SEER Program Coding and Staging Manual 2023

Effective with Cases Diagnosed January 1, 2023 and Forward

Published September 2022 January 2023 Revision



Data Quality, Analysis, and Interpretation Branch Surveillance Research Program Division of Cancer Control and Population Sciences National Institutes of Health Public Health Service U.S. Department of Health and Human Services

 Suggested citation: Adamo M, Groves C, Dickie L, Ruhl J. (September 2022). SEER Program Coding and Staging Manual 2023. National Cancer Institute, Bethesda, MD 20892.
 U.S. Department of Health and Human Services National Institutes of Health National Cancer Institute

SEER Program Coding and Staging Manual 2023

Acknowledgements

On behalf of the NCI SEER Program, we wish to acknowledge the dedicated and insightful work performed by cancer registrars and their colleagues. Relevant questions from Ask a SEER Registrar and the SEER Inquiry System have been incorporated into this version of the manual. These additions improve the abstracting and coding guidance enhancing the quality of data collection and analysis, with the ultimate goal of improving the quality of life and outcome of all cancer patients. We thank you.

Copyright Information: All material in this manual is in the public domain and may be reproduced or copied without permission. We do request that you use a source citation.

Table of Contents

Preface to the 2023 SEER Program Coding and Staging Manual	1
Effective Date	1
Summary of Changes	1
2023 Changes	3
Submitting Questions	3
Collection and Storage of Dates	3
Transmission Instructions for Dates	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	9
Disease Regression	9
Reportable Examples	9
Non-Reportable Examples	9
Instructions for Reporting Solid Tumors	10
Documentation of Reportable Diagnoses	10
Intracranial or CNS Neoplasms	10
Ambiguous Terminology	11
How to Use Ambiguous Terminology for Case Ascertainment	12
Instructions for Hematopoietic and Lymphoid Neoplasms	14
Casefinding Lists	15
Changing Information on the Abstract	16
Determining Multiple Primaries	17
Solid Tumors	17
Hematopoietic and Lymphoid Neoplasms	17
Transplants	17
Section I Basic Record Identification	18
SEER Participant	19
Patient ID Number	22
Record Type	23
NAACCR Record Version	24

	Table of Contents	iv
Race 1, 2, 3, 4, 5		67
Age at Diagnosis		66
Place of DeathCountry		65
Place of DeathState		64
Date of Birth		62
BirthplaceCountry		61
BirthplaceState		60
Telephone		59
Current AddressPostal Code (ZII	P Code)	58
Current AddressState		57
Current AddressCity		56
Current AddressSupplemental		55
Current AddressNumber and Stre	eet	54
Census Tract Certainty 2010		52
Census Tract 2010		51
State at Diagnosis Geocode 2010		50
State at Diagnosis Geocode 2000		49
State at Diagnosis Geocode 1970/8		48
Address at DiagnosisPostal Code	e (ZIP Code)	47
Address at Diagnosis-State		46
Address at DiagnosisCity		45
County at Diagnosis Analysis		44
County at Diagnosis Geocode 201		43
County at Diagnosis Geocode 200		42
County at Diagnosis Geocode 197	0/80/90	40
County		40
Address at Diagnosis Supplement		39
Address at DiagnosisNumber and	d Street	38
Place of Residence		36
Social Security Number		35
Birth Surname		34
Last Name		33
Middle Name		32
First Name		31
Section III Demographic Information		30
CoC Accredited Flag		20 29
Type of Reporting Source		25 26
Section II Information Source		25

IHS Link	72
Spanish Surname or Origin	73
NHIA Derived Hispanic Origin	75
Sex	76
Marital Status at Diagnosis	77
Primary Payer at Diagnosis	78
Tobacco Use Smoking Status	80
Section IV Description of this Neoplasm	82
Pathology Reports	82
Date of Diagnosis	83
Tumor Record Number	88
Sequence NumberCentral	89
Primary Site	92
Laterality	98
Diagnostic Confirmation	101
Histologic Type ICD-O-3	104
Behavior Code	106
Grade Clinical	109
Grade Post Therapy Clin (yc)	110
Grade Pathological	111
Grade Post Therapy Path (yp)	112
Tumor SizeClinical	113
Tumor SizePathologic	119
ICD-O-3 Conversion Flag	125
Section V Stage of Disease at Diagnosis	126
Extent of Disease Data Items	127
Extent of Disease Primary Tumor	128
Extent of Disease Regional Nodes	129
Extent of Disease Metastases	130
Summary Stage	131
Summary Stage 2018	132
Derived Summary Stage 2018	133
Section VI Stage-related Data Items	134
Stage-related Data Items	135
Lymphovascular Invasion	136
Macroscopic Evaluation of the Mesorectum	139
Mets at DiagnosisBone	140
Mets at DiagnosisBrain	142

	Table of Contents	vi
	Neoadjuvant Therapy	222
	Systemic Treatment/Surgery Sequence	220
	Hematologic Transplant And Endocrine Procedures	217
	Immunotherapy	214
	Date Immunotherapy Started	213
	Hormone Therapy	210
	Date Hormone Therapy Started	209
	Chemotherapy	203
	Date Chemotherapy Started	202
	Date Systemic Therapy Started	201
	Reason for No Radiation	200
	Radiation Sequence with Surgery	198
	Radiation External Beam Planning TechniquePhase I, II, III	195
	Radiation Treatment ModalityPhase I, II, III	194
	Date Radiation Started	193
	Reason for No Surgery of Primary Site	190
	Surgical Procedure of Other Site	188
	Regional Nodes Examined	185
	Regional Nodes Positive	182
	Date of Regional Lymph Node Dissection	181
	Sentinel Lymph Nodes Positive	179
	Sentinel Lymph Nodes Examined	178
	Date of Sentinel Lymph Node Biopsy	177
	Scope of Regional Lymph Node Surgery	173
	Surgical Margins of the Primary Site	172
	Surgery of Primary Site 2023	169
	Date of Most Definitive Surgical Resection of the Primary Site	168
	Date of First Surgical Procedure	167
	Treatment Status	166
	Date Therapy Initiated	163
	First Course of Therapy	159
Section	on VII First Course of Therapy	158
	Additional Stage-related Data Items	154
	SEER Site-specific Factor 1	152
	Mets at DiagnosisOther	150
	Mets at DiagnosisDistant Lymph Node(s)	148
	Mets at DiagnosisLung	146
	Mets at DiagnosisLiver	144
	Mets at DiagnosisLung	14
	Mats at Diagnosis Liver	

	Neoadjuvant TherapyClinical Response	227
	Neoadjuvant TherapyTreatment Effect	231
	Date Other Treatment Started	233
	Other Therapy	234
Sect	ion VIII Follow Up Information	237
	Date of Last Cancer (Tumor) Status	238
	Code the four-digit year	238
	Cancer Status	241
	Recurrence Date1st	242
	Recurrence Type1st	245
	Death Clearance Instructions	247
	Date of Last Follow-Up or of Death	248
	Vital Status	251
	ICD Code Revision Used for Cause of Death	252
	Underlying Cause of Death	253
	Survival Data Items	255
	No Patient Contact Flag	256
	Reporting Facility Restriction Flag	257
Sect	ion IX Administrative Codes	258
	Site/Type Interfield Review	259
	Histology/Behavior Interfield Review	260
	Age/Site/Histology Interfield Review	261
	Sequence Number/Diagnostic Confirmation Interfield Review	262
	Site/Histology/Laterality/Sequence Interrecord Review	263
	Surgery/Diagnostic Confirmation Interfield Review	264
	Type of Reporting Source/Sequence Number Interfield Review	265
	Sequence Number/Ill-Defined Site Interfield Review	266
	Leukemia or Lymphoma/Diagnostic Confirmation Interfield Review	267
	Over-ride Flag for Name/Sex	268
	Over-ride Flag for Site/Behavior (IF39)	269
	Over-ride Flag for Site/EOD/Diagnosis Date (IF40)	270
	Over-ride Flag for Site/Laterality/EOD (IF41)	271
	Over-ride Flag for Site/Laterality/Morphology (IF42)	272
	Over-ride Flag for TNM Tis	273
	Over-ride Flag for Site/TNM-Stage Group	274

Preface to the 2023 SEER Program Coding and Staging Manual

The 2023 Surveillance, Epidemiology and End Results (SEER) Program Coding and Staging Manual may be downloaded in electronic format from the SEER website: <u>http://www.seer.cancer.gov/tools/codingmanuals.</u>

Effective Date

The 2023 SEER Program Coding and Staging Manual is effective for cases diagnosed January 1, 2023, and forward. Previous editions of this manual are available on the <u>SEER website</u>.

Summary of Changes

All date flags have been discontinued starting with cases diagnosed in 2023. These data items have been removed from the 2023 SEER Program Manual. See the list of date flags removed in this section under Data items deleted from manual.

The major changes and additions to the 2023 SEER Program Coding and Staging Manual include

2023 Changes Revised section in the Preface

Reportability

Added reportable malignant and non-malignant terms and codes for 2023 Updated list of reportable intraepithelial neoplasia

Laterality table and coding instructions were updated.

New Site-specific Data Items (SSDIs) were added for 2023. The table that lists additional SSDIs required for transmission by SEER was also updated. Two data items are no longer required for required for cases diagnosed January 1, 2023, or later.

Estrogen Receptor Total Allred Score (3828) Progesterone Receptor Total Allred Score (3916)

Data items added to manual Section VII: First Course of Therapy Surgery of Primary Site 2023

> **Section VIII: Follow Up Information** No Patient Contact Flag Reporting Facility Restriction Flag

Data items deleted from manual Section III: Demographic Information Date of Birth Flag

> **Section IV: Description of this Neoplasm** Date of Diagnosis Flag Morphology

Data items deleted from manual (continued)
Section VII: First Course of Therapy

Date Therapy Initiated Flag
Date of Surgery to Primary Site Flag
Date of Most Definitive Surgical Resection of the Primary Site Flag
Surgery of Primary Site
Date of Sentinel Lymph Node Biopsy Flag
Date of Regional Lymph Node Dissection Flag
Date of Radiation Flag
Date of Systemic Therapy Flag
Date of Hormone Therapy Flag
Date of Immunotherapy Flag
Date Other Treatment Started Flag

Section VIII: Follow-Up Information

Date of Last Contact Flag Date of Last Cancer (tumor) Status Flag Recurrence Date--1st Flag Date of Last Follow-Up or Death Flag

Codes and/or Description added/modified NAACCR Record Version Race 1, Race 2, Race, 3, Race 4, Race 5 Tobacco Use Smoking Status Surgery of Primary Site 2023 (replaces Surgery of Primary Site) codes are 4-digit format

Appendices new/modified Appendix A County Codes (sources only)

Appendix B Country and State Codes (minor edits)

Appendix C Coding Guidelines Bladder Bone Brain/CNS, Benign and Borderline (new; formerly Brain/CNS) Brain/CNS, Malignant (new; formerly Brain/CNS) Breast Intracranial Glands (new) Pancreas (new) Tongue (new)

Appendix C Surgery Codes Breast Colon (minor editing) Esophagus Lung (minor editing) Prostate Skin Thyroid All sites: all codes changed to 4 digits Appendix C Neoadjuvant Therapy Treatment Effect Site-Specific Codes
 Breast
 Lymphoma, Lymphoma CLL/SLL, Mycosis Fungoides, Primary Cutaneous Lymphoma
 (excluding MF and SS), Plasma Cell Myeloma, Plasma Cell Disorders, HemeRetic, Ill-Defined Other

Appendix D Race and Nationality Descriptions (listing of codes)

Appendix E Appendix E. Reportable Examples Appendix E.2 Non-reportable Examples

For a more detailed listing of changes to the 2023 SEER Program Coding and Staging Manual, refer to the Summary of Changes document.

2023 Changes

In addition to the updates to the 2023 SEER Program Coding and Staging Manual, changes related to cancer coding and staging include 2023 updates to

SEER Extent of Disease (EOD) (includes updates to SEER*RSA) Solid Tumor Rules (important updates to existing site groups, comprehensive revision of Other Sites Rules) Grade Manual Site-Specific Data Items Manual ICD-O-3.2 NAACCR Version 23

Submitting Questions

Submit technical questions, suggestions, and revisions related to this manual to <u>Ask A SEER Registrar</u> on the SEER website. An appointed staff member from each SEER core registry may also submit technical questions to NCI SEER inquiry system using the web-based <u>SINQ system</u>. Updates to this manual identified after publication will be found in SINQ under the category of 'Updates to current manual' until a subsequent revision of this manual is issued. Relevant questions and answers from Ask A SEER Registrar and from the SINQ 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 in the <u>NAACCR Required Status Table</u>.

Collection and Storage of Dates

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]); however, the recommended format must be used for transmission (see Transmission Instructions for Dates below). See the <u>2023 NAACCR Implementation Guidelines</u> for further information regarding the updated data exchange standard.

Transmission Instructions for Dates

Dates must be transmitted in the year, month, day format (YYYYMMDD). The transmission requirements are intended to follow a left-to right- transmission which ensure the minimum allowable information is listed first, allowing only valid portions of the date are transmitted; missing and unknown portions of dates are not transmitted. If there are no known date components, the date data item 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; no spaces should be used

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

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.

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 2023 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 2023 SEER Program Coding and Staging Manual includes data item descriptions, codes, and coding instructions for cases diagnosed January 1, 2023, and forward as reported by SEER registries. For all cases diagnosed on or after January 1, 2023, the instructions and codes in this manual take precedence over all previous instructions and codes. Updates to this manual identified after publication will be found in SINQ under the category of 'Updates to current manual' until a subsequent revision of this manual is issued.

The 2023 SEER Program Coding and Staging Manual explains the format and the definitions of the <u>data</u> <u>items required by SEER</u>. 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 <u>SEER website</u>.

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 2023 diagnoses but were collected in years prior to 2023 must be transmitted to SEER as blanks for cases diagnosed in 2023 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 these 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.

Refer to <u>Appendix E.1</u> for reportable examples and to the ICD-O-3.2 Updates for new/changed behaviors and terms.

1. Malignant Histologies (In Situ and Invasive)

- a. Report all histologies with a behavior code of /2 or /3 in the ICD-O- Third Edition, Second Revision Morphology (ICD-O-3.2), except as noted in section 1.b. below. The following are reportable diagnoses that are either new or are frequently questioned.
 - i. High-grade astrocytoma with piloid features (HGAP) (9421/3) as of 01/01/2023
 - ii. Lymphangioleiomyomatosis (9174/3) is reportable as of 01/01/2023; behavior changed from /1 to /3
 - iii. Mesothelioma in situ (9050/2) is reportable as of 01/01/2023
 - iv. Diffuse leptomeningeal glioneuronal tumor (9509/3) is reportable as of 01/01/2023
 - v. Low-grade appendiceal mucinous neoplasm (LAMN) is reportable
 - vi. Early or evolving melanoma, in situ and invasive: As of 01/01/2021, early or evolving melanoma in situ, or any other early or evolving melanoma, is reportable.
 - vii. All GIST tumors, *except* for those stated to be benign, are reportable as of 01/01/2021. The behavior code is /3 in ICD-O-3.2.
 - viii. Nearly all thymomas are reportable as of 01/01/2021. The behavior code is /3 in ICD-O-3.2. The exceptions are
 - Microscopic thymoma or thymoma, benign (8580/0)
 - Micronodular thymoma with lymphoid stroma (8580/1)
 - Ectopic hamartomatous thymoma (8587/0)
 - ix. Carcinoid, NOS of the appendix is reportable. As of 01/01/2015, the ICD-O-3 behavior code changed from /1 to /3.
 - x. The following diagnoses **are reportable** (not a complete list)
 - Lobular carcinoma in situ (LCIS) of breast
 - Intraepithelial neoplasia, high grade, grade II, grade III

Examples: (Not a complete list. See ICD-O-3.2. See 1.b.iii for PIN III.)

- Anal intraepithelial neoplasia II (AIN II) of the anus or anal canal (C210-C211)
- Anal intraepithelial neoplasia III (AIN III) of the anus or anal canal (C210-C211)
- Biliary intraepithelial neoplasia, high grade
- Differentiated vulvar intraepithelial neoplasia (VIN)
- Endometrioid intraepithelial neoplasia
- Esophageal intraepithelial neoplasia (dysplasia), high grade
- Glandular intraepithelial neoplasia, high grade
- Intraductal papillary neoplasm with high grade intraepithelial neoplasia
- Intraepithelial neoplasia, grade III
- Laryngeal intraepithelial neoplasia II (LIN II) (C320-C329)
- Laryngeal intraepithelial neoplasia III (LIN III) (C320-C329)
- Lobular neoplasia grade II (LN II)/lobular intraepithelial neoplasia grade II (LIN II) breast (C500-C509)
- Lobular neoplasia grade III (LN III)/lobular intraepithelial neoplasia grade III (LIN III) breast (C500-C509)
- Pancreatic intraepithelial neoplasia (PanIN II) (C250-C259)
- Pancreatic intraepithelial neoplasia (PanIN III) (C250-C259)
- Penile intraepithelial neoplasia, grade II (PeIN II) (C600-C609)
- Penile intraepithelial neoplasia, grade III (PeIN III) (C600-C609)
- Squamous intraepithelial neoplasia, grade II excluding cervix (C53_) and skin sites coded to C44_
- Squamous intraepithelial neoplasia III (SIN III) excluding cervix (C53_) and skin sites coded to C44_
- Vaginal intraepithelial neoplasia II (VAIN II) (C529)
- Vaginal intraepithelial neoplasia III (VAIN III) (C529)
- Vulvar intraepithelial neoplasia II (VIN II) (C510-C519)
- Vulvar intraepithelial neoplasia III (VIN III) (C510-C519)
- xi. 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.
- xii. Mature teratoma of the testes in adults is malignant and reportable as 9080/3
- xiii. 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

- 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) Squamous intraepithelial neoplasia III (SIN III) (8077) of skin sites coded to C44_ Basal cell carcinoma (8090-8110)

Note: If the registry collects basal or squamous cell carcinoma of **skin** sites (C440-C449), sequence them in the 60-87 range and do not report to SEER.

ii. In situ carcinoma of cervix (/2), any histology, 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. As of the 2018 data submission, cervical in situ cancer is no longer required for any diagnosis year. Sequence all cervix in situ cases in the 60-87 range regardless of diagnosis year.

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

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

- iv. Colon atypical hyperplasia
- v. High grade dysplasia in colorectal and esophageal primary sites
- vi. Adenocarcinoma in situ, HPV associated (8483/2)(C53)

Refer to <u>Appendix E.2</u> for non-reportable examples.

c. "Carcinomatosis" (8010/9) and "metastatic" tumor or neoplasm (8000/6) indicate malignancy and could be indicative of a reportable neoplasm. Review all of the available information to determine the origin of the carcinomatosis or the origin of the metastases.

2. Benign/Non-Malignant Histologies

a. 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 to 12/31/2020) or ICD-O-3.2 (effective with cases diagnosed 01/01/2021 and later). See the table below for the specific sites.

Note 1: Benign and borderline tumors of the cranial bones (C410) are **not reportable**.

Note 2: Benign and borderline tumors of the peripheral nerves (C47_) are **not** reportable.

- b. Report pilocytic astrocytoma/juvenile pilocytic astrocytoma as 9421/1 for *all* CNS sites as of 01/01/2023
- c. Report diffuse astrocytoma, MYB- or MYBL1-altered and diffuse low-grade glioma, MAPK pathway-altered (9421/1) as of 01/01/2023
- d. Report multinodular and vacuolating neuronal tumor (9509/0) as of 01/01/2023
- e. Report juvenile xanthogranuloma (9749/1) as of 01/01/2023 (C715 is the most common site)
- f. **Neoplasm and tumor** are reportable terms for intracranial and CNS because they are listed in ICD-O-3.2 with behavior codes of /0 and /1
 - i. **"Mass"** and **"lesion"** are **not** reportable terms for intracranial and CNS because they are **not** listed in ICD-O-3.2 with behavior codes of /0 or /1

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	C728	
	central nervous system		
	Nervous system, NOS	C729	
Pituitary, craniopharyngeal duct, and pineal	Pituitary gland	C751	
gland	Craniopharyngeal duct	C752	
	Pineal gland	C753	

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

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 <u>Appendix E.1</u> for reportable examples.

Non-Reportable Examples

Refer to <u>Appendix E.2</u> for non-reportable examples.

Instructions for Reporting Solid Tumors

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

Documentation of Reportable Diagnoses

A reportable diagnosis made by a recognized medical practitioner may appear on a variety of medical documentation including, but not limited to

- Pathology report
- Cytology report
- Imaging report
- Discharge diagnosis
- History and physical
- Other parts of medical record
- Death certificate
- Autopsy report

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 discharge 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.

Intracranial or CNS Neoplasms

An intracranial or a CNS neoplasm identified only by diagnostic imaging is reportable.

"Neoplasm" and "**tumor"** are **reportable** terms for intracranial and CNS because they are listed in ICD-O-3.2 with behavior codes of /0 and /1.

"Mass" and "lesion" are not reportable terms for intracranial and CNS because they are not listed in ICD-O-3.2 with behavior codes of /0 or /1.

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. Accession the case when a reportable diagnosis is confirmed later. The date of diagnosis is the date of the suspicious cytology.

Note 1: "Suspicious cytology" means any cytology report diagnosis that uses an ambiguous term, including ambiguous terms that are listed as reportable in this manual.

Note 2: 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.

Urine cytology positive for malignancy is reportable. Code the primary site to C689 in the absence of any other information.

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)

Report cases that use the words on the list or an equivalent word such as "favored" rather than "favor(s)." Do not substitute synonyms such as "supposed" for presumed or "equal" for comparable. Do not substitute "likely" for "most likely."

Use all available information first and seek clarification from clinicians whenever possible.

Equivalent to "Diagnostic for" malignancy or reportable diagnosis. These phrases are reportable when **no** other information is available.

- Considered to be [malignancy or reportable diagnosis]
- Characteristic of [malignancy or reportable diagnosis]

- Appears to be a [malignancy or reportable diagnosis]
- Most compatible with [malignancy or reportable diagnosis]
- Most certainly [malignancy or reportable diagnosis]
- In keeping with

Equivalent to "Not diagnostic for" malignancy or reportable diagnosis. These phrases are **NOT** reportable when **no other information is available**.

- Highly suspicious for, but not diagnostic of [malignancy or reportable diagnosis]
- Most compatible with a [non-reportable diagnosis] such as a [reportable diagnosis]
- High probability for [malignancy or reportable diagnosis]

Equivalent to "Differential diagnoses"

• Differential considerations

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.

If there is no information to the contrary, report a case described as "malignant until proven otherwise." The patient should have further work up to prove or disprove the findings. When additional information becomes available, update as necessary. Use text fields to describe the details.

