if no regional lymph nodes were dissected
- 4. Code 12 if the Date of Regional Lymph Node Dissection [NAACCR Item #682] cannot be determined, but regional lymph nodes were dissected.

Regional Nodes Positive

Item Length: 2 NAACCR Item #: 820 NAACCR Name: Regional Nodes Positive

Description

Regional Nodes Positive records the exact number of regional nodes examined by the pathologist and found to contain metastasis. This data item must be collected on all cases.

Codes	Description
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 OR core biopsy 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 patient record

- 1. **Regional lymph nodes only.** Record information only about regional lymph nodes in this field.
 - a. Include lymph nodes that are regional in the current AJCC Staging Manual or EOD 2018
- 2. **This field is based on pathologic information only.** This field is to be recorded regardless of whether the patient received neoadjuvant (preoperative) treatment.
- 3. True **in situ cases** cannot have positive lymph nodes, so the only allowable codes are 00 (negative) or 98 (not examined). Codes 01-97 and 99 are not allowed.
- 4. **Nodes positive is cumulative.** Record the total number of regional lymph nodes removed and found to be positive by pathologic examination.
 - a. The number of regional nodes positive is cumulative from all procedures that remove lymph nodes through the completion of surgeries in the first course of treatment
 - b. 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.
 - **Example 1:** Lung cancer patient has a mediastinoscopy and positive core biopsy of a hilar lymph node. Patient then undergoes right upper lobectomy that yields 3 hilar and 2 mediastinal nodes positive out of 11 nodes dissected. **Code Regional Nodes Positive as 05 and Regional Nodes Examined as 11 because the core biopsy was of a lymph node in the same chain as the nodes dissected.**
 - **Example 2:** Positive right cervical lymph node aspiration followed by right cervical lymph node dissection showing 1 of 6 nodes positive. **Code Regional Nodes Positive as 01 and** Regional Nodes Examined **as 06.**
 - c. If the positive aspiration or core biopsy is from a node in a different node region, include the node in the count of Regional Nodes Positive

Example: Breast cancer patient has a positive core biopsy of a supraclavicular node and an axillary dissection showing 3 of 8 nodes positive. Code Regional Nodes Positive as 04 and Regional Nodes Examined as 09 because the supraclavicular lymph node is in a different, but still regional, lymph node chain.

d. 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

Example: Patient record states that lymph node core biopsy was performed at another facility and 7/14 regional lymph nodes were positive at the time of resection. **Code Regional Nodes Positive as 07 and Regional Nodes Examined as 14.**

- 5. **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 description, gross description.
- 6. **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.

Example: A breast case is two separate primaries as determined by the SEER multiple primary rules. The pathology report states "3 of 11 lymph nodes positive for metastasis" with no further information available. Code Regional Nodes Positive as 03 and Regional Nodes Examined as 11 for both primaries.

- 7. **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 any nodes that are identified as containing 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.
 - a. For cutaneous melanoma and Merkel cell carcinoma, count nodes with ITCs as positive lymph nodes
- 8. **Code 95**. Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue).
 - a. Use code 95 when a positive lymph node is aspirated and there are no surgically resected lymph nodes
 - *Example*: Patient with esophageal cancer. Enlarged mid-esophageal node found on CT scan, which is aspirated and found to be positive. Patient undergoes radiation therapy and no surgery. Code Regional Nodes Positive as 95 and Regional Nodes Examined as 95.
 - b. Use code 95 when a positive lymph node is aspirated and surgically resected lymph nodes are negative
 - *Example*: Lung cancer patient has aspiration of suspicious hilar mass that shows metastatic squamous carcinoma in lymph node tissue. Patient undergoes neoadjuvant (preoperative) radiation therapy followed by lobectomy showing 6 negative hilar lymph nodes. Code Regional Nodes Positive as 95 and Regional Nodes Examined as the 06 nodes surgically resected.
- 9. **Code 97**. Use code 97 for any combination of positive aspirated, biopsied, sampled or dissected lymph nodes when 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.

Example: Patient with carcinoma of the pyriform sinus has a mass in the mid neck. Fine needle aspiration (FNA) of one node is positive. The patient has neoadjuvant (preoperative) chemotherapy, then resection of the primary tumor and a radical neck dissection. In the radical neck dissection, "several" of 10 nodes are positive; the remainder of the nodes show chemotherapy effect. Code Regional Nodes Positive as 97 because the total number of positive nodes biopsied and removed is unknown, and code Regional Nodes Examined as 10.

Note: If the aspirated node is the only one that is microscopically positive, use code 95.

10. **Use Code 98**

- a. When the assessment of lymph nodes is clinical only
- b. When no lymph nodes are removed and examined
- c. When a "dissection" of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination
- d. When Regional Nodes Positive is coded 98, Regional Nodes Examined is usually coded 00
- 11. **Code 99.** Unknown whether regional lymph nodes are positive
 - a. Primary sites always coded 99
 - i. Brain
 - ii. CNS Other
 - iii. HemeRetic
 - iv. Ill-Defined Other (includes unknown primary [C809])
 - v. Intracranial Gland
 - vi. Lymphoma (excluding Primary Cutaneous Lymphoma [9709/3], Mycosis Fungoides [9700/3] and Sezary Syndrome [9701/3])
 - vii. Lymphoma-CLL/SLL
 - viii. Plasma Cell Myeloma
 - ix. Placenta

Regional Nodes Examined

Item Length: 2 NAACCR Item #: 830 NAACCR Name: Regional Nodes Examined

Description

Regional Nodes Examined records the total number of regional lymph nodes that were removed and examined by the pathologist. This data item must be collected on all cases.

Code	Description
00	No nodes were examined
01-89	1-89 nodes are examined (code exact number of nodes examined)
90	90 or more nodes were examined
95	No regional nodes were removed, but aspiration OR core biopsy 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 are examined; not applicable; not stated in patient record

Coding Instructions

- 1. **Regional lymph nodes only.** Record information only about regional lymph nodes in this field.
 - a. Include lymph nodes that are regional in the current AJCC Staging Manual or EOD 2018
- 2. **This field is based on pathologic information only.** This field is to be recorded regardless of whether the patient received neoadjuvant (preoperative) treatment.
- 3. **Use Code 00**
 - a. When the assessment of lymph nodes is clinical
 - b. When no lymph nodes are removed and examined
 - c. When a "dissection" of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination

Note: When Regional Nodes Examined is coded 00, Regional Nodes Positive is coded 98.

- 4. Nodes removed and examined is cumulative. Record the total number of regional lymph nodes removed and examined by the pathologist.
 - a. 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
 - b. Do not count an 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

Example: Lung cancer patient has a mediastinoscopy and positive core biopsy of a hilar lymph node. Patient then undergoes right upper lobectomy that yields 3 hilar and 2 mediastinal nodes positive out of 11 nodes dissected. **Code Regional Nodes Positive as**

05 and Regional Nodes Examined as 11 because the core biopsy was of a lymph node in the same chain as the nodes dissected.

c. If the positive aspiration or core biopsy is from a node in a different node region, include the node in the count of Regional Nodes Examined

Example: Breast cancer patient has a positive core biopsy of a supraclavicular node and an axillary dissection showing 3 of 8 nodes positive. Code Regional Nodes Positive as 04 and Regional Nodes Examined as 09 because the supraclavicular lymph node is in a different, but still regional, lymph node chain.

d. 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

Example: Patient record states that lymph node core biopsy was performed at another facility and 7/14 regional lymph nodes were positive at the time of resection. **Code Regional Nodes Positive as 07 and Regional Nodes Examined as 14.**

- 5. **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 description, gross description.
- 6. **Code 95.** Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue).

Example: Patient with esophageal cancer. Enlarged mid-esophageal node found on CT scan, which is aspirated and found to be positive. Patient undergoes radiation therapy and no surgery. Code Regional Nodes Positive as 95 and Regional Nodes Examined as 95.

- 7. **Lymph node excision biopsy.** If a lymph node excision biopsy was performed, code the number of nodes removed, if known.
- 8. 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 and, selective dissection. Use code 96 when a limited number of nodes are removed but the number is unknown.
- 9. 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, and lymph node stripping. Use code 97 when more than a limited number of lymph nodes are removed and the number is unknown.
- 10. **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.
- 11. When neither the type of lymph node removal procedure nor the number of lymph nodes examined is known, use **code 98**
- 12. **Code 99.** Unknown whether nodes were removed or examined.
 - a. Primary sites always coded 99
 - i. Brain
 - ii. CNS Other
 - iii. HemeRetic
 - iv. Ill-Defined Other (includes unknown primary [C809])
 - v. Intracranial Gland

- vi. Lymphoma (excluding Primary Cutaneous Lymphoma [9709/3], Mycosis Fungoides [9700/3] and Sezary Syndrome [9701/3])
- vii. Lymphoma-CLL/SLL
- viii. Plasma Cell Myeloma
- ix. Placenta



Surgical Procedure of Other Site

Item Length: 1 NAACCR Item #: 1294 NAACCR Name: RX Summ--Surg Oth Reg/Dis

Surgical Procedure of Other Site describes the surgical removal of distant lymph node(s) or other tissue(s) or organ(s) beyond the primary site.

Code	Description
0	None; diagnosed at autopsy
1	Non-primary surgical procedure performed
2	Non-primary surgical procedure to other regional sites
3	Non-primary surgical procedure to distant lymph node(s)
4	Non-primary surgical procedure to distant site
5	Combination of codes 2, 3, or 4
9	Unknown

Coding Instructions

- 1. Assign code **0** when
 - a. No surgical procedures were performed that removed distant lymph node(s) or other tissue(s) or organ(s) beyond the primary site, or
 - b. First course of treatment was active surveillance/watchful waiting
- 2. The codes are **hierarchical**
 - a. Codes **1-5** have **priority** over codes 0 and 9
- 3. Assign code 1
 - a. When the involved contralateral breast is removed for a single primary breast cancer
 Note: See also notes and codes in Appendix C, Breast surgery codes.
 - b. When any surgery is performed to remove tumors and the primary site is unknown or ill-defined (C760-768, C809)
 - c. When any surgery is performed for hematopoietic neoplasms (C421 or M-9740, 9751, 9754-9759, 9762, 9930)
- 4. Do **not** code tissue or organs such as an appendix that were removed **incidentally**, and the organ was not involved with cancer

Note: Incidental removal of organs means that tissue was removed for reasons other than removing cancer or preventing the spread of cancer. Examples of incidental removal of organ(s) would be removal of appendix, gallbladder, etc., during abdominal surgery.

- 5. Do not code removal of uninvolved contralateral breast in this data item. See Surgery Codes for Breast in Appendix C.
- 6. Assign code 2 for sites that are regional
- 7. Assign code **4** for sites that are distant
- 8. Assign code **9** for death certificate only (DCO) cases

Reason for No Surgery of Primary Site

Item Length: 1 NAACCR Item #: 1340

NAACCR Name: Reason for No Surgery

This data item records the reason that surgery of the **primary site** was not part of the first course of treatment.

