Cancer

PROGRAMS

AMERICAN COLLEGE OF SURGEONS

NATIONAL
CANCER
DATABASE

National Cancer Database Participant User File

2024 Data Dictionary

Includes patients diagnosed in 2004-2024

Contact NCDB_PUF@facs.org with any questions about the data items. The CoC reserves the right to modify or update this Data Dictionary as or when the need arises.

Revised March 2026

Table of Contents

Layout of Data Dictionary Items

Each data item in the Data Dictionary includes the following elements:

Data Dictionary Category

Each item is categorized into one of eleven groups: Facility and Patient Demographics, Cancer Identification, Stage of Disease Traditional AJCC Staging System, Stage of Disease AJCC 8th Edition Staging System, Stage of Disease Collaborative Stage Data Collection System, Treatment, Treatment: Surgery, Treatment: Radiation, Treatment: Systemic, Treatment: Other Treatment, and Outcomes.

Information about the Collaborative Stage (CS) system can be accessed by the links on the PUF web page.

PUF Data Item Name

Identifies the name applied to the data item in the distributed PUF file syntax.

NAACCR Item Number

The North American Association of Central Cancer Registries (NAACCR) facilitates standards for data collection and transmission among and between hospital, state, regional and national cancer registries (*Standards for Cancer Registries Volume II: Data Standards and Data Dictionary).* Links to the NAACR and other registry manuals are found on the Links section on the PUF web page. Each item in the PUF is either drawn directly from data reported from CoC-accredited cancer program registries, in which case the NAACCR Item # is provided for investigators to identify documentation related to this item in other coding manuals, or references that are commonly used across the cancer registry surveillance system in the United States and Canada.

In some cases, no NAACCR item # is provided. These items have been linked from other data sources available to the CoC/NCDB or have been derived by the NCDB from data provided from the reporting cancer registries.

Diagnosis Years Available

Identifies the diagnosis year(s) the data item was available in the PUF.

Length

The total number of characters used by the item.

Allowable Values

The value(s) or range of values coded in the item.

Description

A working description of the item.

Registry Coding Instructions

A detailed account of the coding directives provided to cancer registrars in the FORDs manual. Derived variables or variables not in the FORDs manual will have no instructions.

Analytic Note

On occasion, additional information is made available that may indicate where added information related to the item may be located, whether the item is only available in the PUF for certain diagnosis years, or if experience from previous analytic work with the item warrants special attention or possible consideration by investigators.

Codes /Definitions

The list of code and the code labels for the data item are provided.

The information provided in this PUF *Data Dictionary* should be used by investigators applying for access to the NCDB PUF, and when conducting analyses of the data. Successful candidates will receive access to a PUF that will be issued by the American College of Surgeons' (ACoS) Commission on Cancer (CoC) in 2026. This document represents the current set of items expected to be released. The CoC reserves the right to modify or update this or any other resource as or when the need arises.

Facility and Patient Demographics

Case Key

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: PUF_CASE_ID

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 37

Allowable Values: Alphanumeric (uppercase and lowercase)

Description: Unique case identification number assigned to the case in the PUF.

Registry Coding Instructions: Not applicable.

Analytic Note:

NCDB assigned value that uniquely identifies each case included in the PUF. The value assigned to each case is selected at random, and the value assigned to each case will change with each issued PUF. The PUF *Case Keys* are not the same across cancer sites, and cases cannot be linked across cancer sites.

Note that the length of this key was expanded from 10 to 37 in January 2014.

Facility Key

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: PUF_FACILITY_ID

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 10

Allowable Values: Alphanumeric (uppercase)

Description:

> The facility reporting the case to the NCDB. Codes are anonymized. The random *Facility Keys* are assigned regardless of cancer site, so you may identify the same facilities across cancer sites.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Facility Type

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: FACILITY_TYPE_CD

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

Each facility reporting cases to the NCDB is assigned a category classification by the Commission on Cancer Accreditation program. This item provides a general classification of the structural characteristics of each reporting facility.