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 <u>follow up with the physician</u>. 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 <u>where wording in the patient record is ambiguous</u> with respect to reportability or tumor spread and <u>no further information</u> is available <u>from any resource</u>, 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, and 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 a reportable 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
 - 1. Do **not** accession a case when the original source document used a **non-reportable** 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. No further information available, no evidence of treatment for 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." CT-guided needle biopsy with final diagnosis "Neoplasm suggestive of oncocytoma. 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 intracranial and CNS because they are listed in ICD-O-3.2 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 intracranial and CNS because they are not listed in ICD-O-3.2 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 the reportable ambiguous terms when **screening** diagnoses on pathology reports, scans, ultrasounds, and other diagnostic testing other than tumor markers
 - i. 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> <u>Database</u>.

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.

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.

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 2022. In January 2023, the patient is admitted with widespread metastasis consistent with malignant argentaffin carcinoid. The registrar accessions the malignant argentaffin carcinoid as a 2023 diagnosis. Two months later, the pathologist reviews the slides from the May 2022 surgery and concludes that the carcinoid diagnosed in 2022 was malignant. Change the date of diagnosis to May 2022 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 current Solid Tumor Rules.

Apply the site-specific multiple primary rules in the current 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. The head and neck, colon, rectosigmoid and rectum, breast, kidney, urinary sites, and malignant CNS and peripheral nerves rules exclude lymphoma and leukemia (M9590-M9993) and Kaposi sarcoma (M9140). All other sites rules exclude lymphoma and leukemia (M9590-M9993).

Hematopoietic and Lymphoid Neoplasms

No updates were made to the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database* for 2023 cases. Apply the Multiple Primary Rules in the <u>Hematopoietic and Lymphoid Neoplasm Coding</u> <u>Manual</u> and <u>Database</u>.

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 current 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 data items 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.

SEER Participant

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

SEER Participant is 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.

Table of SEER Core Registries

Code	Participant	Area Covered	Year SEER Reporting Started	Name	Two- Character Abbreviation
0000001501	Cancer Prevention Institute of	5 counties	1973	San Francisco- Oakland SMSA	SF
0000001502	California Connecticut Department of Public Health	Entire state	1973	Connecticut	СТ
0000001521	Research Corporation of Hawaii	Entire state	1973	Hawaii	HI
0000001522	University of Iowa	Entire state	1973	Iowa	IA
0000001523	University of New Mexico	Entire state	1973	New Mexico	NM
0000001525	Fred Hutchinson Cancer Research Center	13 counties	1974	Seattle-Puget Sound	SE
0000001526	University of Utah	Entire state	1973	Utah	UT
0000001527	Emory University	5 counties	1975	Metropolitan Atlanta	AT
0000001529	Alaska Native	Native American population of Alaska	1984	Alaska Native	AK
0000001530	California Cancer Registry	Entire state	2018	California	СА
0000001531	Cancer Prevention Institute of California	4 counties	1992	San Jose-Monterey	SJ
0000001532	Greater Bay Area Cancer Registry	9 counties	2018	Greater Bay	GB
0000001533	University of New Mexico	Native American population of Arizona	1973	Arizona Indians	AZ
0000001535	University of Southern California	1 county	1992	Los Angeles	LX
0000001537	Emory University	10 Counties	1978	Rural Georgia	RG
0000001540	Georgia Comprehensive Cancer Registry	Entire state	2018	Georgia	GA

Code	Participant	Area Covered	Year SEER Reporting Started	Name	Two- Character Abbreviation
0000001541	Public Health Institute, California	California except Los Angeles, San Francisco- Oakland, and San Jose- Monterey	2000	Greater California	GC
0000001542	University of Kentucky Research Foundation	Entire state	2000	Kentucky	КҮ
0000001543	Louisiana State University HSC	Entire state	2000	Louisiana	LA
0000001544	Rutgers, the State University of New Jersey	Entire state	2000	New Jersey	NJ
0000001547	Emory University	Entire state other than metropolitan Atlanta and rural Georgia	2010	Greater Georgia	GG
0000001551	Cherokee Nation – Oklahoma	Native American population	1997	Cherokee Nation	CN
0000001561	Idaho Cancer Data Registry	Entire state	2018	Idaho	ID
0000001562	New York State Cancer Registry	Entire state	2018	New York	NY
0000001563	Massachusetts Cancer Registry	Entire state	2018	Massachusetts	MA
0000001564	Wisconsin Cancer Reporting System	Entire state	2018	Wisconsin	WI
0000001565	Illinois Department of Public Health	Entire state	2021	Illinois	IL
0000001566	Texas Department of State Health Services	Entire state	2021	Texas	TX

Table of SEER Research Support Registries

Code	Participant	Area Covered	Year SEER Reporting Started	Name	Two- Character Abbreviation
0000001520	Wayne State University	3 counties	1973	Metropolitan Detroit	DM
0000001564	Wisconsin Cancer Reporting System	Entire state	2018	Wisconsin	WI
0000001567	Arkansas Department of Health	Entire state	2021	Arkansas	AR

Code	Participant	Area Covered	Year SEER Reporting Started	Name	Two- Character Abbreviation
0000001568	California Department of Public Health	Entire state	2021	California	CA
0000001569	Colorado Department of Public Health and Environment	Entire state	2021	Colorado	СО
0000001570	Michigan Department of Health and Human Services	Entire state	2021	Michigan	MI
0000001571	Oregon Health & Science University	Entire state	2021	Oregon	OR
0000001572	Tennessee Department of Health	Entire state	2021	Tennessee	TN
0000001573	The Curators of the University of Missouri	Entire state	2021	Missouri	МО
0000001574	Trustees of Dartmouth College	Entire state	2021	New Hampshire	NH

Patient ID Number

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

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 XML NAACCR ID: recordType

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

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

NAACCR Record Version

Item Length: 3 NAACCR Item #: 50 NAACCR Name: NAACCR Record Version XML NAACCR ID: naaccrRecordVersion

NAACCR Record Version applies only to record types I, C, A, and M. The correction record (U) has its own record version data item. This data item is the NAACCR version that is used to create the record. The NAACCR layout version is necessary to communicate to the recipient of data in NAACCR format where the various items are found and how they are coded. It should be added to the record when the record is created.

Code	Description
120	2010 Version 12
121	2011 Version 12.1
122	2012 Version 12.2
130	2013 Version 13
140	2014 Version 14
150	2015 Version 15
160	2016 Version 16
180	2018 Version 18
210	2021 Version 21
220	2022 Version 22
230	2023 Version 23

Section II Information Source

Type of Reporting Source

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

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 or practice

Managed health plan

- Any practice and/or facility where all of the diagnostic and treatment information is maintained in one unit record
- 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.

Unit record

• All records for the patient from all departments, clinics, offices, etc. in a single file with the same medical record number

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

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 data item 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 data item 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 XML NAACCR ID: cocAccreditedFlag

CoC Accredited Flag, effective 01/01/2018, 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 2 when **all** incoming records for the consolidated case have the *CoC Accredited Flag* set to 2
- 3. Set the flag to **0** when **all** incoming records for the consolidated case have the *CoC Accredited Flag* set to 0
- 4. Set the flag to **2** when incoming records for the consolidated case have the *CoC Accredited Flag* set to 0 and 2
- 5. Flag remains **blank** for
 - a. DCO cases
Section III Demographic Information

First Name

Item Length: 40 NAACCR Item #: 2240 NAACCR Name: Name--First XML NAACCR ID: nameFirst

This data item identifies the first name of the patient. First name may also be referred to as given name. 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. Blank spaces, hyphens, and apostrophes are allowed; do not use other punctuation
- 3. Leave blank if the patient's first name is unknown
- 4. Record the most current name and update this data item if the first name changes. Enter previous names in the Alias data item (not included in this manual).
- 5. Do not record nicknames in First Name
 - a. Record nicknames in the Alias data item (not included in this manual)

Example: The patient's nickname is Bill and the first name is William. Record William in *First Name*.

Middle Name

Item Length: 40 NAACCR Item #: 2250 NAACCR Name: Name--Middle XML NAACCR ID: nameMiddle

This data item identifies the middle name of the patient. *Middle Name* is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. Truncate middle name if longer than 40 characters
- 2. Blank spaces, hyphens, and apostrophes are allowed; do **not** use other punctuation
- 3. Record the middle initial if the full middle name is not known
- 4. Leave blank if the patient's middle name is unknown or patient has no middle name
- 5. Record the most current name and update this data item if the middle name changes. Enter previous names in the *Name--Alias* data item (not included in this manual).

Last Name

Item Length: 40 NAACCR Item #: 2230 NAACCR Name: Name--Last XML NAACCR ID: nameLast

This data item identifies the last name of the patient. Last name may also be referred to as surname. 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. Record the most current name and update this data item if the last name changes. Enter previous names in the *Name--Alias* data item (not included in this manual).

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

Birth Surname

Item Length: 40 NAACCR Item #: 2232 NAACCR Name: Name--Birth Surname XML NAACCR ID: nameBirthSurname

Birth Surname, effective 01/01/2021, is a gender-neutral replacement for the NAACCR data item *Name* - *Maiden* (NAACCR Item #2390). Birth Surname reflects the last name of the patient at birth regardless of gender or marital status. Allowable values for *Birth Surname* are identical to those used for *Name-Maiden*.

Birth surname 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. Record when known regardless of value in the Sex data item
- 3. Leave blank if the birth surname is not known or not applicable
- 4. Blank spaces, hyphens, and apostrophes are allowed; do **not** use other punctuation

Examples

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

Social Security Number

Item Length: 9 NAACCR Item #: 2320 NAACCR Name: Social Security Number XML NAACCR ID: socialSecurityNumber

Social Security Number records the patient's Social Security number (SSN). Social Security number is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

Code	Description
(actual SSN)	Record the patient's Social Security number without dashes
999999999	Patient does not have a Social Security number; SSN is not available

- 1. Code the patient's Social Security number
- 2. Do not automatically enter a patient's Medicare claim number; it may not always be identical to the person's Social Security number
- 3. See <u>https://www.ssa.gov</u> for more information

Place of Residence

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 known residence)

Code the residence where the student is living for College students while attending college Exchange students temporarily living in the U.S.

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.S. Census Bureau Publications for detailed rules.

Address at Diagnosis--Number and Street

Item Length: 60 NAACCR Item #: 2330 NAACCR Name: Addr at Dx--No & Street XML NAACR ID: addrAtDxNoStreet

Address at Diagnosis--Number and Street is the patient's street address including the number at the time of diagnosis. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

Coding Instructions

- 1. Record the number and street address or the rural mailing address of the patient's usual residence when the tumor was diagnosed
- 2. Record the physical number and street address of the patient at diagnosis. If the patient also has a Post Office (PO) Box address, record the PO Box address in *Address at Diagnosis--Supplemental*.
- 3. Spell out the address fully with standardized use of abbreviations and punctuation per U.S. Postal Service (USPS) postal addressing standards. The USPS Postal Addressing Standards, Publication 28, May 2015, can be found on the Internet at <u>http://pe.usps.gov/cpim/ftp/pubs/pub28/pub28.pdf</u>
- 4. The use of capital letters is preferred by the USPS; use recognized USPS standardized abbreviations. Do not use punctuation unless absolutely necessary to clarify an address; leave space between numbers and words.

Example: 103 FIRST AVE SW APT 102

- 5. Limit abbreviations to those recognized by the Postal Service standard abbreviations. They include, but are not limited to: AVE (avenue), BLVD (boulevard), CIR (circle), CT (court), DR (drive) PLZ (plaza), PARK (park), PKWY (parkway), RD (road), SQ (square), ST (street), APT (apartment), BLDG (building), FL (floor), STE (suite), UNIT (unit), RM (room), DEPT (department), N (north), NE (northeast), NW (northwest), S (south), SE (southeast), SW (southwest), E (east, W (west). A complete list of recognized street abbreviations is provided in Appendix C of USPS Publication 28.
- 6. Punctuation is normally limited to periods (for example, 39.2 RD), slashes for fractional addresses (101 1/2 MAIN ST), and hyphens when a hyphen carries meaning (289-01 MONTGOMERY AVE). Use of the pound sign (#) to designate address units should be avoided whenever possible. The referred notation is a follows: 102 MAIN ST APT 101. If a pound sign is used, there must be a space between the pound sign and the secondary number (425 FLOWER BLVD # 72).
- 7. If the patient has multiple tumors, the address may be different for different primaries
- 8. Do not update this data item if the patient's address changes
- 9. Enter UNKNOWN when the patient's street address is unknown

Address at Diagnosis--Supplemental

Item Length: 60 NAACCR Item #: 2335 NAACCR Name: Addr at Dx--Supplementl XML NAACR ID: addrAtDxSupplementl

Address at Diagnosis--Supplemental allows for additional address information such as the name of a place or facility (for example, a nursing home, apartment complex, or other mailing address) at the time of diagnosis. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. Record the name of the place or facility where the patient resided when the tumor was diagnosed
 - a. For example, the name of an apartment complex or a nursing home
- 2. If the patient has multiple tumors, the address may be different for different primaries
- 3. Do **not** use this data item to record the number and street address of the patient. Record number and street in *Address at Diagnosis--Number and Street*
- 4. Do **not** update this data item if the patient's address changes
- 5. Leave blank if this data item is not needed

County

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

Codes for county of residence at the time of diagnosis for each SEER area are listed in <u>Appendix A</u> 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 XML NAACCR ID: countyAtDxGeocode1990

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 data item 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 XML NAACCR ID: countyAtDxGeocode2000

County at Diagnosis Geocode 2000 stores a computer generated geocoded value for the county of residence at the time of diagnosis. Codes in this data item 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 XML NAACCR ID: countyAtDxGeocode2010

County at Diagnosis Geocode 2010 stores a computer generated geocoded value for the county of residence at the time of diagnosis. Codes in this data item 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 XML NAACCR ID: countyAtDxAnalysis

County at Diagnosis Analysis, effective 01/01/2018, 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--City

Item Length: 50 NAACCR Item #: 70 NAACCR Name: Addr at DX--City XML NAACCR ID: addrAtDxCity

Address at Diagnosis--City captures the name of the city or town of the patient's residence at the time of diagnosis. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. Record the city of the physical number and street address of the patient at diagnosis. If the patient also has a Post Office (PO) Box address, record the PO Box address in *Address at Diagnosis--Supplemental*.
- 2. Do **not** use punctuation, special characters, or numbers. The use of capital letters is preferred by the United States Postal Service (USPS); use abbreviations when necessary.
- 3. If the patient has multiple malignancies/tumors, the city or town of residence at diagnosis may be the different for different primaries
- 4. Do **not** update city/town if the patient's city/town of residence changes
- 5. Enter UNKNOWN if the patient's city or town is unknown

Address at Diagnosis--State

Item Length: 2 NAACCR Item #: 80 NAACCR Name: Addr at DX--State XML NAACCR ID: addrAtDxState

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 <u>Appendix B</u> of this manual.

Address at Diagnosis--Postal Code (ZIP Code)

Item Length: 9 NAACCR Item #: 100 NAACCR Name: Addr at DX--Postal Code XML NAACCR ID: addrPostalCode

Address at Diagnosis--Postal Code (ZIP Code) captures the postal code (ZIP code) of the patient's residence at diagnosis. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

Code	Description
(actual ZIP code)	The patient's nine-digit U.S. extended postal code. Do not record hyphens.
60611	When the nine-digit extended U.S. ZIP code is not available, record the five-digit postal code, left justified, followed by four blanks
M6G2S8	The patient's six-character Canadian postal code left justified, followed by three blanks
888888or 888888888	Permanent address in a country other than Canada, United States, or U.S. possessions and postal code is unknown
999999999	Permanent address in Canada, United States, or U.S. possession and postal code is unknown

- 1. For U.S. residents, record the patient's nine-digit extended postal code of the patient's residence at the time of diagnosis
- 2. For Canadian residents, record the six-character postal code
- 3. When available, record the postal code for other countries
- 4. If the patient has multiple malignancies/tumors, the postal code may be different for all primaries
- 5. Do not update this data item if the patient's postal code changes

State at Diagnosis Geocode 1970/80/90

Item Length: 2 NAACCR Item #: 81 NAACCR Name: State at DX Geocode 1970/80/90 XML NAACCR ID: stateAtDxGeocode19708090

State at Diagnosis Geocode 1970/80/90, effective 01/01/2018, 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 <u>Appendix B</u> of this manual.

State at Diagnosis Geocode 2000

Item Length: 2 NAACCR Item #: 82 NAACCR Name: State at DX Geocode 2000 XML NAACCR ID: stateAtDxGeocode2000

State at Diagnosis Geocode 2000, effective 01/01/2018, 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 <u>Appendix B</u> of this manual.

State at Diagnosis Geocode 2010

Item Length: 2 NAACCR Item #: 83 NAACCR Name: State at DX Geocode 2010 XML NAACCR ID: stateAtDxGeocode2010

State at Diagnosis Geocode 2010, effective 01/01/2018, 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 <u>Appendix B</u> of this manual.

Census Tract 2010

Item Length: 6 NAACCR Item #: 135 NAACCR Name: Census Tract 2010 XML NAACCR ID: censusTract2010

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 data item allows a central registry to add year 2010 Census tracts to cases diagnosed in previous years without losing the codes in the data items *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 XML NAACCR ID: censusTractCertainty2010

Census Tract Certainty 2010 is coded by the central registry. *Census Tract Certainty 2010* 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 data item 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

Current Address--Number and Street

Item Length: 3 NAACCR Item #: 2350 NAACCR Name: Addr Current--No & Street XML NAACCR ID: addrCurrentNoStreet

Current Address--Number and Street identifies the patient's current address including both number and street. It is often used for follow-up. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. Record the number and street address or the rural mailing address of the patient's current usual residence
- 2. Spell out the address fully with standardized use of abbreviations and punctuation per U.S. Postal Service (USPS) postal addressing standards. The USPS Postal Addressing Standards, Publication 28, May 2015, can be found on the Internet at http://pe.usps.gov/cpim/ftp/pubs/pub28/pub28.pdf
- 3. The use of capital letters is preferred by the USPS; use recognized USPS standardized abbreviations. Do not use punctuation unless absolutely necessary to clarify an address; leave space between numbers and words.
- 4. *Example*: 103 FIRST AVE SW APT 102
- 5. Limit abbreviations to those recognized by the Postal Service standard abbreviations. They include, but are not limited to: AVE (avenue), BLVD (boulevard), CIR (circle), CT (court), DR (drive) PLZ (plaza), PARK (park), PKWY (parkway), RD (road), SQ (square), ST (street), APT (apartment), BLDG (building), FL (floor), STE (suite), UNIT (unit), RM (room), DEPT (department), N (north), NE (northeast), NW (northwest), S (south), SE (southeast), SW (southwest), E (east, W (west). A complete list of recognized street abbreviations is provided in Appendix C of USPS Publication 28.
- 6. Punctuation is normally limited to periods (for example, 39.2 RD), slashes for fractional addresses (101 1/2 MAIN ST), and hyphens when a hyphen carries meaning (289-01 MONTGOMERY AVE). Use of the pound sign (#) to designate address units should be avoided whenever possible. The referred notation is a follows: 102 MAIN ST APT 101. If a pound sign is used, there must be a space between the pound sign and the secondary number (425 FLOWER BLVD # 72).
- 7. Update this data item if the patient's address changes
- 8. Do **not** update this data item when the patient dies
- 9. Enter UNKNOWN when the patient's street address is unknown

Current Address--Supplemental

Item Length: 3 NAACCR Item #: 2355 NAACCR Name: Addr Current--Supplementl XML NAACCR ID: addrCurrentSupplementl

Current Address--Supplemental allows for additional address information such as the name of a place or facility (for example, a nursing home, apartment complex, or other mailing address) of current residence. It is often used for follow-up. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. Record the name of the place or facility where the patient currently resides
 - a. For example, the name of an apartment complex or a nursing home
- 2. Do **not** use this data item to record the number and street address of the patient. Record number and street in *Current Address--Number and Street*
- 3. Leave blank if this data item is not needed

Current Address--City

Item Length: 50 NAACCR Item #: 1810 NAACCR Name: Addr Current--City XML NAACCR ID: addrCurrentCity

Current Address--City captures the name of the city or town of the patient's current usual residence. It is often used for follow-up. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. If the patient resides in a rural area, record the name of the city or town used in his or her mailing address
- 2. The current city or town of residence should be the same for all tumors when a patient has multiple malignancies/tumors
- 3. Update city/town if the patient's city/town of residence changes
- 4. Do **not** update this data item when the patient dies

Current Address--State

Item Length: 50 NAACCR Item #: 1820 NAACCR Name: Addr Current-State XML NAACCR ID: addrCurrentState

Current Address--State captures the name of the state of the patient's current usual residence. It is often used for follow-up. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

- 1. Assign the most specific code possible from <u>Appendix B</u> of this manual
- 2. The current state of residence should be the same for all tumors when a patient has multiple malignancies/tumors
- 3. Code either XX or YY depending on the circumstance when the patient is a foreign resident (See <u>Appendix B</u>)
- 4. Update state if the patient's state of residence changes
- 5. Do **not** change this data item when the patient dies

Current Address--Postal Code (ZIP Code)

Item Length: 9 NAACCR Item #: 1830 NAACCR Name: Addr Current--Postal Code XML NAACCR ID: addrCurrentPostalCode

Current Address--Postal Code (ZIP Code) captures the postal code (ZIP code) of the patient's current usual residence. It is often used for follow-up. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

Code	Description
(actual ZIP code)	The patient's nine-digit U.S. extended postal code. Do not record hyphens.
60611	When the nine-digit extended U.S. ZIP code is not available, record the five-digit postal code, left justified, followed by four blanks
M6G2S8	The patient's six-character Canadian postal code left justified, followed by three blanks
888888 or 888888888	Permanent address in a country other than Canada, United States, or U.S. possessions and postal code is unknown
999999999	Permanent address in Canada, United States, or U.S. possession and postal code is unknown

- 1. Record the nine-digit extended postal code of the patient's current usual residence for U.S. residents
- 2. Record the six-character postal code for Canadian residents
- 3. Record the postal code for other countries when available
- 4. The postal code should be the same on each abstract for patients with multiple malignancies/tumors
- 5. Update this data item if the patient's postal code changes

Telephone

Item Length: 10 NAACCR Item #: 2360 NAACCR Name: Telephone XML NAACCR ID: telephone

Telephone records the current telephone number including area code for the patient. This data item is collected by SEER registries for identification and matching purposes; it is not submitted to NCI SEER.

Code	Description
(actual telephone number)	Number entered without dashes
0000000000	Patient does not have a telephone
99999999999	Telephone number unavailable or unknown

- 1. Record the current telephone number including area code of the patient without dashes
- 2. Update the telephone number if the telephone number changes

Birthplace--State

Item Length: 3 NAACCR Item #: 252 NAACCR Name: Birthplace--State XML NAACCR ID: birthplaceState

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

Coding Instructions

Assign the most specific code possible from <u>Appendix B</u> of this manual.

Birthplace--Country

Item Length: 3 NAACCR Item #: 254 NAACCR Name: Birthplace--Country XML NAACCR ID: birthplaceCountry

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

Coding Instructions

Assign the most specific code possible from <u>Appendix B</u> of this manual.