Code	Description
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
2	Surgery of the primary site was not recommended/performed because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, 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 the patient's record.
7	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in the patient record.
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 if surgery of the primary site was recommended or performed; DCO and autopsy only cases

Coding Instructions

- 1. Assign code **0** when Surgery of Primary Site is coded in the range of 10-90 (surgery of the primary site was performed)
- 2. Assign a code in the **range of 1-8** if Surgery of Primary Site is coded 00 or 98

Note: Referral to a surgeon **is equivalent** to a recommendation for surgery.

- a. Assign code 1 when
 - i. There is no information in the patient's medical record about surgery, AND
 - It is known that surgery is not usually performed for this type and/or stage of cancer

OR

• There is no reason to suspect that the patient would have had surgery of primary site

Example: The patient would not be a surgical candidate because of advanced stage.

ii. The treatment plan offered multiple treatment options and the patient selected treatment that did not include surgery of the primary site

Example: Prostate cancer patient is offered three treatment options: a. Radical prostatectomy, b. Radiation therapy, or c. Hormone therapy. The patient chose to have radiation therapy. Assign code 1. Surgery of the primary site was not

performed because it was **not part of the planned** first course of treatment. The treatment plan was for the patient to receive **ONE** of three treatment modality options: surgery, OR radiation, OR hormone therapy. At no time did the physician recommend that the patient have surgery AND radiation therapy AND hormone therapy. The patient chose radiation. This does not mean he refused surgery because at no time did the treatment plan include both radiation AND surgery. Recording that a patient refused the treatment modality means that the patient refused recommended therapy. This is a quality control check explaining why the patient did not receive the expected treatment for their cancer (patient's choice versus physician's choice, or facility's lack of providing quality care).

- iii. Patient elected to pursue no treatment following the discussion of surgery.

 Discussion does not equal a recommendation. Patient's decision not to pursue surgery is not a refusal of surgery in this situation.
- iv. Active surveillance/watchful waiting is the first course (e.g., prostate)
- b. Assign code **6** when
 - i. It is **KNOWN** that surgery was recommended

AND

ii. It is **KNOWN** that surgery was **not** performed

AND

iii. There is no documentation explaining why surgery was not done

Example: The medical record has a recommendation that the patient have surgery. No further admissions or documentation of surgery found; the primary care physician replies that the patient did **NOT** have surgery. No further information is given; it is unknown if the patient refused surgery or if there were co-morbid conditions that prevented the surgical procedure.

- c. Assign code 7 when the patient
 - i. Refuses recommended surgery

OR

- ii. Makes a blanket statement that he/she refused all treatment when surgery is a customary option for the primary site/histology
 - Assign code 1 when surgery is not normally performed for the site/histology

Note: Coding Reason for No Surgery of Primary Site as "refused" does not affect the coding of the other treatment fields (e.g., Radiation, Chemotherapy, Hormone Therapy, etc.). Code 7 means surgery is exactly what was recommended by the physician and the patient refused. If two treatment alternatives were offered and surgery was not chosen, code Reason no surgery of primary site as 1 [Surgery of the primary site was not performed because it was not part of the planned first-course treatment].

d. Assign code **8** when surgery is recommended, but it is unknown if the patient actually had the surgery

Example: There is documentation in the medical record that the primary care physician referred the patient to a surgical oncologist. Follow-back to the surgical oncologist and primary care physician yields no further information. Assign code 8, it is known that surgery was recommended but there is no information on whether or not the patient actually had the surgical procedure.

Note: Review cases coded 8 periodically for later confirmation of surgery.

- 3. Assign code 9
 - a. When there is no documentation that surgery was recommended or performed
 - b. For death certificate only (DCO) cases
 - c. Autopsy only cases



Date Radiation Started

Item Length: 8 NAACCR Item #: 1210 NAACCR Name: RX Date Radiation

Date Radiation Started is the date when radiation therapy began as part of the first course of therapy.

Date Radiation Started must be transmitted in the YYYYMMDD format. Date Radiation Started may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the first/earliest radiation treatment if Radiation was given and recorded as part of the first course of therapy
- 2. Radiation date should be the same as the Date Therapy Initiated when radiation is the only treatment administered
- 3. Transmit date fields in the year, month, day format (YYYYMMDD)



Date Radiation Started Flag

Item Length: 2 NAACCR Item #: 1211

NAACCR Name: RX Date Radiation Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition		
	Blank	A valid date value is provided in Date Radiation Started		
10	No information	No information whatsoever can be inferred		
11	Not applicable	No proper value is applicable in this context		
12	Unknown	A proper value is applicable but not known		
15	Planned	Treatment planned but not yet started		

- 1. Leave this item blank if Date Radiation Started has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any treatment was administered
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** if radiation was not given as part of the first course of therapy or the initial diagnosis was at autopsy
- 4. Assign code **12** if the Date Radiation Started cannot be determined but the patient did receive first course of radiation
- 5. Assign code **15** if radiation treatment is planned but has not started and date is not available. If radiation was expected to be given or was planned as part of the first course of therapy, but information was not known if the radiation had been started or had not been started at the time of the most recent follow-up, attempt to follow-up to assure complete information is collected. As information is learned, update this item, Date Radiation Started, and all other radiation items.

Radiation Treatment Modality--Phase I, II, III

Item Length: 2
NAACCR Item #: 1506, 1516, 1526
NAACCR Name: Phase I Radiation Treatment Modality
Phase II Radiation Treatment Modality
Phase III Radiation Treatment Modality

Radiation Treatment Modality--Phase I, II, and III are new for 2018. These data items identify the radiation modality administered during the first, second, and third phase, respectively, of radiation treatment delivered during the first course of treatment.

Radiation modality reflects whether a treatment was external beam, brachytherapy, a radioisotope as well as their major subtypes, or a combination of modalities.

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

Coding for Tumor Embolization

The American College of Surgeons Commission on Cancer (CoC), the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR), and the SEER Program have collaborated to clarify and refine coding directives for tumor embolization and are jointly issuing the following instructions.

Definitions

Chemoembolization: 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 permits a higher concentration of drug to be in contact with the tumor for a longer period of time.

Radioembolization: Tumor embolization combined with injecting small radioactive beads or coils into an organ or tumor.

Tumor embolization: The intentional blockage of an artery or vein to stop the flow of blood through the desired vessel.

Coding Instructions

Code as brachytherapy (Radioactive implants-code 2) when the tumor embolization is performed using a radioactive agent or radioactive seeds.

Example: Yttrium-90 microsphere radioembolization is an FDA-approved, non-surgical procedure used to treat inoperable liver cancer. With yttrium-90 microsphere radioembolization, a catheter is inserted through a tiny incision in the groin and threaded through the arteries until it reaches the hepatic artery. Once the catheter is properly placed in the hepatic artery, millions of tiny beads, or microspheres, which contain the radioactive element yttrium-90, are released into the blood stream. These microspheres lodge in the smaller blood vessels that feed the tumor. In addition to preventing blood flow to the tumor, the microspheres emit radiation that helps destroy the cancerous cells.

Do not code pre-surgical (pre-operative) embolization of hypervascular tumors with agents such as particles, coils, or alcohol as a treatment. Pre-surgical embolization is typically performed to prevent excess bleeding during the resection of the primary tumor. Examples where pre-surgical embolization is used include meningiomas, hemangioblastomas, paragangliomas, and renal cell metastases in the brain.



Radiation Sequence With Surgery

Item Length: 1 NAACCR Item #: 1380 NAACCR Name: RX Summ--Surg/Rad Seq

This field records the order in which surgery and radiation therapies were administered for those patients who had **both surgery and radiation**. For the purpose of coding the data item Radiation Sequence with Surgery, 'Surgery' is defined as a Surgical Procedure to the Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 1-7) or Surgical Procedure of Other Site (codes 1-5).

Code	Description
0	No radiation and/or surgery as defined above; Unknown if surgery and/or radiation given
2	Radiation before surgery
3	Radiation after surgery
4	Radiation both before and after surgery
5	Intraoperative radiation therapy
6	Intraoperative radiation with other radiation given before and/or after surgery
7	Surgery both before and after radiation (for cases diagnosed 01/01/2012 and later)
9	Sequence unknown, but both surgery and radiation were given

Coding Instructions

- 1. Assign code 0 when
 - a. The patient did not have either surgery or radiation
 - b. The patient had surgery but not radiation
 - c. The patient had radiation but not surgery
 - d. It is unknown whether or not the patient had surgery and/or radiation
 - i. For death certificate only (DCO) cases
- 2. Assign codes 2-9 when first course of therapy includes both cancer-directed surgery and radiation therapy
 - a. Assign code 4 when there are at least two episodes or fractions of radiation therapy

Example

- 1. Preoperative radiation therapy was administered to shrink a large, bulky lesion
- 2. Resection was performed
- 3. Postoperative radiation therapy was administered after resection
- b. Assign code 7 when there are at least two surgeries; radiation was administered between one surgical procedure and a subsequent surgical procedure

Example 1

- 1. Sentinel lymph node biopsy
- 2. Radiation therapy
- 3. Surgery of primary site

Code Radiation Sequence with Surgery as 7 (surgery both before and after radiation).

Example 2

- 1. Lymph node aspiration
- 2. Radiation
- 3. Surgery of primary site

Code Radiation Sequence with Surgery as 7 (surgery both before and after radiation) because lymph node aspiration is coded in Scope of Regional Lymph Node Surgery.



Reason for No Radiation

Item Length: 1 NAACCR Item #: 1430 NAACCR Name: Reason for No Radiation

Reason for No Radiation has been added in 2018. This data item captures the reason the patient did not receive radiation treatment as part of first course of therapy.

Code	Description
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 administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.)
5	Radiation therapy was not administered because the patient died prior to planned or recommended treatment
6	Radiation therapy was not administered; it was recommended by the patient's physician, but was not administered as part of the first-course therapy. No reason was noted in the patient's 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 the patient record.
8	Radiation therapy was recommended, but it is unknown if it was administered
9	It is unknown if radiation therapy was recommended or administered. DCO.

Coding Instructions

- 1. Assign Code 0 if the patient did not receive regional radiation as part of first course of therapy
- 2. Assign Code 1 if the treatment plan offered multiple alternative treatment options but the patient selected treatment that did not include radiation
- 3. Assign 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.
- 4. Assign Code 8
 - a. If it is known that a physician recommended radiation treatment, but no further documentation is available to confirm it was given
 - b. To indicate referral to a radiation oncologist was made and the registry should follow to determine whether radiation was administered
 - c. If follow-up to the specialist or facility determines the patient was never there and no other documentation can be found, assign $Code\ 1$

Note: Cases coded **8** should be followed and updated to a more definitive code as appropriate.

- 5. Assign Code **9**
 - a. If the treatment plan offered multiple alternative treatment options, but it is unknown which treatment, if any, was provided
 - b. If a DCO case

Date Systemic Therapy Started

Item Length: 8 NAACCR Item #: 3230 NAACCR Name: RX Date Systemic

The earliest date of administration of chemotherapy agents, hormonal agents, biological response modifiers, bone marrow transplants, stem cell harvests, or surgical and/or radiation endocrine therapy is recorded in this field.