Registry Coding Instructions: Not applicable.

Analytic Note:

For additional information about CoC accreditation categories see:

https://www.facs.org/quality-programs/cancer-programs/commission-on-cancer/coc-accreditation/categories/

See "Privacy Rule and Patient Case Records" document for a description of the handling of some categories.

This item is suppressed for cases aged 0-39.

Code	Definition
1	Community Cancer Program
2	Comprehensive Community Cancer Program
3	Academic/Research Program (includes NCI-designated comprehensive cancer centers)
4	Integrated Network Cancer Program
blank	Not available

Facility Location

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: FACILITY_LOCATION_CD

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 9, blank

Description: The US Census Division of the reporting facility.

Registry Coding Instructions: Not applicable.

Analytic Note: This item is suppressed for cases aged 0-39.

Code	Definition	State Grouping
1	New England	CT, MA, ME, NH, RI, VT
2	Middle Atlantic	NJ, NY, PA
3	East North Central	IL, IN, MI, OH, WI
4	West North Central	IA, KS, MN, MO, ND, NE, SD
5	South Atlantic	DC, DE, FL, GA, MD, NC, SC, VA, WV
6	East South Central	AL, KY, MS, TN
7	West South Central	AR, LA, OK, TX
8	Mountain	AZ, CO, ID, MT, NM, NV, UT, WY
9	Pacific	AK, CA, HI, OR, WA
blank	Not available	Not available

Patient Treated in More than One CoC Facility Flag

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: PUF_MULT_SOURCE

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0, 1

Description:

Identifies whether there was more than one CoC facility that submitted a report for this case to NCDB.

Registry Coding Instructions: Not applicable.

Analytic Note:

All CoC accredited programs that initially diagnose a patient or that provide all or part of first course treatment report the case. If more than one facility submitted a report, the "best" is provided in the PUF file based on the recency of patient contact with the program, completeness of coded detail, and/or edit quality, where differences exist.

The record used in the case of ties is arbitrary. If this item is coded 0, only one facility provided a report for this cancer.

This item is used for hospital level comparisons, surgical volume, distance or other hospital level computations in order to take into account cases treated at more than one hospital.

If a patient received treatment in an outpatient facility or a non-CoC accredited facility, they could still have a code of 0 for this variable, if only one record for this patient was submitted to the NCDB. For these patients, they could have a Summary Treatment variable indicating that they received treatment (for example Chemotherapy = 1, 2 or 3), but the hospital level treatment variable could indicate that no treatment was received at the facility included in the PUF (for example Chemotherapy at this Facility = 0). This would occur if a patient was diagnosed and/or treated in only one CoC facility but received treatment in an outpatient setting or in a non-CoC facility.

Code	Definition
0	Only one CoC facility reported this case to NCDB
1	Records pertaining to this case submitted to NCDB by more than one CoC facility

Reference Date Flag

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: PUF_REFERENCE_DATE_FLAG

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0, 1

Description:

Identifies whether a report for a case has a diagnosis date before or after the facility's reference date.

Registry Coding Instructions: Not applicable.

Analytic Note:

Every facility has a reference date, from which they are accountable for the completeness of the data for cases diagnosed in that year through the present. Since a facility may request to move their reference date forward, there are some instances where a case's diagnosis year falls before the facility's reference date. This item is coded 0 in cases where this occurs. A value of 1 signifies cases where the diagnosis year is on or after the reference date year. Reports for cases whose diagnosis date is prior to the reference date cannot be changed or updated by the facility. For this reason, PUF researchers may choose to omit cases where the diagnosis date precedes the reference date, depending on the nature of the study.