Date of Birth

Item Length: 8 NAACCR Item #: 240 NAACCR Name: Date of Birth XML NAACCR ID: dateOfBirth

Date of Birth identifies the month, day and year of the patient's birth. Transmit date data items 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 data items 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.

Place of Death--State

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

Place of Death--State, effective 01/01/2018, indicates the state where the patient died and where the certificate of death is filed.

Coding Instructions

Assign the most specific code possible from <u>Appendix B</u> of this manual.

Place of Death--Country

Item Length: 3 NAACCR Item #: 1944 NAACCR Name: Place of Death--Country XML NAACCR ID: placeOfDeathCountry

Place of Death--Country, effective 01/01/2018, indicates the country where the patient died and where the certificate of death is filed.

Coding Instructions

Assign the most specific code possible from <u>Appendix B</u> of this manual.
Age at Diagnosis

Item Length: 3 NAACCR Item #: 230 NAACCR Name: Age at Diagnosis XML NAACCR ID: ageAtDiagnosis

This data item represents the age of the patient at diagnosis **for this cancer or tumor**. This data item is tumor specific; i.e., the correct value could be different for each tumor diagnosis for a patient.

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 XML NAACCR ID: race1, race2, race3, race4, race5

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 data items (*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 or African American
03	American Indian or Alaska Native
04	Chinese
05	Japanese
06	Filipino
07	Native Hawaiian
08	Korean
10	Vietnamese
11	Laotian
12	Hmong
13	Cambodian
14	Thai
15	Asian Indian, NOS or Pakistani, NOS
16	Asian Indian (Effective with 01/01/2010 dx)
17	Pakistani (Effective with 01/01/2010 dx)
20	Micronesian, NOS
21	Chamorro
22	Guamanian, NOS
25	Polynesian, NOS
26	Tahitian
27	Samoan
28	Tongan
30	Melanesian, NOS
31	Fiji Islander
32	Papua New Guinean
88	No additional races (Race 2 – Race 5)
96	Other Asian, including Asian, NOS
97	Pacific Islander, NOS
98	Some other race
99	Unknown by patient

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 (Native 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. Use self-reported information as first priority.
 - a. Self-reported race information takes precedence over genetic testing and over information obtained through linkages. Generally, race information is used from linkages when race data are missing or unknown, or to enhance data. Self-reported information is the highest priority for coding race because the race information for the U.S. population comes from census data and that information is self-reported. For national cancer statistics, in order for the numerator (cancer cases) and the denominator (population) to be comparable, use self-reported race information whenever it is available.

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 data items Race 1, Race 2, Race 3, Race 4, and Race 5
 - a. Code **88** for the remaining race data items (*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
 - i. A person of Spanish origin may be any race; however, for coding race when there is no further information other than "Hispanic" or "Latino(a)," assign race as White as a last resort instead of coding unknown.

Example: Sabrina Fitzsimmons is a Latina. No further information is available. 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 or African American) when the stated race is African-American, Black, or Negro
- 8. Assign code **03** for any person stated to be
 - a. Native Alaskan (western hemisphere) OR
 - b. American 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) in a subsequent race data item 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), 97 (Pacific Islander, NOS), or 98 (Some other race) 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 data items must be coded 99 (Unknown by patient) when *Race 1* is coded 99 (Unknown by patient)

Note: Assign code 99 in *Race 2 – Race 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 <u>Appendix D</u> "Race and Nationality Descriptions" 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 or African American) per the Appendix.

Exception: Code *Race 1* through *Race 5* as 99 (Unknown by patient) 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 by patient)** 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 the race data items in the order stated when no other priority applies
- 19. The race of parents, when known, may be used with caution to determine patient's race in the absence of other more specific information (see coding examples 5 and 7)

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 or African American).

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 or African American) 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 by patient). The death certificate states race as black. Change cancer record for *Race 1* to 02 (Black or African American) 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 or African American). Code in the order stated when no other priority applies.

Example 11: Patient described as Middle Eastern. Code as 01 (White).

Example 12: Patient described as Greek. Code as 01 (White).

Example 13: Race 1 is coded by one facility as 02 (Black or African American) and Race 1 is coded by a different facility as 03 (American Indian or Alaska Native); no further documentation is provided. When consolidating records at the central cancer registry, code Race 1 as 98 (Some other race). If the patient is identified as Native American via the IHS linkage, follow usual procedures.

Example 14: Patient is from Guyana. Patient's race is coded differently in multiple source records using codes such as 02 (Black or African American) for *Race 1* or 98 (Some other race) or 15 (Asian Indian, NOS or Pakistani, NOS) for example; no further documentation is provided. When consolidating records at the central cancer registry, code *Race 1* as 98 (Some other race).

History

- 1. *Race 1* is the data item 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); 97 (Pacific Islander, NOS); 98 (Some other race); and 99 (Unknown by patient).

IHS Link

Item Length: 1 NAACCR Item #: 192 NAACCR Name: IHS Link XML NAACCR ID: ihsLink

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 data item 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 XML NAACCR ID: spanishHispanicOrigin

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. The data item is requested for submission to NAACCR.

Note: Hispanic surname lists are registry-specific.

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 (birth surname) 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. Use all information to determine the Spanish/Hispanic origin including
 - a. The ethnicity stated in the medical record
 - i. Self-reported information takes priority over other sources of information
 - 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 (birth surname) found on a list of Hispanic/Spanish names
- 3. 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.
- 4. Assign code 7 when the only evidence of the patient's Hispanic origin is a surname or maiden name (birth surname) and there is no evidence that the patient is not Hispanic. Code 7 is ordinarily for central registry use only.
- 5. Portuguese, Brazilians, and Filipinos are not presumed to be Spanish or non-Spanish

Section III: Demographic Information

- 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
- 6. Assign code 9
 - a. For death certificate only (DCO) cases when Spanish/Hispanic origin is unknown
 - b. When there is no written or verbal indication of Spanish origin, the patient declined to answer their Spanish origin, or the patient does not know their Spanish origin

Example: The patient's race is white or black, they were born in the United States, their last name is not on a Spanish surname list, and there is no mention of Spanish origin in the patient record.

Coding Examples

Example 1: Married female, no married name, Race 99, born in Mexico, married name is not on Spanish surname list. Code as 1 (Mexican) using coding instruction 2.c.

Example 2: Married female, no maiden name (birth surname), Race 01, born in Philippines, married last name not on Spanish surname list and medical record states "Hispanic." Code as 6 (Hispanic, NOS) using coding instruction 2.a.

Example 3: Married female, no maiden name (birth surname), Race 99, born in Peru, married last name is on Spanish surname list, no statement regarding ethnicity available. Code as 4 (South or Central America) using coding instruction 2.c.

Example 4: Patient has two last names, one of the last names is on the Spanish surname list. Code as 7 (Spanish surname only) using coding instruction 4.

NHIA Derived Hispanic Origin

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

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 XML NAACCR ID: 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>. An 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

Note: Hermaphrodite is an outdated term.

- 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 XML NAACCR ID: maritalStatusAtDx

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 at Diagnosis 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 XML NAACCR ID: primaryPayerAtDx

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 generally for persons who are 65 years of age or older, are chronically disabled (social security insurance eligible), or are dialysis patients. 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		
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
		of the Uniformed Services).
66	Military	Military personnel or their dependents treated at a military facility
67	Veterans Affairs	Veterans treated in Department of Veterans Affairs facilities

Code	Label	Definition
68	Indian/Public Health	Patient receives care at an Indian Health Service facility or at another
	Service	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
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.
 - a. Code the first insurance mentioned when there is more than one type of insurance specified during the initial diagnosis and/or treatment
- 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

Tobacco Use Smoking Status

Item Length: 1 NAACCR Item #344 NAACCR Name: Tobacco Use Smoking Status XML NAACCR ID: tobaccoUseSmokingStatus

Tobacco Use Smoking Status, effective 01/01/2022, captures the patient's past or current use of tobacco (cigarette, cigar and/or pipe).

Tobacco smoking history can be obtained from sections such as the Nursing Interview Guide, Flow Chart, Vital Stats or Nursing Assessment section, or other available sources from the patient's hospital medical record or physician office record. The information recorded in this data item is not comparable to the information previously collected under the CDC Comparative Effectiveness Research (CER) and Patient Centered Outcomes Research (PCOR) projects.

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

Coding Instructions

- 1. Record the past or current use of tobacco
 - a. Tobacco use includes cigarette, cigar, and/or pipe
- 2. Do not record the patient's past or current use of e-cigarette vaping devices
- 3. Assign code 1 when
 - a. The patient currently smokes OR
 - b. It is known that the patient stopped smoking within 30 days prior to diagnosis. The risks associated with smoking decrease as the time from cessation increases which means a person who stopped smoking within the last 30 days has the same risks as a current smoker.
- 4. Assign code **2** when the medical record indicates
 - a. "Former smoker"
 - b. Patient has smoked tobacco in the past but does not smoke now

Note: If there is evidence in the medical record that the patient quit recently (within 30 days prior to diagnosis), assign code 1, current smoker. The 30 days prior information, if available, is intended to differentiate patients who may have quit recently due to symptoms that lead to a cancer diagnosis.

- 5. Assign code **3** when
 - a. The patient is noted to have smoked, but the current smoking status is not known
 - b. It is known that the patient "recently" stopped smoking but it is not known how long ago the patient stopped smoking

- 6. Assign code **9** when
 - a. The medical record only indicates "No"
 - b. The record has no information about smoking status or history (e.g., pathology report only)
 - c. It is documented that the patient uses or used smokeless or chewing tobacco or ecigarettes or vapes, but tobacco use is not mentioned

Section IV Description of this Neoplasm

Pathology Reports

In general, SEER recommends that information from consult pathology reports be preferred over the original pathology report. This is because consults are usually requested from a more experienced or specialized pathologist/lab and are generally thought to be more accurate.

Date of Diagnosis

Item Length: 8 NAACCR Item #: 390 NAACCR Name: Date of Diagnosis XML NAACCR ID: dateOfDiagnosis

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 data items in the year, month, day format (YYYYMMDD). Transmit only known or estimated **year** of diagnosis; blanks will not be accepted for year. Leave the month, day and/or year¹ 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, ¹ month, and day cannot be estimated or are unknown

Transmit Instructions

- 1. Transmit date data items 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..

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.

¹ 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 9.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 coding instructions 9.a.i., ii., iii., and iv.

Case NOT transmitted to NCI SEER

- 1. Code the date of diagnosis when known, even if the case is not transmitted to SEER for other reasons
- 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

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 02/13/2023. Biopsy positive for ductal carcinoma on 02/28/2023. The date of diagnosis is 02/13/2023.

- 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. Code the date the procedure was done, not the date the specimen was received or read as positive by the pathologist when the date of diagnosis is coded from a pathology report

Example: Biopsy was performed on 05/06/2023. The specimen from the biopsy was received and read by the pathologist as positive for cancer on 05/09/2023. The date of diagnosis is 05/06/2023.

4. 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 1: On May 15, 2023, physician states that patient has lung cancer based on clinical findings. The patient has a positive biopsy of the lung in June 3, 2023. The date of diagnosis remains May 15, 2023.

Example 2: Radiologist reports Liver Imaging Reporting and Data System (LI-RADS) Category 5 on imaging. Later biopsy confirms hepatocellular carcinoma (HCC). Record date of diagnosis as date of LI-RADS imaging.

Note: Appendix E in the 2023 SEER Program Manual lists which PI-RADS, BI-RADS, and LI-RADS are reportable versus non-reportable. If reportable, use the date of the imaging procedure as the date of diagnosis when this is the earliest date and there is no information to dispute the imaging findings.

5. 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.

6. Use the date of suspicious cytology when the diagnosis is proven by subsequent biopsy, excision, or other means

Example: Cytology suspicious for malignancy 01/12/2023. Diagnosis of carcinoma per biopsy on 02/06/2023. Record 01/12/2023 as the date of diagnosis.

Note 1: "Suspicious" 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.

- 7. 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 2023. 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 2023.

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

- The information on the previous tumor is unclear AND/OR
- There is **no review** of previous slides **AND/OR**
- 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 2023 with pathology diagnosis of papillary cystadenoma of the ovaries. In December 2023, the patient is diagnosed with widespread metastatic papillary cystadenocarcinoma. The slides from June 2023 are not reviewed and there is no physician statement saying the previous tumor was malignant. The date of diagnosis is December 2023.

- 8. Code the date of death as the date of diagnosis for autopsy only cases
- 9. 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
- 10. **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 2023. History states that the patient was diagnosed 7 months ago. Subtract 7 from the month of admission and code date of diagnosis to March 2023.

Example 2: Outpatient bone scan done January 2023 that states history of prostate cancer. The physician says the patient was diagnosed in 2023. Assume bone scan was part of initial work-up and code date of diagnosis to January 2023.

- 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
- 11. 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 (01/30/2023). Live birth by C-section 02/04/2023. Code the date of diagnosis as 01/30/2023.

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

Tumor Record Number

Item Length: 2 NAACCR Item #: 60 NAACCR Name: Tumor Record Number XML NAACCR ID: tumorRecordNumber

Tumor Record Number is used to identify a tumor. It is auto-assigned in SEER*DMS when the Consolidated Tumor Case (CTC) is created and it never changes. Since the tumor record never changes, there are cases where the tumor record number is not in sequential order according to diagnosis date. *Tumor Record Number* does not change the way the sequence number changes.

Code	Description
01	First tumor
02	Second tumor
99	99 th tumor

Sequence Number--Central

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

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.)

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) excluding Cervix CIS, CIN III, SIN III of cervix	
All other in situ including VIN III, VAIN III, AIN III	00-59
Malignant (behavior code 3)	
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 regional registry defined*	60-87, 88
Examples	
Non-malignant tumor/benign brain/intracranial	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, SIN III of cervix	
<i>Note</i> : Submission of in situ cervical cancer is no longer required as of 2018 NCI SEER data submission.	60-87
Unspecified non-malignant tumor or central registry-defined sequence number	88

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

Note: Conversion Guidance

Do **not** change 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 or the conversion from ICD-O-3 to ICD-O-3.2.

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
- 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
 - Sequence 00-59
 - Refractory anemia is reported only for 2001+
 - Myelodysplastic syndromes are reported only for 2001+
 - Newly reportable hematopoietic neoplasms as of 01/01/2010
- 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 intracranial /CNS tumors 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 intracranial/ CNS tumors
 - a. The sequence number is 60 when a patient has **only one** reportable non-malignant tumor. If a tumor has a sequence of 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 intracranial/CNS 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 intracranial/CNS tumor and a malignant intracranial/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 2023. 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: Sequence all cervix in situ cases in the 60-87 range regardless of diagnosis year. Submission of in situ cervical cancer is no longer required as of 2018 NCI SEER data submission.

Primary Site

Item Length: 4 NAACCR Item #: 400 NAACCR Name: Primary Site XML NAACCR ID: primarySite

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 current Solid Tumor Rules contain additional coding instructions for some primary sites, including Head and Neck, Lung, and Urinary.

Note: Continue to use ICD-O-3 for assigning topography codes. ICD-O-3.2 did not change any of the topography codes.

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.

Resources for Coding Primary Site for Solid Tumors, in priority order

- 1. ICD-O
- 2. SEER Program Manual
 - a. Including Coding Guidelines in Appendix C
- 3. Solid Tumor Rules

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 current <u>Solid Tumor Rules</u> 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
 - a. Primary site should always be coded to reflect the site of origin according to the medical opinion on the case. Look for information about where the neoplasm originated. Always code the primary site based on where the tumor arose / site of origin.
 - b. Site of origin may be indicated by terms such as "tumor arose from...," "tumor originated in...," or similar statements
 - c. Site of origin is not necessarily the site of a biopsy
 - d. Tumors may involve many sites. The primary site code should reflect the site where the tumor arose rather than all of the sites of involvement.

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.

Example 6: The patient has a left lower lip wedge excision showing invasive squamous cell carcinoma at the mucocutaneous junction. There is no further information in operative report or pathology report regarding the location of this tumor that would indicate this is a skin primary. Assign C001, external lower lip. C001 includes vermilion border of lower lip. Vermilion border is synonymous with mucocutaneous junction.

- 3. Do *not* adjust the primary site code to fit staging or any other data items
- 4. 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.

Note: Skin cancers overlapping sites in the head and neck ONLY. Assign the primary site code for the site where the bulk of the tumor is or where the epicenter is; do **not** use code C448.

5. Code the site of the invasive tumor when there is an invasive tumor and also 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).

6. 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).

- 7. Some histology/behavior terms in ICD-O-3.2 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-3.2 code when a primary site is specified in the medical record

Example: The path report says "infiltrating duct carcinoma of the head of pancreas." The listing in ICD-O-3.2 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-3.2.

b. Use the site code suggested by ICD-O-3.2 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-3.2.

Example 2: Excision of the right axillary nodes reveals metastatic infiltrating duct carcinoma. The right breast is negative. ICD-O-3.2 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-3.2 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-3.2.

- 8. 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).
 - a. Code primary site using results of the molecular test CancerTYPE ID *only* when there is no other information about the primary site. Document in the text that the site is solely based on results from CancerTYPE ID molecular testing.

Note: CancerTYPE ID tests are a standardized molecular method of determining primary site in tumors initially identified in a metastatic site. The use of CancerTYPE ID to determine primary site is not yet a standard practice and has not received FDA clearance.

9. See the site-specific coding guidelines in <u>Appendix C</u> for primary site coding guidelines for the following sites

<u>Bladder</u>	Intracranial Glands
Brain/CNS, Benign and Borderline	Kaposi Sarcoma of All Sites
Brain/CNS, Malignant	Lung
Breast	Pancreas
<u>Colon</u>	Rectosigmoid Junction
<u>Esophagus</u>	

- 10. See section below for primary site coding guidelines for sarcoma
- 11. 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.
- 12. Gastrointestinal Stromal Tumors (GIST): Code the primary site to the location where the GIST originated
- 13. 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</u> <u>Primaries</u>
- c. For additional information about hematopoietic-related transplants, refer to the *Hematopoietic and Lymphoid Neoplasm Coding Manual* and *Database*
- 14. Assign primary site code C449, skin NOS, for a Merkel cell carcinoma presenting in a nodal or distant metastatic site and site of origin is **unknown**
- 15. In the *absence of any additional information* about the primary site, assign the codes listed for these primary sites/histologies

Primary Site/Histology Topography Code		
Ampullary/peri-ampullary	C241	
Anal margin	C445	
Anal verge	C211	
Angle of the stomach	C162	
Angular incisura of stomach	C163	
Back of tongue	C019	
Book-leaf lesion (mouth)	C068	
Clavicular skin	C445	
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	
Gastrohepatic ligament	C481	
Genu of pancreas	C250	
Glossotonsillar sulcus	C109	
Incisura, incisura angularis	C163	
Infrahilar area of lung	C349	
Interarytenoid space	C329	
Interhemispheric fissure (cerebrum)	C710	
Intracranial	C719	
Lateral tongue	C023	
Leptomeninges	C709	
Masticator space	C760	
Melanoma, NOS	C449	
Nail bed, thumb	C446	
Pancreatobiliary	C269	
Parapharyngeal space	C490	
Periareolar (breast)	C501	
Perihilar bile duct	C240	
Porta hepatis	C220	
Postauricular region	C444	
Preauricular (skin)	C443	
Prostatic sinus (urethra)	C680	
Testis, descended post orchiopexy	C621	
True vocal folds	C320	

Primary Site/Histology	Topography Code
Uncinate of pancreas	C250

- 16. 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.* Occult Tumors of the Head and Neck
 - i. Assign primary site C119 (nasopharynx) for occult head and neck tumors with cervical lymph node metastasis in Levels I-VII, and other group lymph nodes positive for Epstein–Barr virus (EBV+) (regardless of p16 status) encoded small RNAs (EBER) identified by in situ hybridization
 - Assign primary site C109 (oropharynx) for occult head and neck tumors with cervical lymph node metastasis in Levels I-VII, and other group lymph nodes, p16 positive with histology consistent with HPV-mediated oropharyngeal carcinoma (OPC)
 - Assign C760 for Occult Head and Neck primaries with positive cervical lymph nodes. Schema Discriminator 1: Occult Head and Neck Lymph Nodes is used to discriminate between these cases and other uses of C760

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

d. 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.

- e. Code unknown primary site when there is a physician statement of unknown primary site **ONLY** when **none of the above instructions can be applied**
- f. 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.

Code the organ of origin as the primary site when leiomyosarcoma arises in an organ. Do not code soft tissue as the primary site in this situation.

Example 1: Leiomyosarcoma arises in kidney. Code the primary site to kidney (C649).

Example 2: Leiomyosarcoma arises in prostate. Code primary site to prostate (C619).

Coding Instructions for Hematopoietic and Lymphoid Neoplasms (9590/3-9993/3)

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

Laterality

Item Length: 1 NAACCR Item #: 410 NAACCR Name: Laterality XML NAACCR ID: 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.

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. The primary site is not a paired site
 - b. Primary site is unknown (C809), or
 - c. Laterality is unknown for a death certificate only (DCO) case and the primary site is **NOT** one of the primary site codes listed in the table below (Sites for Which Laterality Codes Must Be Recorded)
- 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, C444, 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 code 5).

Example 2: Patient has a midline meningioma of the cerebral meninges (C700, laterality code 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 code listed in the table below (Sites for Which Laterality Codes Must Be Recorded)
- 7. Document the laterality in a text field

Sites for Which Laterality Codes Must Be Recorded

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

A laterality code other than 0 must be assigned for the sites listed in the table below. 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 below. For example: Code 2 may be assigned for a tumor originating in the left lobe of thyroid.

ICD-O-3 Code	Site or Subsite
C079	Parotid gland
C080	Submandibular gland
C081	Sublingual gland
C098	Overlapping lesion of tonsil
C099	Tonsil, NOS
C301	Middle ear
C310	Maxillary sinus
C312	Frontal sinus
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
C441	Skin of the eyelid
C442	Skin of the external ear
C443	Skin of other and unspecific parts of the face
C444	Skin of scalp and neck

Note: Laterality will be automatically coded to 0 in SEER*DMS for sites not listed in the table below.

ICD-O-3 Code	Site or Subsite
C445	Skin of 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

Diagnostic Confirmation

Item Length: 1 NAACCR Item #: 490 NAACCR Name: Diagnostic Confirmation XML NAACCR ID: diagnosticConfirmation

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 higher-priority code, if at **ANY TIME** during the course of disease the patient has a diagnostic confirmation with a **higher priority**. Change to the higher-priority code even when diagnostic confirmation is based on the result of subsequent treatment.