Date Systemic Therapy Started must be transmitted in the YYYYMMDD format. Date Systemic Therapy Started may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the first/earliest systemic therapy if Chemotherapy, Hormone Therapy, Immunotherapy, or Hematologic Transplant or Endocrine Procedure was recorded as part of the first course of therapy
- 2. Transmit date fields in the year, month, day format (YYYYMMDD)



Date Systemic Therapy Started Flag

Item Length: 2 NAACCR Item #: 3231

NAACCR Name: RX Date Systemic Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition		
	Blank	A valid date value is provided in Date Systemic Therapy Started		
10	No information	No information whatsoever can be inferred		
11	Not applicable	No proper value is applicable in this context		
12	Unknown	A proper value is applicable but not known		
15	Planned	Treatment planned but not yet started		

- 1. Leave this item blank if Date Systemic Therapy Started has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any treatment was administered
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** when no systemic therapy was given during the first course of therapy or initial diagnosis was at autopsy
- 4. Assign code **12** if the Date Systemic Therapy Started cannot be determined, and the patient did receive first course treatment
- 5. Assign code **15** if systemic therapy is planned but has not started and date is not available. If systemic therapy was expected to be given or was planned as part of the first course of therapy, but information was not known if the systemic therapy had been started or had not been started at the time of the most recent follow-up, attempt to follow-up to assure complete information is collected. As information is learned, update this item and Date Systemic Therapy Started.

Date Chemotherapy Started

Item Length: 8 NAACCR Item #: 1220 NAACCR Name: RX Date Chemo

Date Chemotherapy Started is the date when chemotherapy began as part of the first course of therapy.

Date Chemotherapy Started must be transmitted in the YYYYMMDD format. Date Chemotherapy Started may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the first/earliest chemotherapy if chemotherapy was given and recorded as part of the first course of therapy
 - a. Code the date that the prescription was written if date administered unknown
- 2. Chemotherapy date should be the same as the Date Therapy Initiated when chemotherapy is the only treatment administered
- 3. Transmit date fields in the year, month, day format (YYYYMMDD)



Date Chemotherapy Started Flag

Item Length: 2 NAACCR Item #: 1221 NAACCR Name: RX Date Chemo Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition		
	Blank	A valid date value is provided in Date Chemotherapy Started		
10	No information	No information whatsoever can be inferred		
11	Not applicable	No proper value is applicable in this context		
12	Unknown	A proper value is applicable but not known		
15	Planned	Treatment planned but not yet started		

- 1. Leave this item blank if Date Chemotherapy Started has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any treatment was administered
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** when no chemotherapy was given as part of the first course of therapy or initial diagnosis was at autopsy
- 4. Assign code **12** if the Date Chemotherapy Started cannot be determined, and the patient did receive first course treatment
- 5. Assign **15** if chemotherapy is planned but has not started and date is not available. If chemotherapy was expected to be given or was planned as part of the first course of therapy, but information was not known if the chemotherapy had been started or had not been started at the time of the most recent follow-up, attempt to follow-up to assure complete information is collected. As information is learned, update this item, Date Chemotherapy Started, and Chemotherapy.

Chemotherapy

Item Length: 2 NAACCR Item #: 1390 NAACCR Name: RX Summ--Chemo

The data item Chemotherapy records the chemotherapy given as a part of the first course of treatment or the reason that chemotherapy was not given.

See SEER*Rx for chemotherapy drug codes and for information on the drug's function.

Code	Description
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 the patient record
02	Single agent chemotherapy administered as first course therapy
03	Multi-agent chemotherapy administered as first course therapy
82	Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, 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 the treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the 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 the patient record

Important update effective for diagnosis date January 1, 2013 forward

A comprehensive review of chemotherapeutic drugs currently found in the SEER*Rx – Interactive Drug Database was performed and in keeping with the U.S. Food and Drug Administration (FDA), the six (6) drugs listed in the table below have changed categories from Chemotherapy to BRM/Immunotherapy.

This change is effective for cases diagnosed January 1, 2013 forward. For cases diagnosed prior to January 1, 2013, code these six (6) drugs as chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in SEER*Rx.

			Effective Date
Drug Name/Brand Name	Previous Category	New Category	See Note
Alemtuzumab/Campath	Chemotherapy	BRM/Immuno	01/01/2013
Bevacizumab/Avastin	Chemotherapy	BRM/Immuno	01/01/2013
Rituximab/Rituxan	Chemotherapy	BRM/Immuno	01/01/2013
Trastuzumab/Herceptin	Chemotherapy	BRM/Immuno	01/01/2013
Pertuzumab/Perjeta	Chemotherapy	BRM/Immuno	01/01/2013
Cetuximab/Erbitux	Chemotherapy	BRM/Immuno	01/01/2013

Note: Use the **date of diagnosis**, not the date of treatment, to determine whether to code these drugs as chemotherapy or BRM/Immunotherapy.

Example 1: Patient diagnosed with HER2 positive breast cancer December 15, 2017, and was placed on planned Herceptin February 2, 2018. Code Herceptin in the BRM/Immuno field (as the patient was **diagnosed** after January 1, 2013).

Example 2: Patient diagnosed with breast cancer November 1, 2012, and begins receiving Rituximab January 30, 2013, as part of first course therapy. Code the Rituximab in the chemotherapy data field because the patient was **diagnosed** prior to January 1, 2013.

Definitions

Chemotherapy recommended: A consult recommended chemotherapy, or the attending physician documented that chemotherapy was recommended. A referral to a clinical oncologist is equivalent to a recommendation.

Multiple agent chemotherapy: Planned first course of therapy included two or more chemotherapeutic agents and those agents were administered. The planned first course of therapy may or may not have included other agents such as hormone therapy, immunotherapy, or other treatment in addition to the chemotherapeutic agents.

Single agent chemotherapy: Only one chemotherapeutic agent was administered to destroy cancer tissue during the first course of therapy. The chemotherapeutic agent may or may not have been administered with other drugs classified as immunotherapy, hormone therapy, ancillary, or other treatment.

Coding Instructions

- 1. Code the chemotherapeutic agents whose actions are chemotherapeutic only; **do not code** the method of **administration**
- 2. When chemotherapeutic agents are used as radiosensitizers or radioprotectants, they are given at a much lower dosage and do not affect the cancer. Radiosensitizers and radioprotectants are classified as ancillary drugs. See SEER*Rx. **Do not code as chemotherapy**. Review the radiation-oncology progress notes for information about radiosensitizing chemotherapy.

Note: Do not assume that a chemo agent given with radiation therapy is a radiosensitizer. Seek additional information. Compare the dose given to the dose normally given for treatment.

For additional information, see

- The <u>National Cancer Institute Physician Data Query (PDQ)</u>, Health Professional Version AND/OR
- The National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology
- 3. The physician may change a drug during the first course of therapy because the patient cannot tolerate the original agent
 - a. This is a continuation of the first course of therapy when the chemotherapeutic agent that is substituted belongs to the same group (alkylating, antimetabolites, natural products, or other miscellaneous)
 - b. Do **not** code the new agent as first course therapy when the original chemotherapeutic agent is changed to one that is NOT in the same group. Code only the original agent as first course. When the new agent is in a different group, it is second course therapy.

- c. Use <u>SEER*Rx</u> and compare the subcategory of each chemotherapy agent to determine whether or not they belong to the same group (subcategory). See "Chemotherapeutic Agents" below for the groups and their definitions.
- 4. Code as treatment for both primaries when the patient receives chemotherapy for invasive carcinoma in one breast and also has in situ carcinoma in the other breast. Chemotherapy would likely affect both primaries.
- 5. Assign code **00** when
 - a. The medical record documents chemotherapy was not given, was not recommended, or was not indicated
 - b. There is no information in the patient's medical record about chemotherapy, AND
 - i. It is known that chemotherapy is not usually performed for this type and/or stage of cancer

OR

- ii. There is no reason to suspect that the patient would have had chemotherapy
- c. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include chemotherapy
- d. Patient elects to pursue no treatment following the discussion of chemotherapy. Discussion does not equal a recommendation. Patient's decision not to pursue chemotherapy is not a refusal of chemotherapy in this situation.
- e. Active surveillance/watchful waiting is the first course of treatment (e.g., CLL)
- f. Patient diagnosed at autopsy

Example: Patient is diagnosed with plasma cell myeloma. There is no mention of treatment or treatment plans in the medical record. Follow-back finds that the patient died three months after diagnosis. There are no additional medical records or other pertinent information available. Assign code 00 since there is no reason to suspect that the patient had been treated.

- 6. Do not code combination of ancillary drugs administered with single agent chemotherapeutic agents as multiple chemotherapy. For example, the administration of 5-FU (antimetabolite) and Leucovorin (ancillary drug) is coded to single agent (Code 02).
- 7. Assign code **82** when chemotherapy is a customary option for the primary site/histology but it was not administered due to patient risk factors, such as
 - a. Advanced age
 - b. **Comorbid** condition(s) (heart disease, kidney failure, other cancer, etc.)
- 8. Assign code **87** when
 - a. The patient refused recommended chemotherapy
 - b. The patient made a blanket refusal of all recommended treatment and chemotherapy is a customary option for the primary site/histology
 - c. The patient refused all treatment before any was recommended and chemotherapy is a customary option for the primary site/histology
- 9. Assign code **88** when the only information available is
 - a. The patient was **referred** to an oncologist
 - b. Insertion of **port-a-cath**

Note: Review cases coded 88 periodically for later confirmation of chemotherapy.

- 10. Assign code **99** when there is no documentation that chemotherapy was recommended or administered
 - a. For death certificate only (DCO) cases

Chemotherapeutic Agents

Chemotherapeutic agents are chemicals that affect cancer tissue by means other than hormonal manipulation. Chemotherapeutic agents can be divided into five groups.

- Alkylating agents
- Antimetabolites
- Natural products
- Targeted therapy
- Miscellaneous

Alkylating Agents

Alkylating agents are **not cell-cycle-specific**. Although they are toxic to all cells, they are most active in the resting phase of the cell. Alkylating agents directly damage DNA to prevent the cancer cell from reproducing. Alkylating agents are used to treat many different cancers including acute and chronic leukemia, lymphoma, Hodgkin disease, multiple myeloma, sarcoma, and cancers of the lung, breast, and ovary. Because the drugs damage DNA they can cause long-term damage to the bone marrow and can, in rare cases, lead to acute leukemia. The risk of leukemia from alkylating agents is "dose-dependent." Examples of alkylating agents include

- Mustard gas derivatives/nitrogen mustards: mechlorethamine, cyclophosphamide, chlorambucil, melphalan, and ifosfamide
- Ethylenimines: thiotepa and hexamethylmelamine
- Alkylsulfonates: busulfan
- Hydrazines and Trizines: altretamine, procarbazine, dacarbazine, and temozolomide
- Nitrosureas: carmustine, lomustine, streptozocin, and nitrosourea are unique because they can cross the blood-brain barrier and can be used in treating brain tumors
- Metal salts: carboplatin, cisplatin, and oxaliplatin

Antimetabolites

Antimetabolites are **cell-cycle specific**. Antimetabolites are very similar to normal substances within the cell. When the cells incorporate these substances into the cellular metabolism, they are unable to divide. Antimetabolites are classified according to the substances with which they interfere.