Code	Definition
0	Diagnosis date before reference date
1	Diagnosis date on or after reference date

Age at Diagnosis

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: AGE

NAACCR Item #: 230

Diagnosis Years Available: 2004 +

Length: 3

Allowable Values: 000 - 090, 999

Description:

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

Registry Coding Instructions:

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

Analytic Note:

In utero *Date of Initial Diagnosis* (NAACCR Item #390) was coded as equal to the *Date of Birth* (NAACCR Item #240) in the past. Beginning in 2009, assignment is to the pre- birth date on which the diagnosis occurs. Age at Diagnosis is assigned 000 for these cases. For compliance with HIPAA privacy requirements, all patients age 90 or over at diagnosis are shown as 090.

Code	Definition
000	Less than one year old, or diagnosed in utero
001 - 089	One to eighty nine years old
090	Ninety or older
999	Age at diagnosis unknown

Sex

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: SEX

NAACCR Item#: 220

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1, 2

Description:

Record the patient's sex as indicated in the medical record.

Registry Coding Instructions: None

Analytic Note:

Due to low case counts, any sex other than male or female is suppressed in the PUF data.

Code	Definition
1	Male
2	Female

Race

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: RACE

NAACCR Item #: 160

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 01 - 08, 10 - 17, 20 - 22, 25 - 28, 30 - 32, 96 - 99

Description:

Identifies the primary race of the person.

Registry Coding Instructions:

Race is analyzed with *Spanish Origin* (NAACCR Item #190). Both items must be recorded. All tumors for the same patient should have the same race code.

Codes 08-13 became effective with diagnoses on or after January 1, 1988. Code 14 became effective with diagnoses on or after January 1, 1994.

Codes 15 was changed from 09 and split into 16 and 17 in 2010; converted cases are likely to appear as 15.

Codes 20-97 became effective with diagnoses on or after January 1, 1991. SEER participants in San Francisco, San Jose, Monterey, and Los Angeles are permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1987.

Analytic Note:

Beginning in 2001 cancer registries recorded multiple race codes, as many as five. These additional race codes are infrequently reported and are not provided as part of this file.

Race continued

Code	Definition
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
17	Pakistani
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
96	Other Asian, including Asian, NOS and Oriental, NOS
97	Pacific Islander, NOS
98	Some other race
99	Unknown by patient

Spanish/Hispanic Origin

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: SPANISH_HISPANIC_ORIGIN

NAACCR Item #: 190

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 9

Description:

Identifies persons of Spanish or Hispanic origin.

Registry Coding Instructions:

Persons of Spanish or Hispanic origin may be of any race, but these categories are generally not used for Native Americans, Filipinos, or others who may have Spanish names.

Code 0 (Non Spanish, Non-Hispanic) for Portuguese and Brazilian persons. If the patient has multiple tumors, all records should have the same code.

Analytic Note: None.

Spanish/Hispanic Origin continued

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

Primary Payor at Diagnosis

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: INSURANCE_STATUS

NAACCR Item #: 630

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 0 - 4, 9

Description:

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

Registry Coding Instructions:

Record the type of insurance reported on the patient's admission page. If more than one payer or insurance carrier is listed on the patient's admission page record the first. If the patient's payer or insurance carrier changes, do not change the initially recorded code.

Analytic Note:

The category Medicare with Supplemental insurance is only reported for patients diagnosed on or after January 1, 2006. Insurance codes are combined for some NAACCR categories.

Code	Definition	Corresponding NAACCR # 630 Codes
0	Not Insured	01, 02
1	Private Insurance / Managed Care	10, 20, 21
2	Medicaid	31, 35
3	Medicare	60-64
4	Other Government	65-68
9	Insurance Status Unknown	99

Percent No High School Degree Quartiles 2000

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: NO_HSD_QUAR_00

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

This measure of educational attainment for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from year 2000 *US Census* data. This item provides a measure of the number of adults in the patient's zip code who did not graduate from high school, and is categorized as equally proportioned quartiles among all US zip codes.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	29.0% +
2	20.0% - 28.9%
3	14.0%-19.9%
4	< 14.0%
blank	Not available

Percent No High School Degree Quartiles 2008-2012

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: NO_HSD_QUAR_12

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

This measure of educational attainment for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from the 2012 *American Community Survey* data, spanning years 2008-2012.