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 and there is no other diagnostic work up (e.g., imaging)

Example: If the workup for a prostate cancer patient is limited to a highly elevated PSA (no DRE and no imaging) 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

https://www.cancer.gov/about-cancer/diagnosis-staging/diagnosis/ https://www.cancer.gov/about-cancer/diagnosis-staging/diagnosis/tumor-markers-fact-sheet

- 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 (9590/3-9993/3)

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 (9590/3-9993/3)

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

Histologic Type ICD-O-3

Item Length: 4 NAACCR Item #: 522 NAACCR Name: Histologic Type ICD-O-3 XML NAACCR ID: histologicTypeIcdO3

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

The current <u>Solid Tumor Rules</u>, the <u>Hematopoietic and Lymphoid Neoplasm Coding Manual and Database</u>, and the *International Classification of Diseases for Oncology*, Third Edition, Second Revision Morphology (ICD-O-3.2) are the standard references for histology codes.

ICD-0-3.2

Standard setters have agreed to implement new histology terms and codes for ICD-O-3 based on the current versions of the *World Health Organization Classification of Tumors*. The update, referred to as ICD-O-3.2, includes comprehensive tables listing histology codes and behavior codes in effect beginning with cases diagnosed in 2021 The new codes, new terms, and codes with changes to behavior are available at the <u>NAACCR website</u>.

See the <u>NAACCR website</u> for additional updates for 2023.

Histology Coding for Solid Tumors

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

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

Refer to the most current Solid Tumor Rules for histology code changes.

- 1. Beginning with cases diagnosed 01/01/2022, p16 test results can be used to code squamous cell carcinoma, HPV positive (8085) and squamous cell carcinoma, HPV negative (8086).
- Beginning with cases diagnosed 01/01/2022, non-keratinizing squamous cell carcinoma, HPV positive is coded 8085 for sites listed in Head and Neck Solid Tumor Rules Table 5 only. A diagnosis of non-keratinizing squamous cell carcinoma, NOS is coded 8072.
- 3. Beginning with cases diagnosed 01/01/2022, keratinizing squamous cell carcinoma, HPV negative is coded 8086 for sites listed in Head and Neck Solid Tumor Rules Table 5 only. A diagnosis of keratinizing squamous cell carcinoma, NOS is coded 8071.
- 4. Clear cell papillary renal cell carcinoma is coded 8323/3. The 2016 WHO Classification of Tumors of the Urinary System and Male Genital Organs, 4th Edition, reclassified this histology as a /1 because it is low nuclear grade and is now thought to be a neoplasia. This change has not yet been implemented and it remains reportable as behavior /3.

Site-specific histology coding rules cover the following sites/types.

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

Primary Site	Topography
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 Nerves	C470-C479, C700, C701, C709, C710-C719, C720-C725, C728, C729, 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</u> <u>Database</u>. See also the <u>NAACCR 2015 Implementation Guidelines and Recommendations: The</u> <u>Hematopoietic Conversion Documentation</u>.

Behavior Code

Item Length: 1 NAACCR Item #: 523 NAACCR Name: Behavior Code ICD-O-3 XML NAACCR ID: behaviorCodeIcdO3

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

General

Code behavior prior to neoadjuvant therapy when given.

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.

Example: Adenocarcinoma in situ with lymph nodes positive for malignancy. Code the behavior as malignant (/3). When the invasive component cannot be found and there are positive lymph nodes, assign behavior /3 based on the positive lymph nodes.

Exception: For 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.

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-3.2 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-3.2. Pages 27 through 30 in ICD-O-3 discuss behavior. The following general rules are found on pages 29-30 in ICD-O-3.

- 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

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 XML NAACCR ID: gradeClinical

Grade Clinical, effective 01/01/2018, 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.

Grade Post Therapy Clin (yc)

Item Length: 1 NAACCR Item #: 1068 NAACCR Name: Grade Post Therapy Clin (yc) XML NAACCR ID: gradePostTherapyClin

Grade Post Therapy Clin (yc), effective 01/01/2021, records the grade of a solid primary tumor that has been microscopically sampled following neoadjuvant therapy or primary systemic/radiation therapy.

Grade Pathological

Item Length: 1 NAACCR Item #: 3844 NAACCR Name: Grade Pathological XML NAACCR ID: gradePathological

Grade Pathological, effective 01/01/2018, 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.

Grade Post Therapy Path (yp)

Item Length: 1 NAACCR Item #: 3845 NAACCR Name: Grade Post Therapy Path (yp) XML NAACCR ID: gradePostTherapy

Grade Post Therapy Path (yp), effective 01/01/2018, records the grade of a solid primary tumor that has been resected following neoadjuvant therapy or primary systemic/radiation 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. The name was updated from *Grade Post Therapy Path (yp)* in 2021.

Tumor Size--Clinical

Item Length: 3 NAACCR Item #: 752 NAACCR Name: Tumor Size Clinical XML NAACCR ID: tumorSizeClinical

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 description and microscopic measurements most likely from a biopsy that did not remove the entire lesion), and surgical exploration without resection.

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

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

Coding Instructions

- 1. Code the clinical tumor size using all information (reports) available during the detection and diagnostic confirmation of the tumor. Information prior to the date of diagnosis may be used if it is part of the workup for this primary tumor.
 - a. The only exception is when there is progression of disease; use the measurements (size) closest to the day of diagnosis for coding clinical tumor size

Example: There is a screening mammography and a diagnosing mammography, and the size from the latter is the largest measurement. Use the value from the diagnosing mammography (the larger size).

2. Document clinical tumor size before any form of treatment, in the priority order that follows

Priority of recording clinical tumor size

- a. **Operative report** from surgical exploration without resection
- b. Imaging-guided tissue biopsy (i.e., incisional biopsy done under imaging)
 - i. Do **not** use the size from a core biopsy or needle biopsy for clinical tumor size unless you are confident that the size corresponds to the tumor rather than the size of the specimen obtained. Core biopsies and needle biopsies do not necessarily obtain enough tissue to know the actual tumor size.

Example: Prostate biopsy, pathologist states core 1: tumor involves 8 mm of core; core 2: tumor involves 3 mm of core. The sizes reported (8 mm and 3 mm) do not represent the size of the prostate tumor. Look for a tumor size on imaging or elsewhere for this case.

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

Example: A breast biopsy revealed a 1.3 cm ductal carcinoma. There was no residual carcinoma found in the partial mastectomy specimen. The biopsy removed the whole tumor which makes it an excisional biopsy. Code the clinical tumor size as 999 and the path tumor size as 013.

c. Diagnostic imaging

Use the largest size from available diagnostic imaging procedures in no priority order unless the physician specifies the imaging procedure that is most accurate. Examples include: MRI, ultrasound, mammography, CT, PET, x-ray.

d. Physical exam

Use in the absence of surgical exploration, imaging from incisional biopsy, and diagnostic imaging. Tumor size from an endoscopy (e.g., colonoscopy) is included under physical exam.

- 3. Use clinical history on a pathology report for clinical tumor size when that is the only information available to code clinical tumor size. Use text field to record the details.
- 4. Clinical tumor size follows the timing rules for AJCC clinical staging. For clinical tumor size, take into consideration what the physician would use to assign clinical stage. Refer to AJCC TNM guidelines to determine the sources of information that pertain to the clinical staging timeframe.

Example: TURBT for a bladder primary pertains to clinical staging. A size from a TURBT would be a clinical size.

Note 1: Do **not** infer the tumor size from the T category.

Note 2: For prostate clinical tumor size, size from an operative report is the highest priority. Use the size from imaging if you do not have a size from an operative report.

Note 3: When LEEP is followed by more definitive surgery for a cervical primary, code clinical tumor size based on the LEEP.

5. Code the largest size of the primary tumor before neoadjuvant treatment

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.

- 6. If no treatment is administered, use the size from all information available within four months of the date of diagnosis using the priority order, and in the absence of disease progression
- 7. Record the size of the invasive component of the tumor, even if it is smaller, when both an in situ and an invasive component are present and the invasive component is measured
- 8. Record tumor size using the **largest dimension** of the tumor, **not the depth or thickness** of the tumor.
- 9. Do *not* use endometrial ultrasound reporting endometrial stripe or thickening because this does *not* represent clinical tumor size
- 10. Record the size of the primary tumor, including contiguous tumor tissue extension, at the time of diagnosis
- 11. 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.
- 12. For breast tumors, clinical size may be recorded based on the size of a non-mass enhancement (NME). NME is defined as an enhancing abnormality that is not associated with the threedimensional volume of a mass, shape and outlining, and it is separate from the Background Parenchymal Enhancement (BPE).
- 13. **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.
- 14. Code the size of the largest focus when there is microinvasion. Code 990 when there is microinvasion and no size given.
- 15. 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; code as 020.
- 16. Record the size stated when tumor size is described as "at least" a certain size. Record 003 for a tumor size of at least 3 mm.
- 17. 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: If 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 (< 10 mm), which is coded as 009; or < 2 cm (<20 mm), which is coded 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"

Example: If size is > 10 mm, code size as 011.

- i. 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
- ii. Code 989 when described as anything greater than 989 mm (98.9 cm)

18. 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

Note: The word 'between' must be stated to use this instruction.

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).

19. Record the higher tumor size when stated as a range

Example: Tumor size is 8-10 mm or tumor size is 8 to 10 mm. Code size as 010 since 10 mm is the higher of the values in the range.

- 20. Avoid coding tumor size based on a description such as "Mass was present at 22 to 25 cm." Descriptions like this are found on endoscopies. Look for an actual measurement of the mass, or a stated tumor size.
- 21. **Round decimals:** Round the tumor size when it is described in fractions (decimals) of millimeters as follows
 - 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.
 - 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

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 data item 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.

Breast cancer described as 1.3 mm in size. Round up to 2 mm and code as 002.

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

Hypopharynx: 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.

- 22. Assign code **000** when
 - a. Schema is Cervical Lymph Nodes and Unknown Primary 00060
 - b. EOD Primary Tumor is coded 800 (No evidence of primary tumor) for any schema except for those listed in Coding Instruction 24
- 23. Assign tumor size for benign and borderline tumors in the schemas Brain, CNS Other, Intracranial Gland, and Medulloblastoma when provided; do not default to 999

24. Assign code 999 when size is unknown and for the following sites and schemas/schema IDs

a. Any case coded to primary site C420, C421, C423, C424, C770-C779, or C809

- b. HemeRetic 00830
 - i. Excluding Spleen (C422)
- c. Kaposi Sarcoma 00458
- d. Lymphoma 00790
- e. Lymphoma-CLL/SLL 00795
- f. Melanoma Choroid and Ciliary Body 00672
- g. Melanoma Iris 00671
- h. Plasma Cell Disorders 00822
- i. Plasma Cell Myeloma 00821
- 25. Assign code **999** for calcifications that span given distance or a cluster of microcalcifications. Do not record the size of calcifications as tumor size. If there is no measurement of the mass or tumor, record 999 for clinical tumor size.
- 26. Document the information in the appropriate text field of the abstract to support the clinical tumor size

Tumor size is important for staging of tumors in the following schemas. For more information about schemas and schema IDs, go to the <u>SSDI Manual, Appendix A.</u>

Table. Schemas for which Tumor Size Affects Staging

Schema	Schema ID
Adrenal Gland	00760
Anus	00210
Bile Duct Distal	00260
Bile Ducts Intrahepatic	00230
Bone Appendicular Skeleton	00381
Bone Pelvis	00383
Breast	00480
Buccal Mucosa	00076
Cervix	00520
Conjunctiva	00650
Corpus Sarcoma	00541
Cutaneous Carcinoma of Head and Neck	00150
Floor of Mouth	00074
GIST	00430
Gum	00073
Hypopharynx	00112
Kidney Parenchyma	00600
Lacrimal Gland	00690
Lip	00071
Liver	00220
Lung	00360
Major Salivary Glands	00080
Merkel Cell Skin	00460
Mouth Other	00077
NET Adrenal Gland	00770
NET Appendix	00320
NET Colon and Rectum	00330
NET Pancreas	00340

Schema	Schema ID
NET Stomach	00290
Orbital Sarcoma	00700
Oropharynx (p16-)	00111
Oropharynx HPV-Mediated (p16+)	00100
Palate Hard	00075
Pancreas	00280
Primary Cutaneous Lymphomas (excluding MF and SS)	00812
Retroperitoneum	00440
Skin Eyelid	00640
Soft Tissue Head and Neck	00400
Soft Tissue Trunk and Extremities	00410
Thyroid	00730
Thyroid Medullary	00740
Tongue Anterior	00072
Vagina	00510
Vulva	00500

Tumor Size--Pathologic

Item Length: 3 NAACCR Item #:754 NAACCR Name: Tumor Size Pathologic XML NAACCR ID: tumorSizePathologic

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.

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

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 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
	No excisional biopsy or tumor resection done (See #1 below)
	The only measurement(s) describes pieces or chips (See #15 below)
	Not applicable

Coding Instructions

1. Record the size of the resected or excised tumor. The tumor size may differ from the size of the specimen.

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

Example: A breast biopsy revealed a 1.3 cm ductal carcinoma. There was no residual carcinoma found in the partial mastectomy specimen. The biopsy removed the whole tumor which makes it an excisional biopsy. Code the clinical tumor size as 999 and the path tumor size as 013.

- 2. 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 1: 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 2: 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
- 3. 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: Do **not** use pathologic tumor size from surgery when neoadjuvant therapy has been administered.

- 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).

- 4. Tumor size is the largest dimension of the tumor, not the depth or thickness of the tumor
- 5. 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 1: Tumor is described as 2.4 x 5.1 x 1.8 cm in size. Record tumor size as 051 (51 mm).

Example 2: Anal canal tumor is 2.5 cm from proximal to distal (3.5 cm in circumference). Record tumor size as 035. The circumferential measurement is the largest measurement in this example. In this case, the pathologist usually cuts the anus and rectum open like a tube; the circumference is measured flat.

- 6. Include pathologic information obtained **through completion of definitive surgery** when the surgery is part of the first course of treatment
- 7. Do not use information on size from **imaging/radiographic techniques** to code Tumor Size--Pathologic

8. Pathologic tumor size follows the timing rules for AJCC pathological staging. For pathologic tumor size, take into consideration what the physician would use to assign pathological stage. Refer to AJCC TNM guidelines to determine the sources of information that pertain to the pathological staging timeframe.

Example: Lumpectomy and mastectomy pertain to the pathological timeframe. A size from lumpectomy or mastectomy would be used for the pathologic tumor size.

Note: Do **not** infer the tumor size from the T category.

- 9. 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.
- 10. Code the size of the largest focus when there is microinvasion. Code 990 when there is microinvasion and no size given.
- 11. Record the size as stated for purely in situ lesions
- 12. **Disregard microscopic residual or positive surgical margins when coding tumor size.** Microscopic residual tumor does not affect overall tumor size. The status of primary tumor margins may be recorded in a separate data item.
- 13. **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.
- 14. 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.
- 15. Record the size stated when tumor size is described as "at least" a certain size. Record 003 for a tumor size of at least 3mm.

16. 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"

Example: Size is > 10 mm, code size as 011.

- i. 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)
- 17. 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

Note: The word "between" must be stated to use this instruction.

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

18. Record the higher tumor size when stated as a range

Example: Tumor size is 8-10 mm or tumor size is 8 to 10 mm. Code size as 010 since 10 mm is the higher of the values in the range.

- 19. Round decimals: Round the tumor size only if it is described in fractions of millimeters.
 - 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. See Exception for breast cancer.
 - 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

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 data item 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.

Breast cancer described as 1.3 mm in size. Round up to 2 mm and code as 002.

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

Hypopharynx: 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.

- 20. Assign code 000 when
 - a. No residual tumor is found
 - i. Neoadjuvant therapy has been administered and the resection shows no residual tumor
 - b. Schema is Cervical Lymph Nodes and Unknown Primary 00060
 - c. EOD Primary Tumor is coded 800 (No evidence of primary tumor) for any schema except for those listed in Coding Instruction 22
- 21. Assign tumor size for benign and borderline tumors in the schemas Brain, CNS Other, Intracranial Gland, and Medulloblastoma when provided; do not default to 999
- 22. Assign code 999 when
 - **a.** Pathologic tumor size is unknown
 - **b.** There is no excisional biopsy or tumor resection
 - c. 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.

d. Neoadjuvant therapy has been administered. Do not use a post-neoadjuvant size to code path tumor size.

- e. For the following sites and schemas/schema IDs
 - i. Any case coded to primary site C420, C421, C423-C424, C770-C779, or C809
 - ii. HemeRetic 00830
 - 1. Excluding Spleen (C422)
 - iii. Kaposi Sarcoma 00458
 - iv. Lymphoma 00790
 - v. Lymphoma-CLL/SLL 00795
 - vi. Melanoma Choroid and Ciliary Body 00672
 - vii. Melanoma Iris 00671
 - viii. Plasma Cell Disorders 00822
 - ix. Plasma Cell Myeloma 00821
- 23. Document the information to support coded pathologic tumor size in the appropriate text field of the abstract

Tumor size is important for staging of tumors in the following table of schemas. For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix A</u>.

Table. Schemas for which Tumor Size Affects Staging

Schema	Schema ID
Adrenal Gland	00760
Anus	00210
Bile Duct Distal	00260
Bile Ducts Intrahepatic	00230
Bone Appendicular Skeleton	00381
Bone Pelvis	00383
Breast	00480
Buccal Mucosa	00076
Cervix	00520
Conjunctiva	00650
Corpus Sarcoma	00541
Cutaneous Carcinoma of Head and Neck	00150
Floor of Mouth	00074
GIST	00430
Gum	00073
Hypopharynx	00112
Kidney Parenchyma	00600
Lacrimal Gland	00690
Lip	00071
Liver	00220
Lung	00360
Major Salivary Glands	00080
Merkel Cell Skin	00460
Mouth Other	00077
NET Adrenal Gland	00770
NET Appendix	00320
NET Colon and Rectum	00330
NET Pancreas	00340

Schema	Schema ID
NET Stomach	00290
Orbital Sarcoma	00700
Oropharynx (p16-)	00111
Oropharynx HPV-Mediated (p16+)	00100
Palate Hard	00075
Pancreas	00280
Primary Cutaneous Lymphomas (excluding MF and SS)	00812
Retroperitoneum	00440
Skin Eyelid	00640
Soft Tissue Head and Neck	00400
Soft Tissue Trunk and Extremities	00410
Thyroid	00730
Thyroid Medullary	00740
Tongue Anterior	00072
Vagina	00510
Vulva	00500

ICD-O-3 Conversion Flag

Item Length: 1 NAACCR Item #: 2116 NAACCR Name: ICD-O-3 Conversion Flag XML NAACCR ID: icdO3ConversionFlag

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 two categories Extent of Disease Summary Stage

Note: There are no specific instructions for pathology-only cases. Assign 9s or the appropriate "unknown" code when abstracting stage and related data items from pathology reports or HL-7 reports only and information is not provided.

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

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 <u>SEER Registrar Staging Assistant (SEER*RSA)</u>.

Extent of Disease Primary Tumor

Item Length: 3 NAACCR Item #: 772 NAACCR Name: EOD Primary Tumor XML NAACCR ID: eodPrimaryTumor

Description

Extent of Disease Primary Tumor (EOD Primary Tumor) is part of the EOD 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 Mets. Effective for cases diagnosed 01/01/2018 and later.

See the most current version of EOD 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 XML NAACCR ID: eodRegionalNodes

Extent of Disease Regional Nodes (EOD Regional Nodes) is part of the EOD 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 Mets*. Effective for cases diagnosed 01/01/2018 and later.

See the most current version of <u>EOD</u> 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 XML NAACCR ID: eodMets

Extent of Disease Metastases (EOD Mets) is part of the EOD 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 01/01/2018 and later.

See the most current version of <u>EOD</u> 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
	Plasma Cell Disorder
	Plasma Cell Myeloma
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 XML NAACCR ID: summaryStage2018

Summary Stage 2018 stores directly assigned Summary Stage 2018. This data item is effective for cases diagnosed 01/01/2018 and later. Refer to <u>SEER*RSA</u> for additional information.

Code	Description
0	In situ
1	Localized only
2	Regional by direct extension only
3	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 (DCO) case

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

Derived Summary Stage 2018

Item Length: 1 NAACCR Item #: 762 NAACCR Name: Derived Summary Stage 2018 XML NAACCR ID: derivedSummaryStage2018

Derived Summary Stage 2018 is derived using the EOD data collection system (*EOD Primary Tumor, EOD Regional Nodes*, and *EOD Mets*) algorithm. Other data items may be included in the derivation process. Effective for cases diagnosed 01/01/2018 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

Stage-related Data Items

Nine 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.

For more information about schemas and schema IDs, go to the SSDI Manual, Appendix A.

Lymphovascular Invasion

Item Length: 1 NAACCR Item #: 1182 NAACCR Name: Lymphovascular Invasion XML NAACCR ID: lymphVascularInvasion

Lymphovascular Invasion indicates whether lymphatic duct or blood vessel invasion is identified in the pathology report.

Note: **SEER requires** *Lymphovascular Invasion (LVI)* **for penis and testis cases only.** SEER registries may submit LVI for other sites when available. State/central cancer registries may require LVI for sites other than penis and testis. Record 8 for sites other than penis or testis when LVI is not required. LVI is always coded 8 for certain sites (see Coding Instruction #9).

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

Coding Instructions

- 1. **Code from pathology report(s).** If not available, code the absence or presence of lymphovascular invasion as described in the medical record.
 - a. The primary source of information about lymphovascular invasion is the pathology check list (synoptic report) 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.
- 2. Code lymphovascular invasion to 0, 2, 3, 4, or 9 for the following Schema IDs

Thyroid 00730 Thyroid Medullary 00740 Adrenal Gland 00760

- 3. Do not code perineural invasion in this data item
- 4. Use the pathology report for any specimen from the primary site to code this data item (biopsy or resection)
- 5. Code as present/identified when lymphovascular invasion is identified in any primary tumor specimen

6. Use the table below for cases treated with neoadjuvant (preoperative) therapy. Code lymphovascular invasion based on the documentation in the medical record when documentation in the medical record conflicts with this table.

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

7. Use code **0**

- a. When the pathology report indicates that there is **no** lymphovascular invasion
- b. For **in situ** cases
- c. When there is no residual tumor found after neoadjuvant treatment and there is no LVI on biopsy
- 8. Use code 1 when the pathology report or a physician's statement indicates that lymphovascular invasion (or one of its synonyms) is present in the specimen
 - a. **Synonyms** include, but are not limited to
 - i. Angiolymphatic invasion
 - ii. Blood vessel invasion
 - iii. Lymph vascular emboli
 - iv. Lymphatic invasion
 - v. Lymphvascular invasion
 - vi. Vascular invasion
 - vii. Lymphovascular space invasion
- 9. Use code 8
 - a. For the following Schemas/Schema IDs
 - GIST 00430

HemeRetic 00830

Lymphoma 00790

Lymphoma-CLL/SLL 00795

Lymphoma Ocular Adnexa 00710

Mycosis Fungoides (MF) 00811

Plasma Cell Disorder 00822

Plasma Cell Myeloma 00821
Primary Cutaneous Lymphoma (excluding MF and SS) 00812

For more information about schemas and schema IDs, go to the <u>SSDI Manual, Appendix</u> <u>A.</u>

- b. For non-malignant brain (intracranial) and CNS tumors
- c. When standard-setter does not require this item and state/central registry is not collecting it
- 10. 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 lymphovascular invasion is present
 - e. The pathologist indicates the specimen is insufficient to determine lymphovascular invasion
 - f. Lymphovascular invasion is not mentioned in the pathology report
 - g. There is no information/documentation from the pathology report or other sources
 - h. Primary site is unknown
 - i. Ambiguous terminology is used

Example: Assign code 9 for "suspicious LVI."