- Folic acid antagonist: methotrexate
- Pyrimidine antagonist: 5-fluorouracil, floxuridine, cytarabine, capecitabine, and gemcitabine
- Purine antagonist: 6-mercaptopurine and 6-thioguanine
- Adenosine deaminase inhibitor: ladribine, fludarabine, nelarabine, and pentostatin

Natural Products

- 1. Plant Alkaloids **are cell-cycle specific** which means they attack the cells during various phases of division. They block cell division by preventing microtubule function. Microtubules are vital for cell division. Without them, division cannot occur. Plant alkaloids, as the name implies, are derived from certain types of plants.
 - Vinca alkaloids: vincristine, vinblastine, and vinorelbine
 - Taxanes: paclitaxel and docetaxel
 - Podophyllotoxins: etoposide and teniposide
 - Camptothecan analogs: irinotecan and topotecan
- 2. Antitumor antibiotics are also **cell-cycle specific** and act during multiple phases of the cell cycle. They are made from natural products and were first produced by the soil fungus Streptomyces. Antitumor antibiotics form free radicals that break DNA strands, stopping the multiplication of cancer cells.
 - Anthracyclines: doxorubicin, daunorubicin, epirubicin, mitotane, and idarubicin
 - Chromomycins: dactinomycin and plicamycin
 - Miscellaneous: mitomycin and bleomycin
- 3. Topoisomerase inhibitors interfere with the action of topoisomerase enzymes (topoisomerase I and II). They control the manipulation of the structure of DNA necessary for replication.
 - Topoisomerase I inhibitors: irinotecan, topotecan
 - Topoisomerase II inhibitors: amsacrine, etoposide, etoposide phosphate, teniposide

Targeted Therapy

Targeted cancer therapies are drugs or other substances that block the growth and spread of cancer by interfering with specific molecules ("molecular targets") that are involved in the growth, progression, and spread of cancer. Targeted cancer therapies are sometimes called "molecularly targeted drugs," "molecularly targeted therapies," "precision medicines," or similar names. Examples of molecularly targeted therapy are imatinib (Gleevec), lapatinib (Tykerb), erlotinib (Tarceva), sunitinib (Sutent).

Miscellaneous

Miscellaneous antineoplastics that are unique

- Ribonucleotide reductase inhibitor: hydroxyurea
- Adrenocortical steroid inhibitor: mitotane
- Enzymes: asparaginase and pegaspargase
- Antimicrotubule agent: estramustine
- Retinoids: bexarotene, isotretinoin, tretinoin (ATRA)

Coding for Tumor Embolization

The American College of Surgeons Commission on Cancer (CoC), the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR), and the SEER Program have collaborated to clarify and refine coding directives for tumor embolization and are jointly issuing the following instructions.

Definitions

Chemoembolization: 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 permits a higher concentration of drug to be in contact with the tumor for a longer period of time.

Radioembolization: Tumor embolization combined with the injection of small radioactive beads or coils into an organ or tumor.

Tumor embolization: The intentional blockage of an artery or vein to stop the flow of blood through the desired vessel.

Coding Instructions

Code as Chemotherapy when the embolizing agent(s) is a chemotherapeutic drug(s). Use <u>SEER*Rx</u> to determine whether the drugs used are classified as chemotherapeutic agents. Use codes 01, 02, 03 as specific information regarding the agent(s) is documented.

Example: The patient has hepatocellular carcinoma (primary liver cancer). From a procedure report: Under x-ray guidance, a small catheter is inserted into an artery in the groin. The catheter's tip is threaded into the artery in the liver that supplies blood flow to the tumor. Chemotherapy is injected through the catheter into the tumor and mixed with particles that embolize or block the flow of blood to the tumor.

Do not code pre-surgical (pre-operative) embolization of hypervascular tumors with agents such as particles, coils, or alcohol as a treatment. Pre-surgical embolization is typically performed to prevent excess bleeding during the resection of the primary tumor. Examples where pre-surgical embolization is used include meningiomas, hemangioblastomas, paragangliomas, and renal cell metastases in the brain.

Date Hormone Therapy Started

Item Length: 8 NAACCR Item #: 1230 NAACCR Name: RX Date Hormone

Date Hormone Therapy Started must be transmitted in the YYYYMMDD format. Date Hormone Therapy Started may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the first/earliest hormone therapy if hormone therapy was given as part of the first course of therapy
 - a. Code the date that the prescription was written if date administered unknown
- 2. Hormone therapy date should be the same as the Date Therapy Initiated when hormone therapy is the only treatment administered
- 3. Transmit date fields in the year, month, day format (YYYYMMDD)



Date Hormone Therapy Started Flag

Item Length: 2 NAACCR Item #: 1231

NAACCR Name: RX Date Hormone Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition	
	Blank	A valid date value is provided in Date Hormone Therapy Started	
10	No information	No information whatsoever can be inferred	
11	Not applicable	No proper value is applicable in this context	
12	Unknown	A proper value is applicable but not known	
15	Planned	Treatment planned but not yet started	

- 1. Leave this item blank if Date Hormone Therapy Started has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any treatment was administered
 - a. For death certificate only (DCO) only
- 3. Assign code **11** when no hormone therapy was given as part of the first course of therapy or initial diagnosis was at autopsy
- 4. Assign code **12** if the Date Hormone Therapy Started cannot be determined, and the patient did receive first course treatment
- 5. Assign code **15** if hormone therapy is planned but has not started and date is not available. If hormone therapy was expected to be given or was planned as part of the first course of therapy, but information was not known if the hormone therapy had been started or had not been started at the time of the most recent follow-up, attempt to follow-up to assure complete information is collected. As information is learned, update this item and Date Hormone Therapy Started.

Hormone Therapy

Item Length: 2 NAACCR Item #: 1400 NAACCR Name: RX Summ--Hormone

The data item Hormone Therapy records therapy administered as first course treatment that affects cancer tissue by adding, blocking, or removing the action or production of hormones.

See SEER*Rx for hormone therapy drug codes.

Note: Surgical removal of organs for hormone manipulation is not coded in this data item. Code these procedures in the data field Hematologic Transplant and Endocrine Procedures,

Code	Description	
00	None, hormone therapy was not part of the planned first course of therapy; not usually administered for this type and/or stage of cancer; diagnosed at autopsy only	
01	Hormone therapy administered as first course therapy	
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, 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 the 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 the 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	

Coding Instructions

- 1. Code the hormonal agent given as part of combination chemotherapy (e.g., R-CHOP), whether it affects the cancer cells or not
 - a. Check <u>SEER*Rx</u> to determine if a hormone agent is part of a combination chemotherapy regimen
- 2. Assign code **00** when
 - a. The medical record states that hormone therapy was not given, was not recommended, or was not indicated
 - b. There is no information in the patient's medical record about hormone therapy **AND**
 - i. It is known that hormone therapy is not usually performed for this type and/or stage of cancer

OR

- ii. There is no reason to suspect that the patient would have had hormone therapy
- c. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include hormone therapy

- d. Patient elected to pursue no treatment following the discussion of hormone therapy treatment. Discussion does not equal a recommendation. Patient's decision not to pursue hormone therapy is not a refusal of hormone therapy in this situation.
- e. Active surveillance/watchful waiting (e.g., prostate)
- f. Patient diagnosed at autopsy
- g. Hormone treatment was given for a non-reportable condition or as chemoprevention prior to diagnosis of a reportable condition
 - **Example 1:** Tamoxifen given for hyperplasia of breast four years prior to breast cancer diagnosis. Code 00 in Hormone Therapy. Do not code tamoxifen given for hyperplasia as treatment for breast cancer.
 - **Example 2:** Patient with a genetic predisposition to breast cancer is on preventative hormone therapy. Do not code hormone therapy given before cancer is diagnosed.
- 3. Assign code **87** when
 - a. The patient refused recommended hormone therapy
 - b. The patient made a blanket refusal of all recommended treatment and hormone therapy is a customary option for the primary site/histology
 - c. The patient refused all treatment before any was recommended and hormone therapy is a customary option for the primary site/histology
- 4. Assign code **88** when the only information available is that the patient was **referred** to an oncologist
 - Note: Review cases coded 88 periodically for later confirmation of hormone therapy.
- 5. Assign code **99** when there is no documentation that hormone therapy was recommended or performed
 - a. For death certificate only (DCO) cases

Coding Examples

- **Example 1:** Endometrial cancer may be treated with progesterone. Code all administration of progesterone to patients with endometrial cancer in this field. **Even if the progesterone is given for menopausal symptoms**, it has an effect on the growth or recurrence of endometrial cancer.
- **Example 2:** Follicular and papillary cancers of the thyroid are often treated with thyroid hormone to suppress serum thyroid-stimulating hormone (TSH). If a patient with papillary and/or follicular cancer of the thyroid is given a thyroid hormone, code the treatment in this field.
- **Example 3:** Bromocriptine suppresses the production of prolactin, which causes growth in pituitary adenoma. Code bromocriptine as hormone treatment for pituitary adenoma.
- **Example 4:** Lupron is a hormonal treatment for prostate cancer. Code as hormonal treatment when Lupron is given for prostate cancer.
- **Example 5**: Lupron is hormone therapy that has been approved as an ovarian suppressor for pre-menopausal breast cancer.

Hormone Categories

Hormones may be divided into several categories

- Androgens: fluoxymesterone
- Anti-androgens: bicalutamide (Casodex), flutamide (Eulexin), and nilutamide (Nilandron)
- Corticosteroids: adrenocorticotrophic agents
- Estrogens
- Progestins
- Estrogen antagonists, anti-estrogens: fulvestrant (Faslodex), tamoxifen, and toremifene (Fareston)
- Aromatase inhibitors, anti-aromatase: anastrozole (Arimidex), exemestane (Aromasin), and letrozole (Femara)
- GnRH or LH-RH: Lupron, Zoladex
- Polypeptide hormone release suppression
- Somatostatin analog
- Thyroid hormones: levothyroxine, liothyronine, Synthroid



Date Immunotherapy Started

Item Length: 8 NAACCR Item #: 1240 NAACCR Name: RX Date BRM

Date Immunotherapy Started is the date when immunotherapy began as part of the first course of therapy.