This item provides a measure of the number of adults in the patient's zip code who did not graduate from high school, and is categorized as equally proportioned quartiles among all US zip codes. Comparisons with Census 2000 education data may be done. See https://www.census.gov/acs/ for more information.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	21.0% +
2	13.0% - 20.9%
3	7.0%-12.9%
4	< 7.0%
blank	Not available

Percent No High School Degree Quartiles 2012-2016

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: NO_HSD_QUAR_2016

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

This measure of educational attainment for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from the 2016 *American Community Survey* data, spanning years 2012-2016.

This item provides a measure of the number of adults age 25 or older in the patient's zip code who did not graduate from high school, and is categorized as equally proportioned quartiles among all US zip codes. See https://www.census.gov/acs/ for more information.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	17.6% +
2	10.9% - 17.5%
3	6.3% - 10.8%
4	< 6.3%
blank	Not available

Percent No High School Degree Quartiles 2016-2020

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: NO_HSD_QUAR_2020

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

This measure of educational attainment for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from the 2020 *American Community Survey* data, spanning years 2016-2020.

This item provides a measure of the number of adults age 25 or older in the patient's zip code who did not graduate from high school, and is categorized as equally proportioned quartiles among all US zip codes. See https://www.census.gov/acs/ for more information.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	15.3% +
2	9.1% - 15.2%
3	5.0% - 9.0%
4	< 5.0%
blank	Not available

Median Income Quartiles 2000

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: MED_INC_QUAR_00

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

> Median household income for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from year 2000 *US Census* data. Household income is categorized as quartiles based on equally proportioned income ranges among all US zip codes.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	< $30,000
2	$30,000 - $34,999
3	$35,000 - $45,999
4	$46,000 +
blank	Not available

Median Income Quartiles 2008-2012

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: MED_INC_QUAR_12

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

Median household income for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from the 2012 *American Community Survey* data, spanning years 2008-2012 and adjusted for 2012 inflation. Household income is categorized as quartiles based on equally proportioned income ranges among all US zip codes. Due to differences in collection methodology, comparisons with Census 2000 income data should be done with caution. See https://www.census.gov/acs/ for more information.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	< $38,000
2	$38,000 - $47,999
3	$48,000 - $62,999
4	$63,000 +
blank	Not available

Median Income Quartiles 2012-2016

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: MED_INC_QUAR_2016

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

Median household income for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from the 2016 *American Community Survey* data, spanning years 2012-2016 and adjusted for 2016 inflation. Household income is categorized as quartiles based on equally proportioned income ranges among all US zip codes. See https://www.census.gov/acs/ for more information.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	< $40,227
2	$40,227 - $50,353
3	$50,354 - $63,332
4	$63,333 +
blank	Not available

Median Income Quartiles 2016-2020

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: MED_INC_QUAR_2020

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 4, blank

Description:

Median household income for each patient's area of residence is estimated by matching the zip code of the patient recorded at the time of diagnosis against files derived from the 2020 *American Community Survey* data, spanning years 2016-2020 and adjusted for 2020 inflation. Household income is categorized as quartiles based on equally proportioned income ranges among all US zip codes. See https://www.census.gov/acs/ for more information.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
1	< $46,277
2	$46,277 - $57,856
3	$57,857 - $74,062
4	$74,063 +
blank	Not available

Urban/Rural 2003

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: UR_CD_03

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 9, blank

Description:

Area-based measure of rurality and urban influence, using the typology published by the USDA Economic Research Service.

Registry Coding Instructions: Not applicable

Analytic Note:

This item was estimated by matching the state and county FIPS code of the patient recorded at the time of diagnosis against 2003 files published by the United States Department of Agriculture Economic Research Service at: https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/.