Macroscopic Evaluation of the Mesorectum

Item Length: 2 NAACCR Item #: 3950 NAACCR Name: Macroscopic Evaluation of Mesorectum XML NAACCR ID: macroscopicEvalOfTheMesorectum

Macroscopic Evaluation of the Mesorectum, effective January 1, 2022, records whether a total mesorectal excision (TME) was performed and the macroscopic evaluation of the completeness of the excision. This applies to rectal cases only.

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

SEER Central Registries: Collect when available from CoC reporting facilities.

Code	Description	
00	Patient did not receive TME	
10	Incomplete	
20	Nearly complete	
30	Complete	
40	TME performed not specified on pathology report as incomplete, nearly complete, or complete	
	TME performed but pathology report not available	
	Physician statement that TME performed, no mention of incomplete, nearly complete or	
	complete status	
99	Unknown if TME performed	
Blank	Site not rectum (C209)	

- 1. Use information from the pathology report and/or the CAP protocol for this data item
- 2. Leave this field blank when the primary site is other than rectum (C20.9)
- 3. Neoadjuvant therapy does not alter coding of this data item
- 4. Assign code **00** when a total mesorectal excision is not performed
- 5. Assign codes 10, 20, and 30 based on pathology report and/or CAP protocol
 - a. Do not attempt to apply the pathologist's criteria to assess completeness status in order to assign codes 10, 20, or 30
- 6. Assign code **40** when the pathologist does not indicate incomplete, nearly complete, or complete for a TME specimen

Mets at Diagnosis--Bone

Item Length: 1 NAACCR Item #: 1112 NAACCR Name: Mets at DX–Bone XML NAACCR ID: metsAtDxBone

This data item identifies whether bone is an involved metastatic site. The six Mets at Diagnosis-metastatic sites data items 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 data item. Do **not** record contiguous bone invasion by primary tumor in this data item.

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 pathological
- c. Code this data item for bone metastases even if the patient had neoadjuvant (preoperative) systemic therapy unless determined to be disease progression
- d. Code this data item for all solid tumor schemas (including Kaposi Sarcoma and Ill-Defined Other [includes unknown primary site]) and the following Hematopoietic schemas except as noted in 2.c. and 2.d.
 - i. Lymphoma Ocular Adnexa 00710
 - ii. Lymphoma 00790
 - iii. Lymphoma-CLL/SLL 00795
 - iv. Mycosis Fungoides (MF) 00811
 - v. Primary Cutaneous Lymphoma (excluding MF and SS) 00812
 - vi. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424)
- 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. Confirms the tumor is benign (/0), borderline (/1), or in situ (/2)
 - iii. Includes a clinical or pathologic statement that there are no bone metastases
 - iv. Includes imaging reports that are negative for bone metastases

v. 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
 - 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
 - i. Any case coded to primary site C420, C421, C423, or C424
 - ii. Plasma Cell Disorders 00822

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

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 XML NAACCR ID: metsAtDxBrain

This data item identifies whether brain is an involved metastatic site. The six Mets at Diagnosis-metastatic sites data items 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 data item.

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 pathological
- c. Code this data item whether or not the patient had neoadjuvant (preoperative) systemic therapy unless determined to be disease progression
- d. Code this data item for all solid tumor schemas (including Kaposi Sarcoma and Ill-Defined Other [includes unknown primary site]) and the following Hematopoietic schemas except as noted in 2.c. and 2.d.
 - i. Lymphoma Ocular Adnexa 00710
 - ii. Lymphoma 00790
 - iii. Lymphoma-CLL/SLL 00795
 - iv. Mycosis Fungoides (MF) 00811
 - v. Primary Cutaneous Lymphoma (excluding MF and SS) 00812
 - vi. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424)
- 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. Confirms the tumor is benign (/0), borderline (/1), or in situ (/2)
 - iii. Includes a clinical or pathologic statement that there are no brain metastases
 - iv. Includes imaging reports that are negative for brain metastases

v. 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
 - 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
 - i. Any case coded to primary site C420, C421, C423, or C424
 - ii. Plasma Cell Disorders 00822

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

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 XML NAACCR ID: metsAtDxLiver

This data item identifies whether liver is an involved metastatic site. The six Mets at Diagnosis-metastatic sites data items 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	

- 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 pathological
 - c. Code this data item whether or not the patient had neoadjuvant (preoperative) systemic therapy unless determined to be disease progression
 - d. Code this data item for all solid tumor schemas (including Kaposi Sarcoma and Ill-Defined Other [includes unknown primary site]) and the following Hematopoietic schemas except as noted in 2.c. and 2.d.
 - i. Lymphoma Ocular Adnexa 00710
 - ii. Lymphoma 00790
 - iii. Lymphoma-CLL/SLL 00795
 - iv. Mycosis Fungoides (MF) 00811
 - v. Primary Cutaneous Lymphoma (excluding MF and SS) 00812
 - vi. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424)
- 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. Confirms the tumor is benign (0/), borderline (/1), or in situ (/2)
 - iii. Includes a clinical or pathologic statement that there are no liver metastases
 - iv. Includes imaging reports that are negative for liver metastases
 - v. 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
- c. Use code 8 (Not applicable) for the following
 - i. Any case coded to primary site C420, C421, C423, or C424
 - ii. Plasma Cell Disorders 00822

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

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 XML NAACCR ID: metsAtDxLung

This data item identifies whether lung is an involved metastatic site. The six Mets at Diagnosis-metastatic sites data items 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 data item.

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 pathological
- c. Code this data item whether or not the patient had neoadjuvant (preoperative) systemic therapy unless determined to be disease progression
- d. Code this data item for all solid tumor schemas (including Kaposi Sarcoma and Ill-Defined Other [includes unknown primary site]) and the following Hematopoietic schemas except as noted in 2.c. and 2.d.
 - i. Lymphoma Ocular Adnexa 00710
 - ii. Lymphoma 00790
 - iii. Lymphoma-CLL/SLL 00795
 - iv. Mycosis Fungoides (MF) 00811
 - v. Primary Cutaneous Lymphoma (excluding MF and SS) 00812
 - vi. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424)
- 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. Confirms the tumor is benign (/0), borderline (/1), or in situ (/2)
 - iii. Includes a clinical or pathologic statement that there are no lung metastases
 - iv. Includes imaging reports that are negative for lung metastases

v. 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 <u>Solid Tumor Rules</u> 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
 - i. Any case coded to primary site C420, C421, C423, or C424
 - ii. Plasma Cell Disorders 00822

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

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 XML NAACCR ID: metsAtDxDistantLn

This data item identifies whether distant lymph node(s) are an involved metastatic site. The six Mets at Diagnosis-metastatic sites data items 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 data item.

- 1. **Code information about distant lymph node(s) metastases only** (metastases to distant lymph nodes) identified at the time of diagnosis
 - a. Distant lymph node involvement may be single or multiple
 - b. Information about distant lymph node involvement may be clinical or pathological
 - c. Code this data item whether or not the patient had neoadjuvant (preoperative) systemic therapy unless determined to be disease progression
 - d. Do *not* code this data item for regional lymph node involvement
 - e. Code this data item for all solid tumor schemas (including Kaposi Sarcoma and Ill-Defined Other [includes unknown primary site]) and the following Hematopoietic schemas except as noted in 2.c. and 2.d.
 - i. Lymphoma Ocular Adnexa 00710
 - ii. Lymphoma 00790 (excluding primary sites C770-C779; see 2.c.)
 - iii. Lymphoma-CLL/SLL 00795 (excluding primary sites C770-C779; see 2.c.)
 - iv. Mycosis Fungoides (MF) 00811
 - v. Primary Cutaneous Lymphoma (excluding MF and SS) 00812
 - vi. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424, see 2.c.)
- 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. Confirms the tumor is benign (/0), borderline (/1), or in situ (/2)
- iii. Includes a clinical or pathologic statement that there are no distant lymph node metastases
- iv. Includes imaging reports that are negative for distant lymph node metastases
- v. Indicates lymph nodes are involved, but there is no indication whether they are regional or distant
- vi. 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
 - i. Any case coded to primary site C420, C421, C423, C424, or C770-C779
 - ii. Plasma Cell Disorders 00822

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

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 XML NAACCR ID: metsAtDxOther

The six Mets at Diagnosis-metastatic sites data items provide information on metastases for data analysis. This data item identifies any type of distant involvement not captured in the *Mets at Diagnosis--Bone, Mets at Diagnosis--Brain, Mets at Diagnosis--Liver, Mets at Diagnosis--Lung,* and *Mets at Diagnosis--Distant Lymph Nodes* data items. 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

- 1. **Code information about other metastases only** (discontinuous or distant metastases) identified at the time of diagnosis. This data item should not be coded for bone, brain, liver, lung, or distant lymph node metastases.
 - a. Other involvement may be single or multiple
 - b. Information about other involvement may be clinical or pathological
 - c. Code this data item whether or not the patient had any preoperative (neoadjuvant) systemic therapy unless determined to be disease progression
 - d. Code this data item for all solid tumor schemas (including Kaposi Sarcoma and Ill-Defined Other [includes unknown primary site]) and the following Hematopoietic schemas except as noted in 2.d. and 2.e.
 - i. Lymphoma Ocular Adnexa 00710
 - ii. Lymphoma 00790 (see 2.d.)
 - iii. Lymphoma-CLL/SLL 00795 (see 2.d.)
 - iv. Mycosis Fungoides (MF) 00811
 - v. Primary Cutaneous Lymphoma (excluding MF and SS) 00812
 - vi. HemeRetic 00830 (excluding primary sites C420, C421, C423, C424, see 2.d.)

Note: Do not code spleen involvement for Hodgkin lymphoma in *Mets at Diagnosis-Other*. Spleen involvement is not classified as distant mets for Hodgkin lymphoma in most staging systems.

- 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. Confirms the tumor is benign (/0), borderline (/1), or in situ (/2)
 - iii. Includes a clinical or pathologic statement that there are no other metastases
 - iv. Includes imaging reports that are negative for other metastases
 - v. 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 data item (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
 - i. Any case coded to primary site C420, C421, C423, or C424
 - ii. Plasma Cell Disorders 00822

For more information about schemas and schema IDs, go to the <u>SSDI Manual</u>, <u>Appendix</u> <u>A</u>.

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

SEER Site-specific Factor 1

Item Length: 1 NAACCR Item #: 3700 NAACCR Name: SEER Site-Specific Fact 1 XML NAACCR ID: seerSiteSpecificFact1

SEER Site-specific Factor 1, effective 01/01/2018, is reserved for human papilloma virus (HPV) status. This data item applies to the following sites.

- Buccal Mucosa: C060, C061
- Floor of Mouth: C040-C041, C048-C049
- Gum: C030, C031, C039, C062
- Hypopharynx: C129, C130-C132, C138-C139
- Lip: C003-C005, C008, C009
- Mouth Other: C058-C059, C068-C069
- Oropharynx (p16-): C019, C024, C051-C052, C090-C091, C098-C099, C100, C102-C104, C108-C109, C111
- Oropharynx HPV-Mediated (p16+): C019, C024, C051-C052, C090-C091, C098-C099, C100, C102-C104, C108-C109, C111
- Palate Hard: C050
- Tongue Anterior: C020-C023, C028-C029

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	Not documented in medical record
	HPV test detecting viral DNA and or RNA not assessed, or unknown if assessed

- 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 data item

- 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 data item.
- 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

Additional Stage-related Data Items

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 list the site-specific schema discriminators and site-specific data items (SSDIs) that are new and/or are required for collection in 2023. For more information about schemas and schema IDs, go to the <u>SSDI Manual, Appendix A</u>.

Table 1 and Table 2 list Schema Discriminators with the corresponding NAACCR item number and description implemented in 2018 and modified in 2021, respectively. **Schema Discriminators are required for staging**. Table 3 and Table 4 list SSDIs implemented in 2022 and 2023, respectively. Table 5 lists additional SSDIs required for transmission. For additional required data items, see <u>NAACCR Version 23</u> <u>Required Status Table</u> and the <u>SSDI Manual</u>. Refer to <u>SEER*RSA</u> and the SSDI manual for codes and coding instructions.

Schema Discriminator NAACCR Iter		Schema Discriminator Description
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 1: Schema Discriminators Implemented in 2018

Table 2: Schema Discriminators Modified for 2021

Schema Discriminator	NAACCR Item #	New Schema Discriminator Description
Schema Discriminator 2*	3927*	Soft Tissue Abdomen and Thoracic
		Soft Tissue Trunk and Extremities
		Soft Tissue Other

*Schema Discriminator 2 [3927] was implemented in 2018. As of 2021, it is also required for C473, C475, C493-C495 applicable to Soft Tissue schemas.

Table 5. Site-specific Data fields implemented in 2022			
Schema	NAACCR Item #	SSDI	
Cervix (9 th)	3956	p16	
Lymphoma-CLL/SLL	3955	Derived Rai Stage	
Cervix (8th); Cervix (9th), Vagina, Vulva	3957	LN Status: Pelvic	
Cervix (8th); Cervix (9th), Vagina	3958	LN Status: Para-Aortic	
Vagina, Vulva	3959	LN Status: Femoral-Inguinal	

Note: The data items are collected by SEER from CoC-accredited hospitals except Derived Rai Stage.

Table 4: Site-	specific Data	Items Im	plemented	in 2023
----------------	---------------	----------	-----------	---------

Schema	NAACCR Item #	SSDI
Appendix	3960	Histologic Subtype (Appendix 8480)
Melanoma Skin	3961	Clinical Margin Width
Anus V9 (existing SSDI added to schema)	3956	p16

Table 5: Additional Site-specific Data Items Required for Transmission (See NAACCR Vol II Requi	red
Status Table for more information)	

NAA		NAA	
CCR		CCR	
Item		Item	
#	SSDI	#	SSDI
3800	Schema ID*	3873	LN Assessment Method Pelvic
3801	Chromosome 1p: Loss of Heterozygosity (LOH)	3874	LN Distant Assessment Method
3802	Chromosome 19q: Loss of Heterozygosity (LOH)	3875	LN Distant: Mediastinal, Scalene
3803	Adenoid Cystic Basaloid Pattern	3876	LN Head and Neck Levels I-III
3804	Adenopathy	3877	LN Head and Neck Levels IV-V
3805	AFP Post-Orchiectomy Lab Value	3878	LN Head and Neck Levels VI-VII
3806	AFP Post-Orchiectomy Range	3879	LN Head and Neck Other
3807	AFP Pre-Orchiectomy Lab Value	3880	LN Isolated Tumor Cells (ITC)
3808	AFP Pre-Orchiectomy Range	3881	LN Laterality
3809	AFP Pretreatment Interpretation	3882	LN Positive Axillary Level I-II
3810	AFP Pretreatment Lab Value	3883	LN Size
3811	Anemia	3885	Lymphocytosis
3812	B symptoms	3886	Major Vein Involvement
3813	Bilirubin Pretreatment Total Lab Value	3887	Measured Basal Diameter
3814	Bilirubin Pretreatment Unit of Measure	3888	Measured Thickness
3815	Bone Invasion	3889	Methylation of O6-Methylguanine- Methyltransferase
3940	BRAF Mutational Analysis	3890	Microsatellite Instability (MSI)
3816	Brain Molecular Markers	3891	Microvascular Density
3817	Breslow Tumor Thickness	3892	Mitotic Count Uveal Melanoma
3818	CA-125 Pretreatment Interpretation	3893	Mitotic Rate Melanoma
3819	CEA Pretreatment Interpretation	3894	Multigene Signature Method
3820	CEA Pretreatment Lab Value	3895	Multigene Signature Results
3821	Chromosome 3 Status	3896	NCCN International Prognostic Index (IPI)
3822	Chromosome 8q Status	3897	Number of Cores Examined

NAA		NAA	
CCR		CCR	
Item		Item	
#	SSDI	#	SSDI
3823	Circumferential Resection Margin (CRM)	3898	Number of Cores Positive
3824	Creatinine Pretreatment Lab Value	3899	Number of Examined Para-Aortic Nodes
3825	Creatinine Pretreatment Unit of Measure	3900	Number of Examined Pelvic Nodes
3826	Estrogen Receptor Percent Positive or Range	3901	Number of Positive Para-Aortic Nodes
3827	Estrogen Receptor Summary	3902	Number of Positive Pelvic Nodes
3829	Esophagus and EGJ Tumor Epicenter	3903	OncotyPe Dx Recurrence Score- DCIS
3830	Extranodal Extension Clin (non-Head and Neck)	3904	OncotyPe Dx Recurrence Score-Invasive
3831	Extranodal Extension Head and Neck Clinical	3905	OncotyPe Dx Risk Level-DCIS
3832	Extranodal Extension Head and Neck Pathological	3906	OncotyPe Dx Risk Level-Invasive
3833	Extranodal Extension Path (non-Head and Neck)	3907	Organomegaly
3834	Extravascular Matrix Patterns	3908	Percent Necrosis Post Neoadjuvant
3835	Fibrosis Score	3909	Perineural Invasion
3836	FIGO Stage	3910	Peripheral Blood Involvement
3837	Gestational Trophoblastic Prognostic Scoring Index	3911	Peritoneal Cytology
3838	Gleason Patterns Clinical	3913	Pleural Effusion
3839	Gleason Patterns Pathological	3914	Progesterone Receptor Percent Positive or Range
3840	Gleason Score Clinical	3915	Progesterone Receptor Summary
3841	Gleason Score Pathological	3918	Profound Immune Suppression
3842	Gleason Tertiary Pattern	3919	EOD Prostate Pathologic Extension
3846	hCG Post-Orchiectomy Lab Value	3920	PSA (Prostatic Specific Antigen) Lab Value
3847	hCG Post-Orchiectomy Range	3921	Residual Tumor Volume Post Cytoreduction
3848	hCG Pre-Orchiectomy Lab Value	3922	Response to Neoadjuvant Therapy
3849	hCG Pre-Orchiectomy Range	3923	S Category Clinical
3855	HER2 Overall Summary	3924	S Category Pathological
3856	Heritable Trait	3925	Sarcomatoid Features
3857	High Risk Cytogenetics	3926	Schema Discriminator 1
3858	High Risk Histologic Features	3927	Schema Discriminator 2
3859	HIV Status	3928	Schema Discriminator 3
3860	International Normalized Ratio Prothrombin Time	3929	Separate Tumor Nodules
3861	Ipsilateral Adrenal Gland Involvement	3930	Serum Albumin Pretreatment Level
3862	JAK2	3931	Serum Beta-2 Microglobulin Pretreatment Level
3863	Ki-67	3932	LDH Lab Value
3864	Invasion Beyond Capsule	3933	Thrombocytopenia
3865	KIT Gene Immunohistochemistry	3934	Tumor Deposits
3866	KRAS	3936	Ulceration
3867	LDH Post-Orchiectomy Range	3937	Visceral and Parietal Pleural Invasion
3868	LDH Pre-Orchiectomy Range	3938	ALK Rearrangement

NAA CCR		NAA CCR	
Item #	SSDI	Item #	SSDI
3869	LDH Level	3939	EGFR Mutational Analysis
3870	LDH Upper Limits of Normal	3940	BRAF Mutational Analysis
3871	LN Assessment Method Femoral-Inguinal	3941	NRAS Mutational Analysis
3872	LN Assessment Method Para-Aortic	3942	CA-19-9 PreTx Lab Value

SEER Program Coding and Staging Manual 2023

*Derived

Section VII First Course of Therapy

First Course of Therapy

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

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. Also called active monitoring. (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: <u>http://www.cancer.gov/dictionary?CdrID=667618</u>)

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: <u>http://www.cancer.gov/dictionary?CdrID=616061</u>)

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 <u>below</u> 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 only 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 data items *Surgery of Primary Site 2023*, *Scope of Regional Lymph Node Surgery (excluding code 1)*, or *Surgical Procedure of Other Site*.

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 unless there is documentation of disease progression, recurrence, or treatment failure (see #2 below).

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.

Coding Instructions

- 1. Code all treatment data items to 0 or 00 (Not done) when the physician opts for **active surveillance, deferred therapy, expectant management, or watchful waiting.** 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 data items 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 as first course when it is added to the plan after the primary site is discovered. 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 <u>Hematopoietic and Lymphoid Neoplasm Coding Manual</u>.

Date Therapy Initiated

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

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 data items 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 data items in the year, month, day format (YYYYMMDD)
- 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

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

SEER Program Coding and Staging Manual 2023

Codes for Day

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 2023
 - Scope of Regional Lymph Node Surgery (excluding code 1)
 - Surgical Procedure of Other Site
 - Radiation Treatment Modality--Phase I, II, III
 - 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 2023*.

Example: On 01/03/2023, fetus is diagnosed with malignant teratoma. The teratoma is resected in utero on 01/10/2023. Live birth on 04/18/2023. Code the date therapy initiated as January 10, 2023 (20230110).

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

Note: This includes when a patient dies before treatment is recommended or given.

- 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

Treatment Status

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

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 data items.

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 **0** when the patient does not receive any treatment
 - a. Scope of Regional Lymph Node Surgery may be coded 0, 1-7, or 9
- 2. Assign code 1 when the patient receives treatment collected in any of the following data items
 - a. Surgery of Primary Site 2023
 - b. Surgical Procedure of Other Site
 - c. Radiation Treatment Modality, Phase I, II, III
 - d. *Chemotherapy*
 - e. *Hormone Therapy*
 - f. Immunotherapy
 - g. Hematologic Transplant and Endocrine Procedures
 - h. *Other Therapy*
- 3. Assign code 2 when there is documentation that the patient is being monitored using active surveillance/watchful waiting/deferred therapy or other similar options
- 4. Assign code 9 for death certificate only (DCO) cases
- 5. 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 XML NAACCR ID: rxDateSurgery

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 2023, Sentinel Lymph Node Biopsy, Scope of Regional Lymph Node Surgery (codes 2-7), 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: Collect when available from CoC reporting facilities.

- 1. Record the date of the first/earliest surgery if *Surgery of Primary Site 2023, Sentinel Lymph Node Biopsy, Scope of Regional Lymph Node Surgery* (excluding cases coded to 1), 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 data items 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
- 5. Leave date blank when there is no surgery performed

Date of Most Definitive Surgical Resection of the Primary Site

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

Date of Most Definitive Surgical Resection of the Primary Site, effective 01/01/2018, 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: Collect when available from CoC reporting facilities.