Date Immunotherapy Started must be transmitted in the YYYYMMDD format. Date Immunotherapy Started may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

- 1. Record the date of the first/earliest immunotherapy if immunotherapy was given and recorded as part of the first course of therapy
 - a. Code the date that the prescription was written if date administered unknown
- 2. Immunotherapy date should be the same as the Date Therapy Initiated when immunotherapy is the only treatment administered
- 3. Transmit date fields in the year, month, day format (YYYYMMDD)



Date Immunotherapy Started Flag

Item Length: 2 NAACCR Item #: 1241 NAACCR Name: RX Date BRM Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition	
	Blank	A valid date value is provided in Date Immunotherapy Started	
10	No information	No information whatsoever can be inferred	
11	Not applicable	No proper value is applicable in this context	
12	Unknown	A proper value is applicable but not known	
15	Planned	Treatment planned but not yet started	

- 1. Leave this item blank if Date Immunotherapy Started has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any treatment was administered
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** when no immunotherapy was given during the first course of therapy or initial diagnosis was at autopsy
- 4. Assign code **12** if the Date Immunotherapy Started cannot be determined, and the patient did receive first course treatment
- 5. Assign code **15** if immunotherapy is planned but has not started and date is not available. If immunotherapy was expected to be given or was planned as part of the first course of therapy, but information was not known if the immunotherapy had been started or had not been started at the time of the most recent follow-up, attempt to follow-up to assure complete information is collected. As information is learned, update this item and Date Immunotherapy Started.

Immunotherapy

Item Length: 2 NAACCR Item #: 1410 NAACCR Name: RX Summ--BRM

The data item Immunotherapy records immunotherapeutic (biological therapy, biotherapy or biological response modifier) agents administered as first course of therapy. See <u>SEER*Rx</u> for immunotherapy drug codes.

Immunotherapy **uses** the body's **immune system**, either directly or indirectly, to fight cancer or to reduce the side effects that may be caused by some cancer treatments. Record only those treatments that are administered to affect the cancer cells.

Code	Description		
00	None, immunotherapy was not part of the planned first course of therapy		
01	Immunotherapy was administered as first course therapy		
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, 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 noted in the patient's 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 the patient record.		
88	Immunotherapy was recommended, but it is unknown if it was administered		
99	It is unknown if immunotherapy was recommended or administered because it is not stated in patient record.		

Important update effective for diagnosis date January 1, 2013 forward

A comprehensive review of chemotherapeutic drugs currently found in the SEER*Rx – Interactive Drug Database was performed and in keeping with the U.S. Food and Drug Administration (FDA), the six (6) drugs listed in the table below have changed categories from Chemotherapy to BRM/Immunotherapy.

This change is effective for cases diagnosed January 1, 2013 forward. For cases diagnosed prior to January 1, 2013, code these six (6) drugs as chemotherapy. Coding instructions related to this change have been added to the remarks field for the applicable drugs in SEER*Rx.

			Effective Date
Drug Name/Brand Name	Previous Category	New Category	See Note
Alemtuzumab/Campath	Chemotherapy	BRM/Immuno	01/01/2013
Bevacizumab/Avastin	Chemotherapy	BRM/Immuno	01/01/2013
Rituximab/Rituxan	Chemotherapy	BRM/Immuno	01/01/2013
Trastuzumab/Herceptin	Chemotherapy	BRM/Immuno	01/01/2013
Pertuzumab/Perjeta	Chemotherapy	BRM/Immuno	01/01/2013
Cetuximab/Erbitux	Chemotherapy	BRM/Immuno	01/01/2013

Note: Use the **date of diagnosis**, not the date of treatment, to determine whether to code these drugs as chemotherapy or BRM/Immunotherapy.

Example: Patient diagnosed with breast cancer January 5, 2018, and begins receiving Herceptin as part of first course therapy on January 30, 2018. Code the Herceptin in the BRM/Immunotherapy data field.

Definitions

Immunotherapy is designed to

- 1. Make cancer cells more recognizable and therefore more susceptible to destruction by the immune system
- 2. Boost the killing power of immune system cells, such as T-cells, NK-cells, and macrophages
- 3. Alter the growth patterns of cancer cells to promote behavior like that of healthy cells
- 4. Block or reverse the process that changes a normal cell or a pre-cancerous cell into a cancerous cell
- 5. Enhance the body's ability to repair or replace normal cells damaged or destroyed by other forms of cancer treatment, such as chemotherapy or radiation
- 6. Prevent cancer cells from spreading to other parts of the body

Types of Immunotherapy

Cancer Treatment Vaccines: Also called therapeutic vaccines, are a type of <u>immunotherapy</u>. The vaccines work to boost the body's natural defenses to fight a cancer. Doctors give treatment vaccines to people already diagnosed with cancer. The vaccines may:

- Prevent cancer from returning
- Destroy any cancer cells still in the body after other treatment
- Stop a tumor from growing or spreading

Please refer to <u>SEER*Rx</u> to determine how to code non-FDA approved vaccines.

Interferons: Interferons belong to a group of proteins called cytokines. They are produced naturally by the white blood cells in the body. Interferon-alpha is able to slow tumor growth directly as well as activate the immune system. It is used for a number of cancers including multiple myeloma, chronic myelogenous leukemia (CML), hairy cell leukemia, and malignant melanoma.

Interleukins (IL-2) are often used to treat kidney cancer and melanoma.

Monoclonal Antibodies: Monoclonal antibodies (Mab) are produced in a laboratory. The artificial antibodies are used in a variety of ways in systemic therapy and can be chemotherapy, immunotherapy, or ancillary drugs. Some are injected into the patient to seek out and disrupt cancer cell activities. When the monoclonal antibody disrupts tumor growth, it is coded as chemotherapy. Other Mabs are linked to radioisotopes (conjugated monoclonal antibodies). The Mab finds and attaches to the target tumor cells and brings with it the radioisotope that actually kills the tumor cell. The monoclonal antibody itself does nothing to enhance the immune system. Conjugated monoclonal antibodies such as tositumomab (Bexxar) or ibritumomab (Zevalin) are coded to the part of the drug that actually kills the cells, usually radioisotopes. A third function of Mab is to enhance the immune response against the cancer, either by identifying tumor cells

SEER Program Coding and Staging Manual 2018

that are mimicking normal cells, or by boosting the body's natural defenses that destroy foreign cells. Consult SEER*Rx for the treatment category in which each monoclonal antibody should be coded.

Coding Instructions

- 1. Assign code **00** when
 - a. The medical record states that immunotherapy was not given, not recommended, or not indicated
 - b. There is no information in the patient's medical record about immunotherapy **AND**
 - i. It is known that immunotherapy is **not** usually given for this type and/or stage of cancer

OR

- ii. There is **no reason to suspect** that the patient would have had immunotherapy
- c. The treatment plan offered multiple treatment options and the patient selected treatment that did not include immunotherapy
- d. Patient elects to pursue no treatment following the discussion of immunotherapy. Discussion does not equal a recommendation. Patient's decision not to pursue immunotherapy is not a refusal of immunotherapy in this situation.
- e. Active surveillance, watchful waiting is the first course of treatment (e.g., prostate)
- f. Patient diagnosed at autopsy
- g. Anti-thymocyte globulin treatment is given. Anti-thymocyte globulin is used to treat transplant rejection. Do not code as immunotherapy.
- 2. Assign code **87** when
 - a. The patient refused recommended immunotherapy
 - b. The patient made a blanket refusal of all recommended treatment and immunotherapy is a customary option for the primary site/histology
 - c. The patient refused all treatment before any was recommended and immunotherapy is a customary option for the primary site/histology
- 3. Assign code **88** when the only information available is that the patient was referred to an oncologist

Note: Review cases coded 88 periodically for later confirmation of immunotherapy.

- 4. Assign code **99**
 - a. When there is no documentation that immunotherapy was recommended or performed **AND**
 - b. Immunotherapy is usually given for this type and/or stage of cancer
 - c. Or for death certificate only (DCO) cases

Hematologic Transplant And Endocrine Procedures

Item Length: 2 NAACCR Item #: 3250 NAACCR Name: RX Summ--Transplnt/Endocr

This data item records systemic therapeutic procedures administered as part of the first course of treatment. These procedures include bone marrow transplants (BMT) and stem cell harvests with rescue (stem cell transplant), endocrine surgery and/or radiation performed for hormonal effect (when cancer originates at another site), and a combination of transplants and endocrine therapy.

Code	Description
00	None, transplant procedure or endocrine therapy was not a part of the first course of therapy; not
	customary therapy for this cancer; diagnosed at autopsy only
10	Bone marrow transplant, NOS. A bone marrow transplant procedure was administered as first course of therapy, but the type was not specified.
11	Bone marrow transplant autologous
12	Bone marrow transplant allogeneic
20	Stem cell harvest and infusion (stem cell transplant)
30	Endocrine surgery and/or endocrine radiation therapy as first course therapy
40	Combination of transplant procedure with endocrine surgery and/or endocrine radiation (Code 30 in combination with 10, 11, 12, or 20) as first course of therapy
82	Transplant procedure and/or endocrine therapy was not recommended/administered because it was contradicted due to patient risk factors (comorbid conditions, advanced age, etc.)
85	Transplant procedure and/or endocrine therapy was not administered because the patient died prior to planned or recommended therapy
86	Transplant procedure and/or endocrine therapy was not administered; it was recommended by the patient's physician but was not administered as part of first course therapy. No reason was noted in the planned or recommended therapy.
87	Transplant procedure and/or endocrine therapy were not administered; this treatment was recommended by the patient's physician but was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
88	Transplant procedure and/or endocrine therapy was recommended, but it is unknown if it was administered
99	It is unknown if a transplant procedure or endocrine therapy was recommended or administered because it is not stated in patient record

Definitions

Bone marrow transplant (BMT): Procedure where bone marrow is used to restore stem cells that were destroyed by chemotherapy and/or radiation. Replacing the stem cells allows the patient to undergo higher doses of chemotherapy.

BMT Allogeneic: Receives bone marrow from a donor. This includes haploidentical (or half-matched) transplants.

BMT Autologous: Uses the patient's own bone marrow. The tumor cells are filtered out and the purified blood and stem cells are returned to the patient.

BMT Syngeneic: Bone marrow received from an identical twin.

SEER Program Coding and Staging Manual 2018

Conditioning: High-dose chemotherapy with or without radiation administered prior to transplant such as BMT and stem cells to kill cancer cells. This conditioning also destroys normal bone marrow cells so the normal cells need to be replaced (rescue). The high dose chemotherapy is coded in the Chemotherapy field and the radiation is coded in the Radiation field.

Hematopoietic growth factors: A group of substances that support hematopoietic (blood cell) colony formation. The group includes erythropoietin, interleukin-3, and colony-stimulating factors (CSFs). The growth-stimulating substances are ancillary drugs and not coded.

Non-myeloablative therapy: Uses immunosuppressive drugs pre- and post-transplant to ablate (destroy) the bone marrow. These are not recorded as therapeutic agents.

Peripheral Blood Stem Cell Transplantation (PBSCT): Rescue that uses peripheral blood stem cells to replace stem cells after conditioning.

Rescue: Rescue is the actual BMT or PBSCT done after conditioning.

Stem cells: Immature cells found in bone marrow, blood stream, placenta, and umbilical cords. The stem cells mature into blood cells.

Stem cell transplant: Procedure to replenish supply of healthy blood-forming cells. Also known as bone marrow transplant, PBSCT, or umbilical cord blood transplant, depending on the source of the stem cells. When stem cells are collected from bone marrow and transplanted into a patient, the procedure is known as a **bone marrow transplant**. If the transplanted stem cells came from the bloodstream, the procedure is called a **peripheral blood stem cell transplant**—sometimes shortened to stem cell transplant.

Umbilical cord stem cell transplant: Treatment with stem cells harvested from umbilical cord blood.

Coding Instructions

- 1. Assign code **00** when
 - a. The medical record states that there was no hematologic transplant or endocrine therapy, or these were not recommended, or not indicated
 - b. There is no information in the patient's medical record about transplant procedure or endocrine therapy **AND**
 - i. It is known that transplant procedure or endocrine therapy is not usually performed for this type and/or stage of cancer

OR

- ii. There is no reason to suspect that the patient would have had transplant procedure or endocrine therapy
- c. The treatment plan offered multiple treatment options and the patient selected treatment that did not include transplant procedure or endocrine therapy
- d. Patient elects to pursue no treatment following the discussion of transplant procedure or endocrine therapy. Discussion does not equal a recommendation. Patient's decision not to pursue transplant procedure or endocrine therapy is not a refusal of transplant procedure or endocrine therapy in this situation.
- e. Active surveillance/watchful waiting is the first course of treatment (e.g., CLL)
- f. Patient diagnosed at autopsy

SEER Program Coding and Staging Manual 2018

- 2. Assign code **10** if the patient has a bone marrow transplant and it is unknown if autologous or allogeneic (BMT, NOS) or "mixed chimera transplant (mini-transplant or non-myeloablative transplant). These transplants are a mixture of the patient's cells and donor cells.
- 3. Codes **11 and 12** have priority over code 10 (BMT, NOS)
- 4. Assign code **12** (allogeneic) for a syngeneic bone marrow transplant (from an identical twin) or for a transplant from any person other than the patient
- 5. Assign code **20** for
 - a. Allogeneic stem cell transplant
 - b. Peripheral blood stem cell transplant
 - c. Umbilical cord stem cell transplant (single or double)

Note: If the patient does not have a rescue, code the stem cell harvest as **88**, (recommended, unknown if administered) or if harvested but unknown if infused.

- 6. Assign code **30** for endocrine radiation and/or surgery. Endocrine organs are testes and ovaries. Endocrine radiation and/or surgical procedures must be bilateral, or must remove the remaining paired organ for hormonal effect.
- 7. Assign code **87**
 - a. If the patient **refused** recommended transplant or endocrine procedure
 - b. If the patient made a **blanket refusal** of all recommended treatment and the treatment coded in this data item is a customary option for the primary site/histology
 - c. If the patient **refused all treatment** before any was recommended
- 8. Assign code **88** when
 - a. The only information available is that the patient was referred to an oncologist for consideration of hematologic transplant or endocrine procedure
 - b. A bone marrow or stem cell harvest was undertaken, but it was not followed by a rescue or reinfusion as part of first course treatment

Note: Review cases coded 88 periodically for later confirmation of transplant procedure or endocrine therapy.

- 9. Assign code **99** when there is no documentation that transplant procedure or endocrine therapy was recommended or performed
 - a. For death certificate only (DCO) cases

Systemic Treatment/Surgery Sequence

Item Length: 1 NAACCR Item #: 1639

NAACCR Name: RX SUMM--Systemic/SurSeq

This field records the sequence of any systemic therapy and surgery given as first course of therapy for those patients who had both systemic therapy and surgery. For the purpose of coding systemic treatment sequence with surgery, 'Surgery' is defined as a Surgical Procedure to the Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 1-7) or Surgical Procedure of Other Site (codes 1-5).

Systemic therapy is defined as

- Chemotherapy
- Hormone therapy
- Biological response therapy/immunotherapy
- Bone marrow transplant
- Stem cell harvests
- Surgical and/or radiation endocrine therapy

Code	Label	Definition	Example(s) / Notes
0	No systemic therapy and/or surgical treatment; Unknown	The patient did not have both systemic therapy and surgery.	Example: Death certificate only (DCO) case
	if surgery and/or systemic	It is unknown whether or not	omy (200) case
	therapy given	the patient had surgery and/or systemic therapy.	
2	Systemic therapy before surgery	The patient had systemic therapy prior to surgery	
3	Systemic therapy after surgery	The patient had systemic therapy after surgery	
4	Systemic therapy both before and after surgery	Systemic therapy was administered prior to surgery and also after surgery	Note: Code 4 is intended for situations with at least two episodes or courses of systemic therapy.
5	Intraoperative systemic therapy	The patient had intraoperative systemic therapy	
6	Intraoperative systemic therapy with other systemic therapy administered before and/or after surgery	The patient had intraoperative systemic therapy and also had systemic therapy before and/or after surgery	Note: The systemic therapy administered before and/or after surgery does not have to be the same type as the intraoperative systemic therapy.
7	Surgery both before and after systemic therapy (effective for cases diagnosed 01/01/2012 and later)	Systemic therapy was administered between two separate surgical procedures	Example: Patient has LN dissection, followed by chemo, followed by primary site surgery.

SEER Program Coding and Staging Manual 2018

Code	Label	Definition	Example(s) / Notes
9	Sequence unknown	The patient had systemic therapy and also had surgery. It is unknown whether the systemic therapy was administered prior to surgery, after surgery, or intraoperatively	



Date Other Treatment Started

Item Length: 8 NAACCR Item #: 1250 NAACCR Name: RX Date Other

Date Other Treatment Started is the date when an alternative treatment other than surgery, radiation, chemotherapy, immunotherapy, and hematologic transplant and endocrine procedure is initiated/started as part of the first course of therapy. Examples include phlebotomy or aspirin when administered as forms of treatment.

Date Other Treatment Started must be transmitted in the YYYYMMDD format. Date Other Treatment Started may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Coding Instructions

- 1. Record the date of the first/earliest other treatment if an alternative treatment was given and recorded as part of the first course of therapy
- 2. Other treatment date should be the same as the Date Therapy Initiated when an alternative treatment is the only treatment administered
- 3. Transmit date fields in the year, month, day format (YYYYMMDD)



Date Other Treatment Started Flag

Item Length: 2 NAACCR Item #: 1251 NAACCR Name: RX Date Other Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

SEER Central Registries: For 2018 diagnoses, transmit to NCI SEER when available from CoC reporting facilities.

Code	Label	Definition
	Blank	A valid date value is provided in Date of Initial Treatment
10	No information	No information whatsoever can be inferred
11	Not applicable	No proper value is applicable in this context
12	Unknown	A proper value is applicable but not known
15	Planned	Treatment planned but not yet started

Coding Instructions

- 1. Leave this item blank if Date Other Treatment Started has a full or partial date recorded
- 2. Assign code 10 when it is unknown whether any other treatment was administered
 - a. For death certificate only (DCO) cases
- 3. Assign code **11** when no alternative treatment is given during the first course of therapy or initial diagnosis is at autopsy
- 4. Assign code **12** if the Date Other Treatment Started cannot be determined, and the patient did receive first course treatment
- 5. Assign code **15** if an alternative treatment is planned but has not started and date is not available. If an alternative treatment was expected to be given or was planned as part of the first course of therapy, but information was not known if the treatment had been started or had not been started at the time of the most recent follow-up, attempt to follow-up to assure complete information is collected. As information is learned, update this item and Date Other Treatment Started.

Other Therapy

Item Length: 1 NAACCR Item #: 1420 NAACCR Name: RX Summ--Other

Other Therapy identifies treatment given that cannot be classified as surgery, radiation, systemic therapy, or ancillary treatment. This data item includes all complementary and alternative medicine (CAM) used by the patient in conjunction with conventional therapy or in place of conventional therapy.

Code	Description	
0	None	
1	Other	
2	Other-Experimental	
3	Other-Double Blind	
6	Other-Unproven	
7	Refusal	
8	Recommended, unknown if administered	
9	Unknown	

Coding Instructions

- 1. Assign code **0** when
 - a. There is no information in the patient's medical record about other therapy AND
 - i. It is known that other therapy is not usually performed for this type and/or stage of cancer

OR

- ii. There is no reason to suspect that the patient would have had other therapy
- b. First course of treatment was active surveillance/watchful waiting
- c. The treatment plan offered multiple treatment options and the patient selected treatment that did not include other therapy
- d. Patient elects to pursue no treatment following the discussion of other therapy. Discussion does not equal a recommendation. Patient's decision not to pursue other therapy is not a refusal of other therapy in this situation.
- e. Patient diagnosed at autopsy
- 2. Assign code **1** for
 - a. Hematopoietic treatments such as: phlebotomy or aspirin (See <u>SEER*Rx</u> and <u>Hematopoietic and Lymphoid Neoplasm Coding Manual and Database</u> for specific guidance on coding)

Note: Do **not** code blood transfusion as treatment.

Rationale: Blood transfusions may be used for any medical condition that causes anemia. It would be virtually impossible for the registrar to differentiate between blood transfusions used for a co-morbidity (i.e., anemia) from those given as prophylactic treatment of a hematopoietic neoplasm.

SEER Program Coding and Staging Manual 2018

- b. PUVA (Psoralen (P) and long-wave ultraviolet radiation (UVA)) in the **RARE** event that it is used as treatment for extremely thin melanomas or cutaneous T-cell lymphomas (e.g., mycosis fungoides)
 - *Note*: Code UVB phototherapy for mycosis fungoides as photodynamic therapy under Surgery of Primary Site for skin. Assign code 11 [Photodynamic therapy (PDT)] if there is no pathology specimen. Assign code 21 [Photodynamic therapy (PDT)] if there is a pathology specimen.
- c. Photophoresis. This treatment is used ONLY for thin melanoma or cutaneous T-cell lymphoma (mycosis fungoides).
- d. Cancer treatment that could not be assigned to the previous treatment fields (surgery, radiation, chemotherapy, immunotherapy, or systemic therapy)
- 3. Assign code **2** for any experimental or newly developed treatment, such as a clinical trial, that differs greatly from proven types of cancer therapy
 - *Note:* Hyperbaric oxygen has been used to treat cancer in clinical trials, but it is also used to promote tissue healing following head and neck surgeries. Do not code the administration of hyperbaric oxygen to promote healing as an experimental treatment.
- 4. Assign code **3** when the patient is enrolled in a double blind clinical trial. When the trial is complete and the code is broken, review and recode the therapy.
- 5. Assign code **6** for
 - a. Cancer treatment administered by nonmedical personnel
 - *Example*: Cannabis oil or medical marijuana that is used for treatment.
 - b. **Unconventional** methods whether they are the only therapy or are given **in combination** with conventional therapy
 - **Example:** DC vax given for brain cancer. Assign code 6. DC vax is not an approved treatment for brain cancer and should not be coded in the immunotherapy or any of the other treatment fields.
 - c. Complementary and Alternative Medicine (CAM) as any medical system, practice, or product that is not thought of as "western medicine" or standard medical care. CAM treatments may include dietary supplements, megadose vitamins, herbal preparations, acupuncture, massage therapy, magnet therapy, spiritual healing, and meditation.
 - i. **Alternative medicine** is treatment that is used instead of standard medical treatments. Alternative therapy is when the patient receives **no** other type of standard treatment.
 - ii. **Complementary medicine.** Treatments that are used along with standard medical treatments but are not standard treatments; also called conventional medicine. One example is using acupuncture to help lessen some side effects of cancer treatment in conjunction with standard treatment.