- 1. Record the date of the most invasive, extensive, or definitive surgery when *Surgery of Primary Site 2023* was recorded as part of the first course of therapy
 - a. This is the date of the procedure coded in *Surgery of Primary Site 2023*
- 2. Transmit date data items in the year, month, day format (YYYYMMDD)
- 3. Leave date blank when *Surgery of Primary Site 2023* is coded A000 or B000 (no surgery of primary site performed)

Surgery of Primary Site 2023

Item Length: 4 NAACCR Item #: 1291 NAACCR Name: RX Summ--Surg Prim Site 2023 XML NAACCR ID: rxSummSurgPrimSite2023

Surgery of Primary Site 2023, effective 01/01/2023, 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 <u>Appendix C</u> of this manual.

General Coding Structure

Code	Description
A000	None; no surgical procedure of primary site; diagnosed at autopsy only
A100-A190	Site-specific codes. Tumor destruction; no pathologic specimen or unknown whether there is a pathologic specimen
A200-A800	Site-specific codes. Resection; pathologic specimen
A900	Surgery, NOS. A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided.
A980	Special codes for hematopoietic neoplasms; ill-defined sites; and unknown primaries (See site-specific codes for the sites and histologies), except death certificate only
A990	Unknown if surgery performed

(See <u>Appendix C</u> for site-specific codes.)

Use the **entire operative report** as the primary source document to determine the best surgery of primary site code. The body of 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**.

Coding Instructions

- 1. Code **A000 or B000** 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: Codes **A000** and B000 exclude all sites and histologies that would be coded as **A980**. (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 incisional biopsy as 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 meet the criteria in either 4.a or 4.b above.

Example: Shave biopsy performed for a suspicious lesion on the skin of the right arm that has been changing in size and color. The shave biopsy pathology report showed malignant melanoma with only microscopically positive margins. Code the shave biopsy as an excisional biopsy.

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.

Example: Left thyroidectomy for suspicious nodules. Path showed papillary carcinoma. Completion thyroidectomy was performed. Code surgery of primary site as total thyroidectomy (A500).

- 6. Assign the code that reflects the **cumulative effect** of all surgeries to the primary site.
 - a. When a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, code the total or final results. Do not rely on registry software to perform this task.

Example: The patient underwent a partial mastectomy and sentinel lymph node biopsy, followed by an axillary lymph node dissection for the first right breast primary in 2011. The separate 2020 right breast primary was treated with a total mastectomy and removal of one involved axillary lymph node. The operative report only refers to this as a non-sentinel lymph node, with no mention of other axillary findings. Cumulatively, this patient has undergone a modified radical mastectomy since there were likely no remaining axillary lymph nodes. For the 2020 primary, code the cumulative effect of the surgery done in 2011 plus the surgery performed in 2020. Use text fields on both abstracts to record the details.

7. 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* 2023 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.

- 8. Code surgery for extra-lymphatic lymphoma using the **site-specific** surgery coding scheme for the primary site. Do **not** use the lymph node scheme.
- 9. 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 A000. See 1.a. above.
- 10. Code A800, B800, A900, or B900 only when there is no specific information
- 11. Code **A980** for the following primary sites **unless** the case is death certificate only (see #13 below)
 - a. Any case coded to C420, C421, C423, C424, C760-C768, or C809
- 12. When Surgery of Primary Site 2023 is coded A980
 - a. Code Surgical Margins of the Primary Site (#1320) to 9
 - b. Code *Reason for No Surgery of Primary Site* (#1340) to 1

- 13. Code **A990 or B990** for death certificate only (DCO) cases or if patient record does not state whether a surgical procedure of the primary site was performed (i.e., is unknown)
- 14. Leave blank for diagnosis years 2003-2022

Surgical Margins of the Primary Site

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

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 **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 *Surgery of Primary Site 2023* (NAACCR Item #1291) is coded to A980 (not applicable)
 - b. 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
 - c. For any case coded to primary site C420, C421, C423, C424, C760-C768, C770-C779, or C809
 - d. For death certificate only (DCO) cases

Scope of Regional Lymph Node Surgery

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

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 **entire 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 body of 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 Surgery* data item 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.
 - iii. Assume the lymph node that is aspirated is part of the lymph node chain surgically removed and do **not** include it in the count when its location is **not known**
- 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 the appropriate code for **occult head and neck primaries with positive cervical lymph nodes** (schema 00060). Do not default to code 9 for this schema.
- 8. 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 #13 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
- 9. 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.

- 10. 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.

- 11. 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**.
- 12. 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
- 13. Code **9:** The status of regional lymph node evaluation should be known for surgically treated cases (i.e., cases coded A190-A900 or B190-B900 in the data item *Surgery of Primary Site 2023* (NAACCR Item #1291). Review surgically treated cases coded as 9 in *Scope of Regional Lymph Node Surgery* to confirm the code.
 - a. Assign code 9 for
 - i. Any case coded to primary site: C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809

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

1. Use the **entire 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 body of 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 Nodes Examined* (NAACCR Item #830) and *Regional 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 XML NAACCR ID: dateSentinelLymphNodeBiopsy

Date of Sentinel Lymph Node Biopsy, effective 01/01/2018, records the date of the sentinel lymph node biopsy procedure. **This data item is required for breast and cutaneous 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.

SEER Central Registries: Collect when available.

- 1. Record the date of the sentinel lymph node biopsy procedure documented in the *Sentinel Lymph Nodes 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. Record the date documented in this data item in the *Date of First Surgical Procedure* data item [NAACCR Item #1200] when the sentinel lymph node biopsy is the first or only surgical procedure performed
- 4. 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] when both a sentinel node biopsy procedure and a subsequent regional node dissection procedure are performed
- 5. Record the date of the procedure in both this data item and in the *Date of Regional Lymph Node Dissection* data item [NAACCR Item #632] when a sentinel lymph node biopsy is performed in the same procedure as the regional node dissection. The **dates should be the same**.
- 6. Leave this date blank when sentinel lymph node biopsy was attempted, but unsuccessful (e.g. failed to map). Leave this date blank for cases other than breast and cutaneous melanoma.

Sentinel Lymph Nodes Examined

Item Length: 2 NAACCR Item #: 834 NAACCR Name: Sentinel Lymph Nodes Examined XML NAACCR ID: sentinelLymphNodesExamined

Sentinel Lymph Nodes Examined, effective 01/01/2018, 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 cutaneous melanoma cases only.**

SEER Central Registries: Collect when available.

This data item may be left blank for cases other than breast and cutaneous melanoma.

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. Document the **total number of nodes sampled during the sentinel node procedure** in this data item when <u>both sentinel and non-sentinel</u> nodes are sampled during the sentinel node biopsy procedure; i.e., record the total number of nodes from the procedure regardless of sentinel node status
- 2. Record the total number of nodes biopsied during the sentinel node biopsy 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 Nodes Examined* [NAACCR Item #830] when
 - a. Both a sentinel node biopsy procedure and a subsequent dissection procedure are performed OR
 - b. A sentinel node biopsy procedure is performed during the same procedure as the regional node dissection
- 3. Record the results for the sentinel node biopsy in this data item when an aspiration of sentinel lymph nodes(s) AND a sentinel node biopsy procedure were performed for same patient
- 4. 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.
- 5. The number of sentinel nodes should be equal to or less than the number of regional nodes examined recorded in the *Regional Nodes Examined* data item [NAACCR Item #830]

Sentinel Lymph Nodes Positive

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

Sentinel Lymph Nodes Positive, effective 01/01/2018, the exact number of sentinel lymph nodes found to contain metastases. **This data item is required for breast and cutaneous melanoma cases only.**

SEER Central Registries: Collect when available.

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. For breast ONLY: SLN and RLND occurred during the same procedure	
98	No sentinel nodes were biopsied	
99	It is unknown whether sentinel nodes are positive; not applicable; not stated in patient record	

- 1. Document the **total number of positive nodes** identified during the sentinel node procedure in this data item when, during a sentinel node biopsy procedure a few non-sentinel nodes happen to be sampled and are positive; i.e., record the total number of positive nodes from the sentinel node biopsy procedure regardless of whether the nodes contain dye or colloidal material (tracer or radiotracer)
- 2. Record the number of **positive sentinel nodes** biopsied in this data item and record the <u>total</u> <u>number</u> of positive regional (<u>which includes sentinel</u>) lymph nodes biopsied/dissected in *Regional Nodes Positive* [NAACCR Item #820] when both sentinel and additional regional nodes are examined via sentinel node biopsy and subsequent regional node dissection
- 3. Record the results from the positive sentinel node biopsy procedure when a positive aspiration of sentinel lymph node(s) AND a positive sentinel node biopsy procedure were performed for same patient
- 4. FOR BREAST ONLY
 - use code 97 in this data item and record the total number of positive regional lymph nodes biopsied/dissected (both sentinel and regional) in *Regional Nodes Positive* (NAACCR Item #820) when a sentinel lymph node biopsy is performed <u>during the same procedure</u> as the regional node dissection. When both are performed during the same procedure, code 97 has priority over the number of positive lymph nodes.
 - b. Sentinel lymph nodes are <u>negative</u> when only positive Isolated Tumor Cells (ITCs) are identified
- 5. FOR CUTANEOUS MELANOMA ONLY
 - a. Record the total number of positive sentinel nodes identified in this data item and record the total number of positive regional lymph nodes identified (which includes the number of positive sentinel nodes documented in this data item) in *Regional Nodes*

Positive (NAACCR Item #820) when a sentinel lymph node biopsy is performed <u>during</u> the same procedure as the regional node dissection

- i. The CAP Protocol for melanoma captures both the number of positive sentinel nodes as well as the number of positive regional nodes (i.e., the number of positive sentinel nodes is captured) when the sentinel lymph node biopsy is performed during the same procedure as the regional node dissection
- b. Sentinel lymph nodes are <u>positive</u> when **only positive Isolated Tumor Cells** (ITCs) are identified
- 6. 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.
- 7. The number of sentinel nodes positive should be less than or equal to the total number of *Regional Nodes Positive* [NAACCR Item #820]
- 8. mi (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 XML NAACCR ID: dateRegionalLNDissection

Date of Regional Lymph Node Dissection 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.

SEER Central Registries: Collect when available from CoC reporting facilities.

- 1. Record the date of regional lymph node dissection documented in the *Regional Nodes Examined* data item [NAACCR Item #830]
- 2. Record the date of the regional lymph node dissection in this data item and record the date of the sentinel lymph node biopsy procedure in the *Date of Sentinel Lymph Node Biopsy* data item [NAACCR Item #832] for **breast and cutaneous melanoma cases** when
 - a. Both a sentinel lymph node biopsy procedure and a separate regional lymph node dissection procedure are performed OR
 - b. A sentinel lymph node biopsy is performed in the same procedure as the regional lymph node dissection. In this case, the **dates should be the same**.
- 3. Record the date of the regional lymph node dissection in this data item for **all other cases** (in addition to breast and cutaneous melanoma cases)
 - a. If a sentinel lymph node biopsy procedure is also performed, record the procedure in the *Date of Sentinel Lymph Node Biopsy* data item [NAACCR Item #832]
 - i. If the sentinel lymph node biopsy is performed in the same procedure as the regional lymph node dissection, the **dates should be the same**
- 4. Leave *Date of Regional Lymph Node Dissection* blank when only a sentinel lymph node biopsy is performed

Regional Nodes Positive

Item Length: 2 NAACCR Item #: 820 NAACCR Name: Regional Nodes Positive XML NAACCR ID: regionalNodesPositive

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	

Coding Instructions

- 1. **Regional lymph nodes only.** Record information only about regional lymph nodes in this data item.
 - a. Include lymph nodes that are regional in the current AJCC Staging Manual or *EOD Regional Nodes*
- 2. **This data item is based on pathological information only**, including autopsy. This data item is to be recorded regardless of whether the patient received neoadjuvant (preoperative) treatment. Information from the autopsy may be used to code *Regional Nodes Positive*. Use text fields to explain the situation.
- 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. Record lymph nodes removed and found to be positive during an autopsy for autopsy-only cases.
 - 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, when there are positive regional lymph node 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. Include the node in the count of *Regional Nodes Positive* when the positive aspiration or core biopsy is from a node in a **different** node region

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. Assume the lymph node that is core-biopsied or aspirated is part of the lymph node chain surgically removed and do **not** include it in the count of *Regional Nodes Positive* when its location is **not known**

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.** Use information in the following priority when there is a discrepancy regarding the number of positive lymph nodes
 - a. Final diagnosis
 - b. Synoptic report (also known as CAP protocol or pathology report checklist; the consolidated findings on the CAP protocol)
 - c. Microscopic description
 - d. Gross description

6. **Positive nodes in multiple primaries in same organ**

- a. Determine the histology of the metastases in the nodes and code the nodes as positive for the primary with that histology when there are multiple primary cancers with different histologic types in the same organ and the pathology report just states the number of nodes positive
- b. Code the nodes as positive for all primaries when no further information is available

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
 - a. For all cases **except cutaneous melanoma and Merkel cell** carcinoma of skin
 - i. Count only lymph nodes that contain micrometastases or larger (metastases greater than 0.2 millimeters in size)
 - ii. Assume the metastases are larger than 0.2 mm and count the lymph node(s) as positive when the path report indicates that nodes are positive but the size of metastasis is not stated
 - iii. Do **not** include in the count of lymph nodes positive any nodes that are identified as containing ITCs
 - b. For cutaneous melanoma and Merkel cell carcinoma of skin
 - i. Count nodes with ITCs as positive lymph nodes

- 8. Use code **95** when
 - a. The only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue)
 - b. 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.

c. 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 when
 - a. The assessment of lymph nodes is clinical only
 - b. No lymph nodes are removed and examined
 - c. A "dissection" of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination
 - d. Regional Nodes Positive is coded 98, Regional Nodes Examined is usually coded 00
- 11. Use code **99** for
 - a. Any case coded to primary site C420, C421, C423, C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809
 - b. Lymphoma 00790
 - c. Lymphoma-CLL/SLL 00795
 - d. Plasma Cell Disorders (excluding 9734/3) 00822
 - e. HemeRetic 00830
 - f. Ill-Defined/Other 99999
 - g. Cases with no information about positive regional lymph nodes

For more information about schemas and schema IDs, go to the SSDI Manual, Appendix A.

Regional Nodes Examined

Item Length: 2 NAACCR Item #: 830 NAACCR Name: Regional Nodes Examined XML NAACCR ID: regionalNodesExamined

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 stated in patient record	

Coding Instructions

- 1. **Regional lymph nodes only.** Record information only about regional lymph nodes in this data item.
 - a. Include lymph nodes that are regional in the current AJCC Staging Manual or EOD Regional Lymph Nodes 2018
- 2. **This data item is based on pathologic information only**, including autopsy. This data item is to be recorded regardless of whether the patient received neoadjuvant (preoperative) treatment. Information from the autopsy may be used to code *Regional Nodes Examined*. Use text fields to explain the situation.
- 3. Use code **00** when
 - a. The assessment of lymph nodes is clinical
 - b. No lymph nodes are removed and examined
 - c. 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. Record lymph nodes removed during an autopsy for autopsy-only cases.
 - 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. Include the node in the count of *Regional Nodes Examined* when the aspiration or core biopsy is from a node in a different node region

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. Assume the lymph node that is aspirated or core-biopsied is part of the lymph node chain surgically removed and do **not** include it in the count of *Regional Nodes Examined* when its location is not known

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.** Use information in the following priority when there is a discrepancy regarding the number of lymph nodes examined
 - a. Final diagnosis
 - b. Synoptic report (also known as CAP protocol or pathology report checklist; the consolidated findings on the CAP protocol)
 - c. Microscopic description
 - d. 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. Removal of lymph nodes during autopsy is a dissection. Use code 97 when more than a limited number of lymph nodes are removed and the number is unknown.
- 10. **Multiple lymph node procedures**. Use code **97** when both a lymph node sampling and a lymph node dissection are performed and the total number of lymph nodes examined is unknown.

- 11. Use code **98** when neither the type of lymph node removal procedure nor the number of lymph nodes examined is known
- 12. Use code **99** for
 - a. Any case coded to primary site C420, C421, C423-C424, C589, C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809
 - b. Lymphoma 00790
 - c. Lymphoma-CLL/SLL 00795
 - d. Plasma Cell Disorders (excluding 9734/3) 00822
 - e. HemeRetic 00830
 - f. Ill-Defined/Other 99999
 - g. Cases with no information about the examination of regional lymph nodes

For more information about schemas and schema IDs, go to the SSDI Manual, Appendix A.

Surgical Procedure of Other Site

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

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. 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.

- 2. Do **not** code removal of **uninvolved** contralateral breast in this data item. See <u>Surgery Codes</u> for Breast in Appendix C.
- 3. For this data item, do not include organs beyond the primary site that are included in the *Surgery of Primary Site 2023* codes.

Example: A hemicolectomy including removal of the small bowel. Surgery of Primary Site 2023 code A410 for colon includes resection of contiguous organ such as small bowel or bladder. Do not code removal of small bowel or bladder performed with a subtotal colectomy/hemicolectomy in Surgical Procedure of Other Site.

- 4. 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
- 5. The codes are **hierarchical**
 - a. Codes 1-5 have priority over codes 0 and 9
- 6. Assign code **1** when
 - a. Any surgery is performed to remove tumors for any case coded to primary site C420, C421, C423, C424, C760-C768, C770-C779, or C809
 - i. **Excluding** cases coded to the schema Cervical Lymph Nodes and Unknown Primary 00060

For more information about schemas and schema IDs, go to the SSDI Manual, Appendix A.

- 7. Assign code **2** for sites that are regional. Include sites that are regional in the current AJCC Staging Manual or EOD.
- 8. Assign code **4** for sites that are distant. Include sites that are distant in the current AJCC Staging Manual or EOD.
- 9. 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 XML NAACCR ID: reasonForNoSurgery

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, progression of tumor prior to planned surgery, etc.)
5	Surgery of the primary site was not performed because the patient died prior to planned or recommended surgery
6	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was not performed as part of the first course of therapy. No reason was noted in 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 2023* is coded in the range of A100-A900 or B100-B900 (surgery of the primary site was performed)
- 2. Assign code 1 when *Surgery of Primary Site 2023* is coded A980 (not applicable). For Autopsy Only cases, see coding instruction #4.
- 3. Assign a code in the **range of 1-8** when *Surgery of Primary Site 2023* is coded A000 or B000

Note: Referral to a surgeon is equivalent to a recommendation for surgery.

- a. Assign code **1** when
 - i. Primary site is C420, C421, C423, C424, C760-C768, or C809

Note: Surgery is not standard treatment for these cases.

- ii. 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.

iii. 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 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).

- iv. Surgery was part of the first course of treatment but was cancelled due to complete response to radiation and/or systemic therapy
- v. 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.
- vi. Active surveillance/watchful waiting is the first course (e.g., prostate)
- b. Assign code **2** when surgery of the primary site is contraindicated due to factors including, but not limited to, comorbid conditions, advanced age, and progression of tumor prior to planned surgery.

Example: Patient with metastatic cancer from the right kidney to the lung has a history of prior left nephrectomy with a current history of congestive heart disease and smoking. Surgery is not performed for the right kidney malignancy because the patient is considered a surgical risk.

- c. 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.**

- d. 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 according to NCCN guidelines and/or the NCI PDQ 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 data items (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 for 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].

e. 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.

- 4. 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 XML NAACCR ID: rxDateRadiation

Date Radiation Started is the date when radiation therapy began as part of the first course of therapy.

The date radiation started will typically be found in the radiation oncologist's summary letter for the first course of treatment. Determination of the date radiation started may require assistance from the radiation oncologist for consistent coding.

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: Collect 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
 - a. Do **not** record the date of the initial radiation planning session
- 2. Radiation date should be the same as the Date Therapy Initiated when radiation is the only treatment administered
- 3. There may be times when the first course of treatment information is incomplete. Therefore, it is important to continue follow-up efforts to be certain the complete treatment information is collected.
- 4. Transmit date data items in the year, month, day format (YYYYMMDD)

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 XML NAACCR ID: phase1RadiationTreatmentModality phase2RadiationTreatmentModality phase3RadiationTreatmentModality

Radiation Treatment Modality--Phase I, II, and III, effective 01/01/2018, 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	
98	Radiation therapy administered, but treatment modality is not specified or unknown	
99	Unknown if radiation treatment administered	

• Refer to the current <u>STandards for Oncology Registry Entry (STORE) Manual</u> and the <u>CTR Guide</u> to Coding Radiation Therapy Treatment in the <u>STORE</u>

Coding Instructions

1. Assign code **13** Radioisotopes, NOS for Radioembolization procedures, e.g., intravascular Yttrium-90

Radiation External Beam Planning Technique--Phase I, II, III

Item Length: 2 NAACCR Item #: 1502, 1512, 1522 NAACCR Name: Phase I Radiation External Beam Planning Tech Phase II Radiation External Beam Planning Tech Phase III Radiation External Beam Planning Tech XML NAACCR ID: phase1RadiationExternalBeamTech phase2RadiationExternalBeamTech phase3RadiationExternalBeamTech

Radiation External Beam Planning Technique--Phase I, II, and III, effective 01/01/2018, identify the external beam radiation planning technique used to administer the first, second, and third phase, respectively, of radiation treatment during the first course of treatment.

SEER Central Registries: Collect when available from CoC reporting facilities.

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

Code	Label	Description
06	Stereotactic radiotherapy or radiosurgery, NOS	Treatment planning using stereotactic radiotherapy/radiosurgery techniques, but the treatment is not described as CyberKnife [®] or Gamma Knife [®] . These approaches are sometimes described as SBRT (stereotactic body radiation), SABR (stereotactic ablative radiation), SRS (stereotactic radiosurgery), or SRT (stereotactic radiotherapy). If the treatment is described as robotic radiotherapy (e.g., CyberKnife [®]) or Gamma Knife [®] , use stereotactic radiotherapy subcodes below. If a treatment is described as stereotactic radiotherapy or radiosurgery with online re-optimization/re-planning, then it should be categorized as online re-optimization or re-planning.
07	Stereotactic radiotherapy or radiosurgery, robotic	Treatment planning using stereotactic radiotherapy/radiosurgery techniques which is specifically described as robotic (e.g., CyberKnife [®])
08	Stereotactic radiotherapy or radiosurgery, Gamma Knife®	Treatment planning using stereotactic radiotherapy/radiosurgery techniques which uses a Cobalt-60 gamma ray source and is specifically described as Gamma Knife [®] . This is most commonly used for treatments in the brain.
09	CT-guided online adaptive therapy	An external beam technique in which the treatment plan is adapted over the course of radiation to reflect changes in the patient's tumor or normal anatomy radiation using a CT scan obtained at the treatment machine (online). These approaches are sometimes described as CT- guided online re-optimization or online re-planning. If a treatment technique is described as both CT-guided online adaptive therapy as well as another external beam technique (IMRT, SBRT, etc.), then it should be categorized as CT-guided online adaptive therapy. If a treatment is described as "adaptive" but does not include the descriptor "online," this code should not be used.
10	MR-guided online adaptive therapy	An external beam technique in which the treatment plan is adapted over the course of radiation to reflect changes in the patient's tumor or normal anatomy radiation using an MRI scan obtained at the treatment machine (online). These approaches are sometimes described as MR- guided online re-optimization or online re-planning. If a treatment technique is described as both MR-guided online adaptive therapy as well as another external beam technique (IMRT, SBRT, etc.), then it should be categorized as MR-guided online adaptive therapy. If a treatment is described as "adaptive" but does not include the descriptor "online," this code should not be used.
88	Not Applicable	Treatment not by external beam
98	Other, NOS	Other radiation, NOS; Radiation therapy administered, but the treatment modality is not specified or is unknown
99	Unknown	It is unknown whether radiation therapy was administered

- Radiation external beam treatment planning technique will typically be found in the radiation oncologist's summary letter. Determination of the external beam planning technique may require assistance from the radiation oncologist to ensure consistent coding.
- The first phase may be commonly referred to as an initial plan and a subsequent phase may be referred to as a boost or cone down, and would be recorded as Phase II, Phase III, etc., accordingly
- In keeping with contemporary practice, modern radiotherapy allows phases to be delivered simultaneously so new terminology is needed. Each phase is meant to reflect a "delivered radiation prescription." At the start of the radiation planning process, physicians write radiation prescriptions to treatment volumes and specify the dose per fraction (session), the number of

fractions, the modality, and the planning technique. A phase simply represents the radiation prescription that has actually been delivered (as sometimes the intended prescription differs from the delivered prescription).