Note: See complete information on types of complementary and alternative medicine specific to cancer at http://www.cancer.gov/cam/. For additional information on cancer and other diseases, please visit http://nccam.nih.gov/health/whatiscam/.

- d. **Integrative medicine.** A total approach to medical care that combines standard medicine with the CAM practices that have shown to be safe and effective. They treat the patient's mind, body, and spirit.
- 6. Assign code **8** when **other therapy** was recommended by the physician **but there is no information** that the treatment was given

SEER Program Coding and Staging Manual 2018

- 7. Assign code **9** when there is no documentation that other therapy was recommended or performed
 - a. For death certificate only (DCO) cases

Coding for Tumor Embolization

The American College of Surgeons Commission on Cancer (CoC), the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR), and the SEER Program have collaborated to clarify and refine coding directives for tumor embolization and are jointly issuing the following instructions.

Definitions

Chemoembolization: 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 permits a higher concentration of drug to be in contact with the tumor for a longer period of time.

Radioembolization: Tumor embolization combined with injecting small radioactive beads or coils into an organ or tumor.

Tumor embolization: The intentional blockage of an artery or vein to stop the flow of blood through the desired vessel.

Coding Instructions

Code as "Other Therapy" when tumor embolization is performed using **alcohol** as the embolizing agent. Use code 1.

Example: For head and neck primaries: Ideally, an embolic agent is chosen that will block the very small vessels within the tumor but spare the adjacent normal tissue. Liquid embolic agents, such as ethanol or acrylic, and powdered particulate materials can penetrate into the smallest blood vessels of the tumor.

Use code 1 for embolization of a tumor in a site other than the liver when the embolizing agent is unknown.

Do not code pre-surgical (pre-operative) embolization of hypervascular tumors with agents such as particles, coils, or alcohol as a treatment. Pre-surgical embolization is typically performed to prevent excess bleeding during the resection of the primary tumor. Examples where pre-surgical embolization is used include meningiomas, hemangioblastomas, paragangliomas, and renal cell metastases in the brain.

Section VIII Follow Up Information



Death Clearance Instructions

See the NAACCR Death Clearance Manual.

There are two SEER requirements that differ from the NAACCR manual. SEER requires

- 1. Use of all entries on the death certificate to be matched at the patient level, not just the underlying cause of death
- 2. Tumor comparison—link all reportable death certificates at the tumor level, looking for possible second primaries



Date of Last Follow-Up or of Death

Item Length: 8 NAACCR Item #: 1750 NAACCR Name: Date of Last Contact

This data item records the date of last follow-up or the date of death. SEER requires the registries to update the follow up information on all cases on an annual basis. The exception is carcinoma in situ of the cervix diagnosed on or after 01/01/1996.

Date of Last Follow-Up or of Death must be transmitted in the YYYYMMDD format. Date of Last Follow-Up or of Death may be recorded in the transmission format, or recorded in the traditional format (MMDDYYYY) and converted electronically to the transmission format.

Transmitting Dates

Transmit date fields in the year, month, day format (YYYYMMDD). Leave the year, month and/or day blank when they cannot be estimated or are unknown.

Common Formats

YYYYMMDD Complete date is known

YYYYMM Year and month are known/estimated; day is unknown

YYYY Year is known/estimated; month and day cannot be estimated or are unknown

Blank Year, month, and day cannot be estimated or are unknown

Transmit Instructions

- 1. Transmit date fields in the year, month, day format (YYYYMMDD)
- 2. Leave the year, month and/or day blank when they cannot be estimated or are unknown
- 3. Most SEER registries collect the month, day, and year. When the full date (YYYYMMDD) is transmitted, the seventh and eighth digits (day) will be held confidentially and only used for survival calculations when received by NCI SEER. The corresponding date flag is not affected (it will remain blank).

Codes for Year

Code the four-digit year

Codes for Month

Code	Description	
01	January	
02	February	
03	March	
04	April	
05	May	
06	June	
07	July	
08	August	
09	September	
10	October	
11	November	
12	December	

Codes for Day

01

02

03

••

31

Coding Instructions

- 1. Code the date the patient was actually seen by the physician or contacted by the hospital registry as the follow-up date. Do not code the date the follow-up report was received.
- 2. Do not change the follow-up date unless new information is available
- 3. The field is associated with the patient, not the cancer, so all records (primary sites) for the same patient will have the same follow-up date
- 4. Record the date of death for death certificate only (DCO) cases

Estimating Dates

Estimating the **month**

- 1. Code "spring of" to April
- 2. Code "summer" or "middle of the year" to July
- 3. Code "fall" or "autumn" to October
- 4. For "winter of," try to determine whether the physician means the first of the year or the end of the year and code January or December as appropriate. If no determination can be made, use whatever information is available to calculate the month.
- 5. Code "early in year" to January
- 6. Code "late in year" to December

- 7. Use whatever information is available to calculate the month
- 8. Code the month of admission when there is no basis for estimation
- 9. Leave month blank if there is no basis for approximation

Estimating the **year**

- 1. Code "a couple of years" to two years earlier
- 2. Code "a few years" to three years earlier
- 3. Use whatever information is available to calculate the year
- 4. Code the year of admission when there is no basis for estimation



Date of Last Follow-Up or Death Flag

Item Length: 2 NAACCR Item #: 1751

NAACCR Name: Date of Last Contact Flag

Date flag fields were added beginning with diagnoses on or after 01/01/2010 as part of an initiative to standardize date fields. Date flags replace non-date information that had previously been transmitted in date fields. Coding 99999999 to indicate "unknown" is an example of non-date information that was previously transmitted in date fields.

Code	Label	Definition
	Blank	A valid date value is provided in Date of Last Follow up or Death
12	Unknown	A proper value is applicable but not known

Coding Instructions

- 1. Leave this item blank when Date of Last Follow up or Death has a full or partial date recorded
- 2. Assign code 12 when the date of last follow up or death cannot be determined



Vital Status

Item Length: 1 NAACCR Item #: 1760 NAACCR Name: Vital Status

SEER requires the registries to update the follow up information on all cases on an annual basis. The exception is carcinoma in situ of the cervix diagnosed on or after 01/01/1996. This field records the vital status of the patient on the date of last follow up.

The code for Dead has been changed from 4 to 0 beginning with cases diagnosed in 2018. Earlier cases may be converted if desired.

Code	Description	
0	Dead	
1	Alive	

The field is associated with the patient, not the cancer, so if the patient has multiple primary tumors, vital status should be the same for all tumors.

Coding Instructions

1. Assign code **0** for death certificate only (DCO) cases



ICD Code Revision Used for Cause of Death

Item Length: 1 NAACCR Item #: 1920 NAACCR Name: ICD Revision Number

SEER requires the registries to update the follow up information on all cases on an annual basis. The exception is carcinoma in situ of the cervix diagnosed on or after 01/01/1996. This field shows the revision of the International Classification of Diseases (ICD) used to code the underlying cause of death. This field is populated by the central registry.

If the patient has multiple tumor records, the ICD Code Revision Used for Cause of Death must be identical on each record.

Code	Description	
0	Patient alive at last follow up	
1	ICD-10 (1999+ deaths)	
7	ICD-7 (1958-1967)	
8	ICDA-8 (1968-1978)	
9	ICD-9 (1979-1998)	

Coding instructions

1. Assign code **1** for death certificate only (DCO) cases



Underlying Cause of Death

Item Length: 4 NAACCR Item #: 1910 NAACCR Name: Cause of Death

This is the official underlying cause of death coded from the death certificate using ICD-7, ICDA-8, ICD-9, or ICD-10 codes. This field is populated by the central registry.

Special Codes

Code	Description
0000	Patient alive at last contact
7777	State death certificate or listing not available
7797	State death certificate or listing available, but underlying cause of death not coded

Coding Instructions for ICD-10

- 1. Ignore (do not record) decimal points when copying codes
- 2. The cause of death code is commonly four characters. Ignore (do not code) a fifth character if present.
- 3. Left justify the codes; if less than four characters, left justify and add a 9 to the right
- 4. If the underlying cause of death code is not available, do not attempt to code the underlying cause of death unless you have a trained ICD-10 nosologist on staff or on consult

Priority Order for use of source documents to assign codes, with 1 having the highest priority.

- 1. Use the underlying cause of death as coded by a state health department even if the code seems to be in error
- 2. Report the coded underlying cause of death code from another source such as NDI Plus or state data exchange
- 3. Code the underlying cause of death if a trained ICD-10 nosologist is on staff or under contract
- 4. Code the underlying cause of death as 7797 when the death certificate is available but the underlying cause of death code is not coded and cause of death is not available from another source such as NDI Plus or state data exchange
- 5. Code 7777 when the death certificate is not available AND the coded underlying cause of death is not available from other sources such as NDI or state data exchange
 - **Example:** Medical doctor states patient died, but death certificate not available (not on state death file, not available through federal or state agencies); code 7777.

Beginning with deaths in 1999, the United States agreed to code all deaths using the *International Statistical Classification of Diseases and Related Health Problems*, *Tenth Revision* (ICD-10). The ICD-10 codes have up to four characters: a letter followed by 2 or 3 digits.

Examples:

Underlying Cause of Death	ICD-10	SEER Code
Malignant neoplasm of the thyroid	C73	C739
Acute appendicitis with peritonitis	K35.0	K350
Malignant neoplasm of stomach	C16.9	C169

If the patient has multiple records, the underlying cause of death must be identical on each record.



Type of Follow-Up

Item Length: 1 NAACCR Item #: 2180 NAACCR Name: SEER Type of Follow-up

Type of Follow-Up identifies the source of information used to code the patient's vital status. SEER requires registries to collect this data item.

Code	Description
1	"Autopsy Only" or "Death Certificate Only" case
2	Active follow up case
3	In situ cancer of the cervix uteri only
4	San Francisco-Oakland only: Case not originally in active follow-up, but in active follow-up
	now

Coding Instructions

- 1. All cases (other than in situ cancers of the cervix uteri) must be followed annually, including benign and borderline intracranial and CNS tumors diagnosed 01/01/2004 and forward
- 2. Cases of in situ cancer of the cervix diagnosed on or after 01/01/1996 are not reportable; follow-up is not required

Note: Follow-up information should be updated on cases diagnosed before 01/01/1996 when information is available.

Survival Data Items

Effective January 1, 2015, there were seven new NAACCR data items to facilitate survival analysis by NAACCR registries. The fields are derived for SEER registries. For further information on each specific data item, see the <u>NAACCR Data Dictionary</u> and the <u>NAACCR 2015 Implementation Guidelines</u>.