• Phases can be delivered sequentially or simultaneously. In sequential phases, a new phase begins when there is a change in the anatomic target volume of a body site, treatment fraction size (i.e., dose given during a session), modality, or treatment technique. Any one of these changes will generally mean that a new radiation plan will be generated in the treatment planning system and should be **coded as a new** phase of radiation therapy.

Note: "Online adaptive therapy" refers to treatment where radiation treatment plans are adapted or updated while a patient is on the treatment table. When treatment plans are adapted, the shape of the target volume may change from day to day but, for registry purposes, the volume that is being targeted will not change. An adapted plan should not be coded as though a new phase of treatment has been initiated unless, as above, the radiation oncologist documents it as a new phase in the radiation treatment summary. Two new technique codes have been added to capture when online adaptive therapy is occurring: CT-guided and MR-guided adaptive therapy.

• Refer to the current <u>STandards for Oncology Registry Entry (STORE) Manual</u> and the <u>CTR Guide</u> to Coding Radiation Therapy Treatment in the <u>STORE</u>

- 1. Assign code **00** when
 - a. The patient did not have radiation
 - b. Diagnosed at autopsy (for death certificate only (DCO) cases)
- 2. Assign code **04** for Conformal or 3-D Conformal Therapy whenever either is explicitly mentioned
- 3. Assign code **05** for Intensity Modulated Therapy (IMT) or Intensity Modulated Radiation Therapy (IMRT)
- 4. Document the planning technique in the appropriate text field when assigning code 98

Radiation Sequence with Surgery

Item Length: 1 NAACCR Item #: 1380 NAACCR Name: RX Summ--Surg/Rad Seq XML NAACCR ID: rxSummSurgRadSeq

This data item 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 *Surgery of Primary Site 2023* (codes A100-A900 or B100-B900) or *Scope of Regional Lymph Node Surgery* (codes 2-7) 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 phases, episodes, or fractions of radiation therapy given before and at least two more after surgery to the primary site, scope of regional lymph node surgery (excluding code 1), surgery to other regional site(s), distant site(s), or distant lymph node(s)

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. Two regional lymph nodes removed
- 2. Radiation
- 3. Surgery of primary site

Code *Radiation Sequence with Surgery* as 7 (surgery both before and after radiation) because regional lymph node removal 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 XML NAACCR ID: reasonForNoRadiation

Reason for No Radiation, effective 01/01/2018, 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, progression of tumor prior to planned radiation, 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 received 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 therapy
- 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 XML NAACCR ID: rxDateSystemic

The earliest date of administration of chemotherapy agents, hormonal agents, biological response modifiers (BRMs), bone marrow transplants, stem cell harvests, or surgical and/or radiation endocrine therapy is recorded in this data item.

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: Collect 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 data items in the year, month, day format (YYYYMMDD)

Date Chemotherapy Started

Item Length: 8 NAACCR Item #: 1220 NAACCR Name: RX Date Chemo XML NAACCR ID: rxDateChemo

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: Collect 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 or physician order 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 data items in the year, month, day format (YYYYMMDD)

Chemotherapy

Item Length: 2 NAACCR Item #: 1390 NAACCR Name: RX Summ--Chemo XML NAACCR ID: rxSummChemo

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 <u>SEER*Rx</u> 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 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 section 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, 2022, and was placed on planned Herceptin February 2, 2023. Code Herceptin in the *BRM/Immunotherapy* data item (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 item 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, targeted therapy, 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 an invasive or in situ carcinoma in the other breast. Chemotherapy would likely affect both primaries.

Example: Patient is diagnosed with infiltrating duct carcinoma, stage III, in the right breast and infiltrating duct carcinoma, stage I, in the left breast. Neoadjuvant chemotherapy is administered for the stage III neoplasm in the right breast per the breast surgeon consult, but not for the left breast. Code the chemotherapy on both abstracts for both primaries in this case (simultaneous bilateral breast 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. 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 XML NAACCR ID: rxDateHormone

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: Collect 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 data items in the year, month, day format (YYYYMMDD)
Hormone Therapy

Item Length: 2 NAACCR Item #: 1400 NAACCR Name: RX Summ--Hormone XML NAACCR ID: rxSummHormone

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 <u>SEER*Rx</u> 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 item *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. 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 data item. **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 data item.

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 XML NAACCR ID: rxDateBrm

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: Collect when available from CoC reporting facilities.

Coding Instructions

- 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 data items in the year, month, day format (YYYYMMDD)

Immunotherapy

Item Length: 2 NAACCR Item #: 1410 NAACCR Name: RX Summ--BRM XML NAACCR ID: rxSummBrm

The data item *Immunotherapy* records immunotherapeutic (biological therapy, biotherapy, or biological response modifier (BRM)) 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 section for the applicable drugs in SEER*Rx.

Drug Name/Brand Name	Previous Category	New Category	Effective Date See Note
		BRM/Immuno	01/01/2013
Alemtuzumab/Campath	Chemotherapy	BRIVI/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, 2023, and begins receiving Herceptin as part of first course therapy on January 30, 2023. Code the Herceptin in the BRM/Immunotherapy data item.

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 that are mimicking normal cells, or by boosting the body's natural defenses that destroy foreign cells. Consult <u>SEER*Rx</u> 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 **OR**
- c. For death certificate only (DCO) cases

Hematologic Transplant And Endocrine Procedures

Item Length: 2 NAACCR Item #: 3250 NAACCR Name: RX Summ--Transplnt/Endocr XML NAACCR ID: rxSummTransplntEndocr

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.

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 data item and the radiation is coded in the Radiation Treatment Modality--Phase I, II, III data items.

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

- 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** (Bone marrow transplant autologous) **and 12** (Bone marrow transplant allogeneic) 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.

Note: Bilateral oophorectomy is coded 30 when it is performed for hormonal effect for breast, endometrial, vaginal, and other primary cancers.

- 7. Assign code **87** if the patient
 - a. **Refused** recommended transplant or endocrine procedure
 - b. 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. 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 XML NAACCR ID: rxSummSystemicSurSeq

This data item 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 Surgery of Primary Site 2023* (codes A100-A900 or B100-B900) or *Scope of Regional Lymph Node Surgery* (codes 2-7) 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 if surgery and/or systemic	The patient did not have both systemic therapy and surgery. It is unknown whether or not the patient	Example: Death certificate only (DCO) case
	therapy given	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.

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	

Neoadjuvant Therapy

Item Length: 1 NAACCR Item #: 1632 NAACCR Name: Neoadjuvant Therapy XML NAACCR ID: neoadjuvantTherapy

Neoadjuvant Therapy, effective for cases diagnosed 01/01/2021, or later, records whether the patient had neoadjuvant therapy prior to planned definitive surgical resection of the primary site.

This data item provides information related to the quality of care and describes whether a patient had neoadjuvant therapy.

For the purposes of this data item, neoadjuvant therapy is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy before **intended** or **performed** surgical resection to improve local therapy and long-term outcomes during first course of treatment.

Code	Description
0	No neoadjuvant therapy, no treatment before surgery, surgical resection not part of first course of
	treatment plan
	Autopsy only
1	Neoadjuvant therapy completed according to treatment plan and guidelines
2	Neoadjuvant therapy started, but not completed OR unknown if completed
3	Limited systemic exposure when the intent was not neoadjuvant; treatment did not meet the
	definition of neoadjuvant therapy
9	Unknown if neoadjuvant therapy performed
	Death certificate only (DCO)

Definitions

There are several related but distinct concepts that cover adjuvant therapy, neoadjuvant therapy, and primary therapy. This section contains definitions that can be used in the context of abstracting and coding.

Adjuvant therapy: Additional cancer treatment given after the primary treatment (usually surgery) to lower the risk that the cancer will come back. Adjuvant therapy may include radiation therapy and/or systemic therapy including chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy.

Neoadjuvant therapy: Systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy given prior to surgical resection to improve outcomes. May also be called **pre-surgical treatment or preoperative treatment**.

Neoadjuvant therapy may be administered to

- Reduce the disease burden, which might allow surgical resection for previously unresectable disease or allow for less extensive surgical resection, organ preservation or function, or quality of life
- Eradicate or control undiscovered metastases and improve outcomes of overall survival and disease-free survival
- Provide prognostic information based on response. A clinical response to neoadjuvant therapy is associated with length of disease-free survival and overall survival in some cancer types

Note: Limited systemic therapy may be given prior to surgery, or may also occur in clinical trials with no expectation of the above-mentioned benefits and should **not** be coded as neoadjuvant therapy (code 1 or 2) for the purposes of this data item. See instructions for code 3 below.

Additional opportunities to use neoadjuvant therapy information

- Allow direct observation of therapeutic efficacy
- Allow time for appropriate genetic testing (if applicable)
- Test novel therapies and predictive biomarkers by providing tumor specimens and blood samples prior to and during systemic treatment
- Assist in determining the next steps for treatment
- Compare survival, rates of successful optimal reductive surgical resection, postoperative complications and quality of life

Limited systemic therapy may be given prior to surgery, or **may** also occur in clinical trials to study biology of cancer or in other circumstances to impact the biology of a cancer but is not a full course of neoadjuvant therapy with the intent to impact extent of surgical resection or other outcomes (organ preservation, function or quality of life).

• Do **not** code as neoadjuvant therapy (code 1 or 2) for the purposes of this data item. See instructions for code 3 below.

Primary therapy: The centerpiece of treatment given for a disease. It is often part of a standard set of treatments, such as surgical resection followed by chemotherapy and radiation. It may be used alone to remove or reduce the burden/progression of disease OR used along with additional treatments.

Surgical resection: For purposes of this data item, surgical resection is defined as the most definitive surgical procedure that removes some or all of the primary tumor or site. For many sites, this would be Surgical Codes 30-80; however, there are some sites where surgical codes less than 30 could be used (for example, code 22 for Breast (excisional biopsy or lumpectomy).

Coding Guidelines

Use this data item to record whether neoadjuvant therapy was administered. This data item captures a full course of neoadjuvant therapy (generally 4-6 months) or a limited exposure to systemic therapy prior to surgical resection. When part of the treatment plan, a full course of neoadjuvant therapy is recommended; however, there are specific scenarios in which the planned full course of neoadjuvant therapy is not carried out. Site-specific recommendations for neoadjuvant therapy are found in the NCCN guidelines, ASCO guidelines, or other treatment guidelines.

For purposes of this data item, the criteria for neoadjuvant therapy are

- A physician's treatment plan and/or statement of patient completing neoadjuvant therapy must be used
- Treatment must follow the recommended treatment guidelines for the type and duration of treatment for that primary site and/or histology

The length of a full course of neoadjuvant systemic therapy may vary depending on the primary site and/or histology, often from 4-6 months, but could be shorter, of neoadjuvant systemic therapy and/or radiation

• Neoadjuvant therapy may include systemic therapy alone, radiation alone, or combinations of radiation and systemic therapy (for example, with rectal cancer, esophageal cancer, head and neck cancer)

- Neoadjuvant therapy data items are coded based on treatment/procedures that occur during first course of therapy
- Neoadjuvant therapy may be given as part of a clinical trial

Code neoadjuvant therapy in the corresponding treatment data items even when the treatment is partial (i.e., less than a full course of neoadjuvant therapy is administered) or limited (i.e., limited exposure to systemic therapy)

- *Radiation Sequence and Surgery* (if radiation given prior to surgical resection) as part of limited neoadjuvant therapy
- *Systemic Treatment/Surgery Sequ*ence (if systemic treatment given prior to surgical resection) as part of limited neoadjuvant therapy
- The appropriate treatment data items (*Chemotherapy, Immunotherapy, Hormone Therapy, Hematologic Transplant and Endocrine Procedures, Radiation Treatment Modality--Phase I, II, III*), and the associated date data item for each treatment type

Document information regarding neoadjuvant therapy in the text remarks field as needed.

Coding Instructions

- 1. Assign code 0
 - a. When neoadjuvant therapy or tumor-directed treatment prior to surgical resection is **not** part of treatment plan
 - i. For example, the patient's only treatment was surgery
 - b. When surgical resection is **not** part of planned first course of treatment

Example: Patient with unresectable lung cancer (no surgical resection planned), chemotherapy and radiation planned.

c. When patient did **not** have neoadjuvant therapy based on the sequence of treatment

Example: Patient diagnosed with breast cancer via needle core biopsy, had surgical resection, and then had adjuvant chemotherapy/radiation.

- d. For autopsy only cases
- e. For the following cases for which neoadjuvant therapy is not a part of standard treatment
 - i. Primary site : C420, C421, C423, C424, C809
 - ii. One of the following schemas
 - 1. HemeRetic 00830
 - 2. Ill-Defined Other 99999
 - 3. Lymphoma 00790
 - 4. Lymphoma-CLL/SLL 00795
 - 5. Mycosis Fungoides (MF) 00811
 - 6. Plasma Cell Disorders 00822
 - 7. Plasma Cell Myeloma 00821
 - 8. Primary Cutaneous Lymphomas (excluding MF and SS) 00812

2. Assign code 1

- a. For any tumor-directed therapy meeting the definition of neoadjuvant therapy
 - i. Occurring prior to an intended or performed definitive surgical resection, AND
 - ii. **Documented** as neoadjuvant treatment by a treating physician or part of the patient's documented treatment regimen/protocol.
- b. When the patient completed the full course of neoadjuvant therapy with or without planned surgical resection

Example 1: Patient diagnosed with rectal cancer via biopsy. Patient received 6 cycles of chemotherapy with concurrent radiation and then had surgical resection.

Example 2: Patient diagnosed with rectal cancer, 6 cycles of chemotherapy and radiation recommended. After completion of neoadjuvant therapy, re-evaluation of tumor burden done, and no evidence of cancer found. The planned surgical resection was **not** performed.

Example 3: Patient diagnosed with pancreatic cancer; 6 cycles of chemotherapy recommended. During last cycle, patient developed heart issues due to the chemotherapy. Planned surgical resection **not** performed due to risk factors and patient placed on hospice.

Example 4: Patient completed neoadjuvant therapy, surgery recommended, but patient refused any further treatment or patient died prior to surgical resection.

Example 5: Patient had a full course of neoadjuvant therapy, surgical resection recommended, unknown if performed.

- 3. Assign code 2
 - a. When any tumor-directed therapy (excluding surgical resection) <u>meeting the definition</u> <u>of neoadjuvant therapy</u> whose intent **was neoadjuvant**, was begun and the patient did **not** complete the full course of neoadjuvant therapy

Example: Patient diagnosed with advanced breast cancer; 6 cycles of chemotherapy, followed by surgical resection recommended. After 4th cycle of chemotherapy, patient's tumor was noted to be growing despite the chemotherapy and planned surgical resection not performed (neoadjuvant therapy failed).

- 4. Assign code 3
 - a. When any tumor-directed therapy (excluding surgical resection) **not** documented as **neoadjuvant in the treatment plan** and **not** meeting treatment guideline recommendations for neoadjuvant therapy was given
 - b. When patient receives some therapy prior to surgical resection, but not enough to qualify for a full course of neoadjuvant therapy

Example 1: Patient diagnosed with prostate cancer. Patient received one shot of Lupron followed by prostatectomy 2 weeks later.

- i. For purposes of the *Neoadjuvant Therapy* data item, one shot of Lupron does **not** qualify as neoadjuvant therapy
 - 1. Record this Lupron shot as hormone therapy
 - a. Hormone Therapy: Code 01-Hormone Therapy Administered
 - b. *Date Hormone Therapy Started*: Code date the Lupron was administered

c. *Systemic Treatment/Surgery Sequence*: Code 2-Systemic therapy before surgery

Example 2: Patient diagnosed with breast cancer. Due to scheduling, patient not able to have surgical resection for 3 weeks, patient given Tamoxifen, followed by mastectomy with sentinel lymph node biopsy.

- ii. For purposes of the *Neoadjuvant Therapy* data item, a short course of Tamoxifen does **not** qualify as neoadjuvant therapy
 - 1. Record the hormone therapy as treatment
 - 1. Hormone Therapy: Code 01-Hormone Therapy Administered
 - 2. *Date Hormone Therapy Started*: Code date the Tamoxifen was administered
 - 3. *Systemic Treatment/Surgery Sequence*: Code 2-Systemic therapy before surgery
- 5. Assign code **9** when
 - a. It is unknown whether neoadjuvant therapy was administered
 - i. Planned, but unknown if given
 - ii. Death certificate only (DCO)

Note 1: Code 9 (unknown) should be used rarely.

Note 2: Use code 0 when it is clear that the patient did not have neoadjuvant therapy based on the sequence of diagnosis and treatment.

Neoadjuvant Therapy--Clinical Response

Item Length: 1 NAACCR Item #: 1633 NAACCR Name: Neoadjuvant Therapy-Clinical Response XML NAACCR ID: neoadjuvantTherapyClinicalResponse

Neoadjuvant Therapy--Clinical Response, effective for cases diagnosed 01/01/2021, or later, records the clinical outcomes of neoadjuvant therapy prior to planned surgical resection.

This data item provides information related to the quality of care and describes the clinical outcomes after neoadjuvant therapy. Prognostically relevant information is captured by quantifying the extent of therapy-induced tumor regression. This item can provide a better risk stratification for patients who received neoadjuvant therapy. In addition, this data item can contribute to assessments of cancer care quality.

This data item records the clinical outcomes of neoadjuvant therapy as determined by the managing physician (oncologic surgeon, radiation oncologist or medical oncologist).

For the purposes of this data item, neoadjuvant therapy is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy given to shrink a tumor before surgical resection.

Code	Description
0	Neoadjuvant therapy not given
1	Complete clinical response (CR) (per managing/treating physician statement)
2	Partial clinical response (PR) (per managing/treating physician statement)
3	Progressive disease (PD) (per managing/treating physician statement)
4	Stable disease (SD) (per managing/treating physician statement)
5	No response (NR) (per managing/treating physician statement)
	Not stated as progressive disease (PD) or stable disease (SD)
6	Neoadjuvant therapy done, managing/treating physician interpretation not available, treatment
	response inferred from imaging, biomarkers, or yc stage
7	Complete clinical response based on biopsy results from a pathology report (per pathologist
	assessment)
8	Neoadjuvant therapy done, response not documented or unknown
9	Unknown if neoadjuvant therapy performed
	Death certificate only (DCO)

Coding Guidelines

Use this data item to record the clinical response (outcomes) to neoadjuvant therapy.

Neoadjuvant Therapy--Clinical Response is evaluated after primary systemic and/or radiation therapy is completed and **prior** to surgical resection. It is based on clinical history, physical examination, biopsies, imaging studies, and other diagnostic work up. Do **not** use information from the surgical pathology report to code this data item.

Code this data item based on the managing/treating physician's interpretation/statement of the response to neoadjuvant therapy, whenever this interpretation/statement is available.

This data item is related to *Neoadjuvant Therapy* [NAACCR Item #1632].

Coding Instructions

- 1. Assign code **0**
 - a. When neoadjuvant therapy is **not** administered
 - i. Neoadjuvant Therapy data item [NAACCR Item #1632] coded to 0 or 3
 - b. When therapy administered does not qualify as neoadjuvant therapy (pre-surgical treatment) because surgical resection **not** planned

Example: Patient with unresectable lung cancer (no surgical resection planned), chemotherapy and radiation planned. Chemotherapy and radiation do **not** qualify as neoadjuvant therapy because no surgical resection is planned.

c. When the patient did **not** have neoadjuvant therapy based on the sequence of diagnosis and treatment

Example: Patient diagnosed with breast cancer via needle core biopsy, had surgical resection followed by chemotherapy and radiation.

- d. For autopsy only cases
- e. For the following cases for which neoadjuvant therapy is not a part of standard treatment
 - i. Primary site: C420, C421, C423, C424, C809
 - ii. One of the following schemas
 - 1. HemeRetic 00830
 - 2. Ill-Defined Other 99999
 - 3. Lymphoma 00790
 - 4. Lymphoma-CLL/SLL 00795
 - 5. Mycosis Fungoides 00811
 - 6. Plasma Cell Disorders 00822
 - 7. Plasma Cell Myeloma 00821
 - 8. Primary Cutaneous Lymphomas (excluding MF and SS) 00812
- 2. A managing/treating physician statement is required to assign codes 1-5.
- 3. Assign code 1
 - **a.** When the managing/treating physician documents complete (or total) response (CR) based on clinical findings

Note 1: CR is defined as the disappearance of all known tumors/lesions and lymph nodes.

Note 2: Neoadjuvant Therapy data item [NAACCR Item #1632] coded to 1 or 2.

- 4. Assign code **2** when
 - a. The managing/treating physician documents partial response (PR) based on clinical findings or

Note: PR is defined as a decrease in the size/extent of the tumor and/or presence of lymph nodes or metastatic disease.

b. Documented as **not** being either complete response (CR) or progressive disease (PD)

Note: Neoadjuvant Therapy data item [NAACCR Item #1632] coded to 1 or 2.

- 5. Assign code **3**
 - a. When the managing/treating physician documents
 - i. **Progressive disease (PD)** based on clinical findings or
 - ii. "Progression" or that the size/extent of the tumor and/or the presence of lymph nodes or metastatic disease has increased or
 - iii. There is evidence of new metastasis

Note 1: PD is defined as an increase in the size/extent of the tumor and/or presence of lymph nodes or metastatic disease.

Note 2: Assign code 3 when the managing/treating physician documents that the patient progressed after neoadjuvant therapy was started even if the neoadjuvant therapy was not completed. Use text fields for documentation.

Note 3: *Neoadjuvant Therapy* data item [NAACCR Item #1632] coded to 1 or 2.

- 6. Assign code 4
 - a. When the managing/treating physician
 - i. Documents no clinical response based on clinical findings due to stable disease (SD) or
 - ii. States that there is no change in the size/extent of the tumor and/or the presence of lymph nodes or metastatic disease

Note 1: SD is defined as no changes in the size/extent of the tumor and/or presence of lymph nodes or metastatic disease.

Note 2: *Neoadjuvant Therapy* data item [NAACCR Item #1632] coded to 1 or 2.

- 7. Assign code **5**
 - a. When clinical evaluation after neoadjuvant therapy is done and the managing/treating physician documents no response (NR); and does not indicate
 - i. If the tumor progressed (code 3) or
 - ii. If there was change in the tumor size/extent or
 - iii. If the tumor was stable (see code 4)

Note 1: No response (NR), NOS is documented by the managing/treating physician based on clinical findings.

Note 2: *Neoadjuvant Therapy* data item [NAACCR Item #1632] coded to 1 or 2.

- 8. Assign code 6
 - a. When neoadjuvant therapy was completed, there is **no** statement from the managing/treating physician based on clinical evaluation documented or available, and clinical response is inferred from imaging impression, changes in biomarkers or yc stage

Note: *Neoadjuvant Therapy* data item [NAACCR Item #1632] coded to 1.

Example: Patient completes neoadjuvant therapy and presents to radiology for follow up scan. Per the radiology report, there is significant decrease in the size of the tumor. No documentation can be found from the managing/treating physician regarding the response.

- 9. Assign code 7
 - a. When a biopsy is done of the primary site, the pathology report states complete response, and there is **no** statement regarding clinical response from the managing physician

Note: *Neoadjuvant Therapy* data item [NAACCR Item #1632] coded to 1.

Example: Patient completes neoadjuvant therapy for a rectal cancer. Imaging does not identify definitive residual tumor. On endoscopic biopsy, the biopsy of the treated rectal tumor is negative for malignancy.

10. Assign code 8

a. When neoadjuvant therapy done, and clinical response is not documented or is unknown

Note: Neoadjuvant Therapy data item [NAACCR Item #1632] coded to 1 or 2.

Example 1: Patient completes neoadjuvant therapy; however, there is no information available regarding the status of the cancer.

Example 2: Patient starts neoadjuvant chemotherapy; however, patient expires after one cycle of chemotherapy.

Example 3: Patient starts neoadjuvant chemotherapy; however, due to rapid reporting of the case, the information is not yet available. Revise the code after treatment is completed.

- 11. Assign code 9
 - a. When it is unknown whether neoadjuvant therapy was administered
 - i. Planned, but unknown if given
 - ii. Death certificate only (DCO)

Note 1: *Neoadjuvant Therapy* data item [NAACCR Item #1632] coded to 9.

Note 2: Code 9 (unknown) should be used rarely.

Note 3: Use code 0 when it is clear that the patient did **not** have neoadjuvant therapy based on the sequence of diagnosis and treatment or on standard of care for the diagnosis.

Neoadjuvant Therapy--Treatment Effect

Item Length: 1 NAACCR Item #: 1634 NAACCR Name: Neoadjuvant Therapy-Treatment Effect XML NAACCR ID: NeoadjuvantTherapyTreatmentEffect

Neoadjuvant Therapy--Treatment Effect, effective for cases diagnosed 01/01/2021, or later, records the pathologist's statement of neoadjuvant treatment effect on the primary tumor or site, with or without lymph nodes and/or distant metastasis, from the surgical pathology report. Whenever treatment effect definitions are recommended by, or available in, the College of American Pathologists (CAP) Cancer Protocols, this data item follows the CAP definitions indicating absent or present effect. When site-specific CAP definitions are not available, use treatment effect codes for All Other Schemas in <u>Appendix C</u>. Site-specific codes are also included in <u>Appendix C</u> of this manual.

This data item provides information related to the quality of care and describes the pathological outcomes after neoadjuvant therapy. Prognostically relevant information is captured by quantifying the extent of therapy-induced tumor regression. This item can provide a better risk stratification for patients who received neoadjuvant therapy. In addition, this data item can contribute to assessments of cancer care quality.

Coding Structure

See <u>Appendix C</u> for site-specific codes coding instructions of *Neoadjuvant Therapy--Treatment Effect*.

Code	Description
0	Neoadjuvant therapy not given/no known presurgical therapy
1-4	Site-specific code; type of response
6	Neoadjuvant therapy completed and surgical resection performed, response not documented or unknown
	Cannot be determined
7	Neoadjuvant therapy completed and planned surgical resection not performed
9	Unknown if neoadjuvant therapy performed
	Unknown if planned surgical procedure performed after completion of neoadjuvant therapy
	Death certificate only (DCO)

For purposes of this data item, neoadjuvant therapy is defined as systemic treatment (chemotherapy, endocrine/hormone therapy, targeted therapy, immunotherapy, or biological therapy) and/or radiation therapy given to shrink a tumor **before** surgical resection.

Surgical resection: For purposes of this data item, surgical resection is defined as the most definitive surgical procedure that removes some or all of the primary tumor or site, with or without lymph nodes and/or distant metastasis. For many sites, this would be Surgical Codes 30-80; however, there are some sites where surgical codes less than 30 could be used, for example, code 22 for Breast (excisional biopsy or lumpectomy).

Note 1: Code 0 indicates a patient did not receive any neoadjuvant treatment or received only a short course of hormone therapy that was **not** part of a clinical trial. If hormone therapy is given as part of a clinical trial, it is coded as neoadjuvant treatment and not coded 0 for treatment effect.

Note 2: Code 6 includes situations where a treatment effect is noted to be present, but cannot be classified to codes 1-4.

Note 3: Code 7 includes patients who complete or start neoadjuvant treatment and expire before surgical treatment.

Note 4: This data item is not the same as AJCC's Post Therapy Path (yp) Pathological Response, which is based on the managing/treating physician's evaluation from the surgical pathology report and clinical evaluation after neoadjuvant therapy. This data item only addresses response based on the surgical pathology report.

Assign code 9 when the only information available is the managing/treating physician's evaluation

Note 5: Code 9 includes patients who start treatment and treatment effect information is not available at the time of reporting, such as with rapid case reporting. Revise the code after treatment is completed.

Date Other Treatment Started

Item Length: 8 NAACCR Item #: 1250 NAACCR Name: RX Date Other XML NAACCR ID: rxDateOther

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: Collect 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 data items in the year, month, day format (YYYYMMDD)

Other Therapy

Item Length: 1 NAACCR Item #: 1420 NAACCR Name: RX Summ--Other XML NAACCR ID: rxSummOther

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. The treatment plan offered multiple treatment options and the patient selected treatment that did not include other therapy
- c. 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.
- d. First course of treatment was active surveillance/watchful waiting
- 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. 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 2023* for skin. Assign code B110 [Photodynamic therapy (PDT)] if there is no pathology specimen. Assign code B210 [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. Peptide Receptor Radionuclide Therapy (PRRT)
- e. Cancer treatment that could not be assigned to the previous treatment data items (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 data items.

- 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.
- *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.

Note: See complete information on types of complementary and alternative medicine specific to cancer at <u>NCI Office of Cancer Complementary and Alternative Medicine</u>. For additional information on cancer and other diseases, please visit <u>NIH National Center for Complementary and Integrative Health</u>.

- 6. Assign code **8** when other therapy was recommended by the physician but there is **no** information that the treatment was given
- 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

Date of Last Cancer (Tumor) Status

Item Length: 8 NAACCR Item #: 1772 NAACCR Name: Date of Last Cancer (Tumor) Status XML NAACCR ID: dateOfLastCancerStatus

Date of Last Cancer (tumor) Status records the date of last known cancer status for this tumor. NCI SEER requires the registries to update the follow up information on all cases on an annual basis.

Date of Last Cancer (tumor) Status 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 data items 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 data items 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 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 NCI 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 month, day and the date of the last known cancer status (Cancer Status [NAACCR Item #1770)] for this tumor was updated
- 2. Use information from a physician the patient's physician or other official source such as a death certificate. Do not use information from an unofficial source such as a family member, friend, or other non-official source.

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

Cancer Status

Item Length: 1 NAACCR Item #: 1770 NAACCR Name: Cancer Status XML NAACCR ID: cancerStatus

Cancer Status records the presence or absence of clinical evidence of the patient's malignant or nonmalignant tumor as of the *Date of Last Cancer (tumor) Status* [NAACCR Item #1772]. If the patient has multiple primaries, the status may be different for each primary. SEER requires the registries to update the follow up information on all cases on an annual basis.

This data item can be used in follow-up and outcomes studies such as computing disease-free survival.

Code	Description
1	No evidence of this tumor
2	Evidence of this tumor
9	Unknown, indeterminate whether this tumor is present, not stated in patient record

Coding Instructions

- 1. Assign code 1 when there is no indication or evidence of this tumor, for example, the patient is in remission for a hematopoietic disease.
- 2. Assign code **2** when there is an indication of this tumor, for example, patient died or is continuing treatment for this tumor.

Recurrence Date--1st

Item Length: 8 NAACCR Item #: 1860 NAACCR Name: Recurrence Date--1st XML NAACCR ID: recurrenceDate1st

Recurrence Date--1st records the date of the first recurrence of this tumor. *Recurrence Date--1st* must be transmitted in the YYYYMMDD format. *Recurrence Date--1st* 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 data items 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 data items 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.

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. Record the date the physician diagnoses the first progression, metastasis, or recurrence of disease after a disease-free period.

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

Recurrence Type--1st

Item Length: 2 NAACCR Item #: 1880 NAACCR Name: Recurrence Type--1st XML NAACCR ID: recurrenceType1st

Recurrence Type--1st indicates the type of first recurrence after a period of documented disease free intermission or remission.

Code	Description
00	Patient became disease-free after treatment and has not had a recurrence; leukemia in remission
04	In situ recurrence of an invasive tumor
06	In situ recurrence of an in situ tumor
10	Local recurrence and there is insufficient information available to code to 13-17. Recurrence is confined to the remnant of the organ of origin; to the organ of origin; to the anastomosis; or to scar tissue where the organ previously existed.
13	Local recurrence of an invasive tumor
14	Trocar recurrence of an invasive tumor. Includes recurrence in the trocar path or entrance site following prior surgery.
15	Both local and trocar recurrence of an invasive tumor (both 13 and 14)
16	Local recurrence of an in situ tumor
17	Both local and trocar recurrence of an in situ tumor
20	Regional recurrence, and there is insufficient information available to code to 21-27
21	Recurrence of an invasive tumor in adjacent tissue or organ(s) only
22	Recurrence of an invasive tumor in regional lymph nodes only
25	Recurrence of an invasive tumor in adjacent tissue or organ(s) and in regional lymph nodes (both 21 and 22) at the same time
26	Regional recurrence of an in situ tumor, NOS
27	Recurrence of an in situ tumor in adjacent tissue or organ(s) and in regional lymph nodes at the same time
30	Both regional recurrence of an invasive tumor in adjacent tissue or organ(s) and/or regional lymph nodes (20-25) and local and/or trocar recurrence (10, 13, 14, or 15).
36	Both regional recurrence of an <i>in situ</i> tumor in adjacent tissue or organ(s) and/or regional lymph nodes (26 or 27) and local and/or trocar recurrence (16 or 17).
40	Distant recurrence and there is insufficient information available to code to 46-62.
46	Distant recurrence of an <i>in situ</i> tumor.
51	Distant recurrence of an invasive tumor in the peritoneum only. Peritoneum includes peritoneal surfaces of all structures within the abdominal cavity and/or positive ascitic fluid.
52	Distant recurrence of an invasive tumor in the lung only. Lung includes the visceral pleura.
53	Distant recurrence of an invasive tumor in the pleura only. Pleura includes the pleural surface of all structures within the thoracic cavity and/or positive pleural fluid.
54	Distant recurrence of an invasive tumor in the liver only
55	Distant recurrence of an invasive tumor in bone only. This includes bones other than the primary site.
56	Distant recurrence of an invasive tumor in the CNS only. This includes the brain and spinal cord, but not the external eye.
57	Distant recurrence of an invasive tumor in the skin only. This includes skin other than the primary site.
Code	Description
------	--
58	Distant recurrence of an invasive tumor in lymph node only. Refer to the staging schema for a description of lymph nodes that are distant for a particular site.
59	Distant systemic recurrence of an invasive tumor only. This includes leukemia, bone marrow metastasis, carcinomatosis, and generalized disease.
60	Distant recurrence of an invasive tumor in a single distant site (51-58) and local, trocar, and/or regional recurrence (10-15, 20-25, or 30)
62	Distant recurrence of an invasive tumor in multiple sites (recurrences that can be coded to more than one category 51-59)
70	Since diagnosis, patient has never been disease-free. This includes cases with distant metastasis at diagnosis, systemic disease, unknown primary, or minimal disease that is not treated.
88	Disease has recurred, but the type of recurrence is unknown
99	It is unknown whether the disease has recurred or if the patient was ever disease-free

Coding Instructions

- 1. Assign the code for the type of first recurrence. First recurrence may occur well after completion of the first course of treatment or after subsequent treatment.
- 2. Check the Solid Tumor Rules to determine which subsequent tumors should be coded as recurrences
- 3. Continue to check for disease-free status, which may occur after subsequent treatment has been completed, when the patient has never been disease-free (code 70)
- 4. Continue to check until a recurrence occurs when the patient is disease-free (code 00). First recurrence may occur well after completion of the first course of treatment.
- 5. Do *not* record subsequent recurrences once a recurrence has been recorded (code 04-62 or 88)
- 6. Assign the highest-numbered applicable response for hierarchical codes 00-70
 - a. Change the code to 00 the first time a patient converts from code 70 (never disease free) to disease-free
 - b. Assign the proper code for the recurrence the first time a patient converts from code 00 to a recurrence. No further changes (other than corrections) should be made.
- 7. Assign code 06, 16, 17, 26, 27, 36, or 46 for recurrence when the tumor was originally diagnosed as in situ. Do not use those codes for any other tumors.
- 8. Codes 00, 88, or 99 may apply to any tumor
- 9. Assign codes 51–59 (organ or organ system of distant recurrence) only when all first occurrences were in a single category. There may be multiple metastases (or "seeding") within the distant location.
- 10. Assign code 00 for lymphomas or leukemias that are in remission. The patient is in remission when the lymphoma or leukemia is controlled by drugs (e.g., Gleevec for chronic myeloid leukemia).
 - a. Assign recurrence code 59 when the patient relapses.
- 11. Code the recurrent disease for each tumor when there is more than one primary tumor and the physician is unable to decide which has recurred. If the recurrent primary is identified later, revise the codes appropriately.
- 12. Assign code 10 for recurrence of a benign brain tumor.

Death Clearance Instructions

See the <u>NAACCR Death Clearance Manual</u>.

There are two SEER requirements that differ from the current NAACCR manual. SEER requires

- Use of all entries on the death certificate to be matched at the patient level, not just the underlying cause of death
- 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 XML NAACCR ID: dateOfLastContact

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.

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 data items 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 data items 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.

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 data item 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 deceased patients
 - a. Death certificate only (DCO) cases
 - b. 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" 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

Vital Status

Item Length: 1 NAACCR Item #: 1760 NAACCR Name: Vital Status XML NAACCR ID: vitalStatus

SEER requires the registries to update the follow up information on all cases on an annual basis. This data item 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 data item 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
 - a. Deceased patients
 - b. Death certificate only (DCO) cases
 - c. Autopsy only cases

ICD Code Revision Used for Cause of Death

Item Length: 1 NAACCR Item #: 1920 NAACCR Name: ICD Revision Number XML NAACCR ID: icdRevisionNumber

SEER requires the registries to update the follow up information on all cases on an annual basis. This data item shows the revision of the International Classification of Diseases (ICD) used to code the underlying cause of death. This data item 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 XML NAACCR ID: causeOfDeath

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 data item 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, leave the fourth character blank *Note*: This is a change from previous instructions.
- 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	C73
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.

Survival Data Items

Effective January 1, 2015, there were seven new NAACCR data items to facilitate survival analysis by NAACCR registries. The data items 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	XML NAACCR ID
1782	Surv-Date Active Followup	survDateActiveFollowup
1783	Surv-Flag Active Followup	survFlagActiveFollowup
1784	Surv-Mos Active Followup	survMosActiveFollowup
1785	Surv-Date Presumed Alive	survDatePresumedAlive
1786	Surv-Flag Presumed Alive	survFlagPresumedAlive
1787	Surv-Mos Presumed Alive	survMosPresumedAlive
1788	Surv-Date DX Recode	survDateDxRecode

No Patient Contact Flag

Item Length: 1 NAACCR Item #: 1854 NAACCR Name: No Patient Contact Flag XML NAACCR ID: noPatientContactFlag

No Patient Contact Flag, effective 01/01/2023, flags a record when a patient, family member, or provider informs the physician, hospital, or central registry that they do not want to be contacted for research purposes. This data item is populated by the central registry.

Restrictions on release do not apply to routine surveillance reporting to NCI, CDC, and NAACCR, for which all reportable tumor records are to be submitted. It also does not apply to release for studies where no patient contact is planned. This data item is applied at the patient level and used to exclude all tumor records of the patient. It is used in combination with the data item *Reporting Facility Restriction Flag* (NAACCR Item # 1856) to identify data at the patient and tumor level that the registry may not be allowed to release.

Code	Description
0	Patient may be contacted for research purposes
1	Patient may NOT be contacted for research purposes, per notification from patient, family member, or provider

Coding Instructions

- 1. Code this data item as either 0 or 1. Blanks are not allowed regardless of diagnosis year.
 - a. This data item should always have a value for all diagnosis years. If there is not a known restriction, then code 0 (e.g., the person can be contacted unless known otherwise).
- 2. Assign the code that best describes whether the patient should or should not be contacted for research purposes
- 3. Assign this flag at the patient-level so that it can be used to flag release of all associated tumors
- 4. Code 1 takes precedence over code 0 when consolidating records

Reporting Facility Restriction Flag

Item Length: 2 NAACCR Item #: 1856 NAACCR Name: Reporting Facility Restriction Flag XML NAACCR ID: reportingFacilityRestrictionFlag

Reporting Facility Restriction Flag, effective 01/01/2023, flags cases that the central cancer registry may not be allowed to release for research and certain other types of uses due to the restrictions of the reporting facility. This data item is populated by the central registry.

Case data, regardless of the reporting facility, can be released for routine surveillance reporting to NCI, CDC, and NAACCR, for which all reportable tumor records are to be submitted. This item is used in combination with the data item *No Patient Contact Flag* (NAACCR Item #1854) to identify data that the registry may not be allowed to release.

Code	Description	
00	No restrictions on release based on reporting facility. This code is assigned if the tumor record only reported by a facility without potential restrictions on release of data (e.g., in-state hospita physician offices, pathology lab). The code is also assigned if the tumor record is reported by both a facility without restrictions and a facility listed below that potentially has restrictions. F example, if an in-state hospital and a VHA facility report the same tumor, code 00 would be assigned upon consolidation.	
01	OOS: Tumor records received only from Out of State (OOS) data exchange with another central registry	
02	VHA: Tumor records received only from Veterans Health Administration (VHA)	
03	DoD: Tumor records received only from Department of Defense (DOD)	
04	VHA and OOS	
05	DoD and OOS	
06	DoD and VHA	
07	DoD, VHA and OOS	

Coding Instructions

- 1. Code this data item using the most appropriate code. Blanks are not allowed regardless of diagnosis year.
 - a. This data item should always have a value for all diagnosis years. If there is no known restriction, assign code 00.
- 2. Assign code 00 when codes 01-07 do not apply
- 3. Record the flag that best describes the reporting facility(ies) that have contributed to the case
- 4. Update the flag when additional reporting facilities contribute to the case
- 5. Work with software vendors to populate this data item for information previously captured in other fields and/or based on the reporting facilities contributing to the case

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 XML NAACCR ID: overRideSiteType

Site/Type Interfield Review (used by edits: IF25, IF25_3, IF510)

This data item is used to flag those cases where the primary site and histology are unusual.

escription	
Not reviewed, or reviewed and corrected	
eviewed and confirmed as reported: The coding of an unusual combination of primary site and stologic type has been reviewed	
)1 ;1	

Histology/Behavior Interfield Review

Item Length: 1 NAACCR Item #: 2040 NAACCR Name: Over-ride Histology XML NAACCR ID: overRideHistology

Histology/Behavior Interfield Review (used by edits: IF31_3, Morph_P2, MorphICDO3_P1, MorphICDO3_P4)

This data item 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 XML NAACCR ID: overRideAgeSiteMorph

Age/Site/Histology Interfield Review (used by edits: IF13, IF15, IF15_3, IF47, IF118, IF119, S011)

This data item 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 XML NAACCR ID: overRideSeqnoDxconf

Sequence Number/Diagnostic Confirmation Interfield Review (used by edit: IF23)

This data item 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 XML NAACCR ID: overRideSiteLatSeqno

Site/Histology/Laterality/Sequence Number Interrecord Review (used by edits IR09, IR09_3)

This data item 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 XML NAACCR ID: overRideSurgDxconf

Surgery/Diagnostic Confirmation Interfield Review (used by edits: IF46 and IF76)

This data item 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 XML NAACCR ID: overRideReportSource

Type of Reporting Source/Sequence Number Interfield Review (used by edit: IF04_3)

This data item 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 XML NAACCR ID: overRideIllDefineSite

Sequence Number/Ill-defined Site Interfield Review (used by edit: IF22_3)

This data item 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 XML NAACCR ID: overRideLeukLymphoma

Leukemia or Lymphoma/Diagnostic Confirmation Interfield Review (used by edits: IF48 and IF48 3)

This data item 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 XML NAACCR ID: overRideNameSex

Over-ride Flag for Name/Sex

Over-ride Flag for Name/Sex, effective 01/01/2018, does not allow extremely rare or nonexistent combinations of first name and sex, such as John/female. Edits do not apply to this data item as registries use this internally and it is not transmitted to SEER.

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 XML NAACCR ID: overRideSiteBehavior

Over-ride Flag for Site/Behavior (Interfield Edit 39) (used by edit: IF39_3)

This data item 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 XML NAACCR ID: overRideSiteEodDxDt

Over-ride Flag for Site/EOD/Diagnosis Date (used by edits: IF40_3 and IF176)

This data item 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 XML NAACCR ID: overRideSiteLatEod

Over-ride Flag for Site/Laterality/EOD (Interfield Edit 41) (used by edits: IF41_3 and IF177)

This data item 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 do 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 XML NAACCR ID: overRideSiteLatMorph

Over-ride Flag for Site/Laterality/Morphology (Interfield Edit 42) (used by edit: IF42_3)

This data item 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 XML NAACCR ID: overRideTnmTis

Over-ride Flag for TNM Tis (used by edit IF623)

This data item, effective 01/01/2018, 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
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 XML NAACCR ID: overRideSiteTnmStggrp

Over-ride Flag for Site/TNM-Stage Group (used by edits: IF506, IF507, IF508, IF509, IF610, IF611, IF613)

This data item, effective 01/01/2018, 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