Survival Data Items

Item#	Data Item Name	Column #	Length
1782	Surv-Date Active	2292-2299	8
	Followup		
1783	Surv-Flag Active	2300-2300	1
	Followup		
1784	Surv-Mos Active	2301-2304	4
	Followup		
1785	Surv-Date Presumed	2305-2312	8
	Alive		
1786	Surv-Flag Presumed	2313-2313	1
	Alive		· ·
1787	Surv-Mos Presumed	2314-2317	4
	Alive		
1788	Surv-Date DX Recode	2318-2325	8

Section IX Administrative Codes

Each calendar year the SEER registries submit records to NCI for all persons/reportable neoplasms diagnosed since the registry started reporting to NCI. Many of these records have been updated with information received by the registry since the prior data submission. NCI edits the information to ensure correctness and comparability of reporting. Some of these edits identify conditions that require additional review. To eliminate the need to review the same cases each submission, the Administrative Codes section contains a set of indicators used to show that the information in a record has already been reviewed.



Site/Type Interfield Review

Item Length: 1 NAACCR Item #: 2030 NAACCR Name: Over-ride Site/Type

Site/Type Interfield Review (Interfield Edit 25)

This field is used to flag those cases where the primary site and histology are unusual.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: The coding of an unusual combination of primary site and histologic type has been reviewed



Histology/Behavior Interfield Review

Item Length: 1 NAACCR Item #: 2040 NAACCR Name: Over-ride Histology

Histology/Behavior Interfield Review (Field Item Edit Morph and Interfield Edit 31)

This field is used to identify whether a case was reviewed and coding confirmed for those cases where the behavior code differs from the ICD-O-3 behavior code, i.e., ICD-O-3 only lists a behavior code of /3 and the case was coded /2, or the ICD-O-3 only lists behavior codes of /0 and /1 and the case is coded /3. It is also used to flag those cases that are in situ and not microscopically confirmed.

Code	Description
Blank	Not reviewed or reviewed and corrected
1	Reviewed and confirmed that the pathologist states the primary to be "in situ" or "malignant" although the behavior code of the histology is designated as "benign" or "uncertain" in ICD-O-2 or ICD-O-3 (flag for a "Morphology Type & Behavior" edit)
2	Reviewed and confirmed that the behavior code is "in situ," but the case is not microscopically confirmed (flag for a "Diagnostic Confirmation, Behavior Code" edit)
3	Reviewed and confirmed that conditions 1 and 2 both apply



Age/Site/Histology Interfield Review

Item Length: 1 NAACCR Item #: 1990

NAACCR Name: Over-ride Age/Site/Morph

Age/Site/Histology Interfield Review (Interfield Edit 15)

This field is used to identify whether a case was reviewed and coding confirmed for those cases with an unusual site/histology combination for a given age-group.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed that age/site/histology combination is correct as reported
2	Reviewed and confirmed that case was diagnosed in utero
3	Reviewed and confirmed that conditions 1 and 2 both apply



Sequence Number/Diagnostic Confirmation Interfield Review

Item Length: 1 NAACCR Item #: 2000

NAACCR Name: Over-ride SeqNo/DxConf

Sequence Number/Diagnostic Confirmation Interfield Review (Interfield Edit 23)

This field is used to identify whether a case was reviewed and coding confirmed for those cases where a patient has separate primary records and one of them has not been microscopically confirmed. The unconfirmed primary should be reviewed to determine whether it is a true primary or metastasis from a previous one.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: Multiple primaries of special sites in which at least one diagnosis has not been microscopically confirmed have been reviewed



Site/Histology/Laterality/Sequence Interrecord Review

Item Length: 1 NAACCR Item #: 2010

NAACCR Name: Over-ride Site/Lat/SeqNo

Site/Histology/Laterality/Sequence Number Interrecord Review (Interrecord Edit 09)

This field is used to identify whether a case was reviewed and coding confirmed for cases having multiple primaries with the same histology and the same primary site. This review ensures that over-reporting does not happen.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: Multiple primaries of the same histology (3 digit) in the
	same primary site group have been reviewed



Surgery/Diagnostic Confirmation Interfield Review

Item Length: 1 NAACCR Item #: 2020

NAACCR Name: Over-ride Surg/DxConf

Surgery/Diagnostic Confirmation Interfield Review (Interfield Edit 46 and Interfield Edit 76)

This field is used to identify whether a case was reviewed and coding confirmed for cases where the patient had surgery but the specimen was so small that it was not possible to confirm the diagnosis microscopically.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A patient who had (cancer-directed) surgery, but the tissue
	removed was not sufficient for microscopic confirmation



Type of Reporting Source/Sequence Number Interfield Review

Item Length: 1
NAACCR Item #: 2050

NAACCR Name: Over-ride Report Source

Type of Reporting Source/Sequence Number Interfield Review (Interfield Edit 04)

This field is used to identify whether a case was reviewed and coding confirmed for cases where the second or subsequent primary added to a patient's record was a Death Certificate Only (DCO) case. The DCO case should be reviewed to determine that it is not a metastasis from the prior primary.

Code	Description
Blank	Not reviewed, or reviewed, and corrected
1	Reviewed and confirmed as reported: A second or subsequent primary with a reporting source of
	death certificate only has been reviewed and is indeed an independent primary



Sequence Number/Ill-Defined Site Interfield Review

Item Length: 1 NAACCR Item #: 2060

NAACCR Name: Over-ride Ill-define Site

Sequence Number/Ill-defined Site Interfield Review (Interfield Edit 22)

This field is used to identify whether a case was reviewed and coding confirmed when a subsequent primary has an ill-defined primary site code. The ill-defined site should be reviewed to determine that it is not the same as a previous tumor.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A second or subsequent primary reported with an ill-
	defined primary site (C760-C768, C80.9) has been reviewed and is an independent primary



Leukemia or Lymphoma/Diagnostic Confirmation Interfield Review

Item Length: 1 NAACCR Item #: 2070 NAACCR Name: Over-ride Leuk, Lymphoma

Leukemia or Lymphoma/Diagnostic Confirmation Interfield Review (Interfield Edit 48)

This field is used to identify whether a case was reviewed and coding confirmed for leukemia or lymphoma cases that have not been microscopically confirmed.

IF48 identifies lymphoma cases with a diagnostic confirmation code of 6 (direct visualization) or 8 (clinical), and leukemia cases with a diagnostic confirmation code of 6 (direct visualization).

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A patient was diagnosed with leukemia or lymphoma and
	the diagnosis was not microscopically confirmed



Over-ride Flag for Name/Sex

Item Length: 1 NAACCR Item #: 2078 NAACCR Name: Over-ride Name/Sex

Over-ride Flag for Name/Sex

The Over-ride for Name/Sex flag, new for 2018, does not allow extremely rare or nonexistent combinations of first name and sex, such as John/female.

Code	Description	
Blank	Not reviewed, or reviewed and corrected	
1	Reviewed and confirmed as reported	



Over-ride Flag for Site/Behavior (IF39)

Item Length: 1 NAACCR Item #: 2071 NAACCR Name: Over-ride Site/Behavior

Over-ride Flag for Site/Behavior (Interfield Edit 39)

This field is used to identify whether a case was reviewed and coding confirmed for cases where the behavior is coded to a /2 and the primary site is nonspecific, such as female genital tract, NOS.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A patient has an in situ cancer of a nonspecific site and no
	further information about the primary site is available

The IF39 edit does not allow in situ cases of nonspecific sites, such as gastrointestinal tract, NOS; uterus, NOS; female genital tract, NOS; male genital organs, NOS; and others. This over-ride indicates that the conflict has been reviewed.



Over-ride Flag for Site/EOD/Diagnosis Date (IF40)

Item Length: 1 NAACCR Item #: 2072

NAACCR Name: Over-ride Site/EOD/DX Dt

Over-ride Flag for Site/EOD/Diagnosis Date (Interfield Edit 40 and Interfield Edit 176)

This field is used to identify whether a case was reviewed and coding confirmed for cases where the patient has a localized disease with the primary site coded to a non-specific site, like colon, NOS.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A patient had "localized" disease with a non-specific site
	and no further information about the primary site is available

The IF40 and IF176 edits do not allow "localized" disease with non-specific sites, such as mouth, NOS; colon, NOS (except histology 8220); bone, NOS; female genital system, NOS; male genital organs, NOS; and others. This over-ride indicates that the conflict has been reviewed.



Over-ride Flag for Site/Laterality/EOD (IF41)

Item Length: 1 NAACCR Item #: 2073

NAACCR Name: Over-ride Site/Lat/EOD

Over-ride Flag for Site/Laterality/EOD (Interfield Edit 41 and Interfield Edit 177)

This field is used to identify whether a case was reviewed and coding confirmed for cases with a non-specific laterality code.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A patient had laterality coded non-specifically and
	extension coded specifically

The IF41 and IF177 edits for paired organs does not allow EOD/CS Extension to be specified as in situ, localized, or regional by direct extension if laterality is coded as "bilateral, side unknown," or "laterality unknown." This over-ride indicates that the conflict has been reviewed.



Over-ride Flag for Site/Laterality/Morphology (IF42)

Item Length: 1
NAACCR Item #: 2074

NAACCR Name: Over-ride Site/Lat/Morph

Over-ride Flag for Site/Laterality/Morphology (Interfield Edit 42)

This field is used to identify whether a case was reviewed and coding confirmed for paired-organ primary site cases with an in situ behavior and the laterality is not coded right, left, or one side involved, right or left origin not specified.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: A patient had behavior code of in situ and laterality is not
	stated as right: origin of primary; left: origin of primary; or only one side involved, right or left origin not specified

The IF42 edit does not allow behavior code of in situ with non-specific laterality codes. This over-ride indicates that the conflict has been reviewed.

Over-ride Flag for TNM Tis

Item Length: 1 NAACCR Item #: 1993 NAACCR Name: Over-ride TNM Tis

Over-ride Flag for TNM Tis

This field, new for 2018, is used to identify whether a case was reviewed and coding confirmed for a T value of in situ/noninvasive but N, M, and/or stage group indicates invasive disease. There are certain circumstances where AJCC does allow a T value indicating in situ/noninvasive and N, M, and/or stage group that indicates invasive disease. An over-ride is required to accommodate these situations. This over-ride will allow registrars to enter combination of T, N, and M with a stage group that differs from the combinations documented in the AJCC Staging Manual.

Code	Description		7	
Blank	Not reviewed, or reviewed and corrected			
1	Reviewed and confirmed as reported			



Over-ride Flag for Site/TNM-Stage Group

Item Length: 1 NAACCR Item #: 1989

NAACCR Name: Over-ride Site/TNM-StgGrp

Over-ride Flag for Site/TNM-Stage Group

This field, new for 2018, indicates whether a case was reviewed and coding confirmed for pediatric cases not coded according to the AJCC manual. Pediatric Stage groups should not be recorded in the TNM Clinical Stage Group or TNM Pathologic Stage Group items. When neither clinical nor pathologic AJCC staging is used for pediatric cases, code all AJCC items 88. When any components of either is used to stage a pediatric case, follow the instructions for coding AJCC items and leave Over-ride Site/TNM-Stage Group blank.

Code	Description
Blank	Not reviewed, or reviewed and corrected
1	Reviewed and confirmed as reported: case is confirmed to be a pediatric case that was coded
	using a pediatric coding system