Rural-Urban continuum codes form a classification scheme that distinguishes metropolitan (metro) counties by the population size of their metro area, and nonmetropolitan (non-metro) counties by degree of urbanization and adjacency to a metro area or areas. The metro and non-metro categories have been subdivided into three metro and six non-metro groupings, resulting in a nine-part county codification. The codes allow researchers working with data to break such data into finer residential groups beyond a simple metro/non-metro dichotomy, particularly for the analysis of trends in non-metro areas that may be related to degree of rurality and metro proximity.

Urban/Rural 2003 continued

Code	Definition	Rural Urban Grouping
1	Counties in metro areas of 1 million population or more	Metro
2	Counties in metro areas of 250,000 to 1 million population	Metro
3	Counties in metro areas of fewer than 250,000 population	Metro
4	Urban population of 20,000 or more, adjacent to a metro area	Urban
5	Urban population of 20,000 or more, not adjacent to a metro area	Urban
6	Urban population of 2,500 to 19,999, adjacent to a metro area	Urban
7	Urban population of 2,500 to 19,999, not adjacent to a metro area.	Urban
8	Completely rural or less than 2,500 urban population, adjacent to a metro area	Rural
9	Completely rural or less than 2,500 urban population, not adjacent to a metro area	Rural
blank	Not available	Not available

Urban/Rural 2013

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: UR_CD_13

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 9, blank

Description:

Area-based measure of rurality and urban influence, using the typology published by the USDA Economic Research Service.

Registry Coding Instructions: Not applicable.

Analytic Note:

This item was estimated by matching the state and county FIPS code of the patient recorded at the time of diagnosis against 2013 files published by the United States Department of Agriculture Economic Research Service (https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/).

Rural-Urban continuum codes form a classification scheme that distinguishes metropolitan (metro) counties by the population size of their metro area, and nonmetropolitan (non-metro) counties by degree of urbanization and adjacency to a metro area or areas. The metro and non-metro categories have been subdivided into three metro and six non-metro groupings, resulting in a nine part county codification. The codes allow researchers working with data to break such data into finer residential groups beyond a simple metro/non-metro dichotomy, particularly for the analysis of trends in non-metro areas that may be related to degree of rurality and metro proximity.

Since labels for the 2013 classification codes are the same as the 2003 labels, a direct comparison with the 2003 Urban/Rural codes may be made.

Urban/Rural 2013 continued

Code	Definition	Rural Urban Grouping
1	Counties in metro areas of 1 million population or more	Metro
2	Counties in metro areas of 250,000 to 1 million population	Metro
3	Counties in metro areas of fewer than 250,000 population	Metro
4	Urban population of 20,000 or more, adjacent to a metro area	Urban
5	Urban population of 20,000 or more, not adjacent to a metro area	Urban
6	Urban population of 2,500 to 19,999, adjacent to a metro area	Urban
7	Urban population of 2,500 to 19,999, not adjacent to a metro area	Urban
8	Completely rural or less than 2,500 urban population, adjacent to a metro area	Rural
9	Completely rural or less than 2,500 urban population, not adjacent to a metro area	Rural
blank	Not available	Not available

Urban/Rural 2023

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: UR_CD_23

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 9, blank

Description:

Area-based measure of rurality and urban influence, using the typology published by the USDA Economic Research Service.

Registry Coding Instructions: Not applicable.

Analytic Note:

This item was estimated by matching the state and county FIPS code of the patient recorded at the time of diagnosis against 2023 files published by the United States Department of Agriculture Economic Research Service (https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/).

Rural-Urban continuum codes form a classification scheme that distinguishes metropolitan (metro) counties by the population size of their metro area, and nonmetropolitan (non-metro) counties by degree of urbanization and adjacency to a metro area or areas. The metro and non-metro categories have been subdivided into three metro and six non-metro groupings, resulting in a nine part county codification. The codes allow researchers working with data to break such data into finer residential groups beyond a simple metro/non-metro dichotomy, particularly for the analysis of trends in non-metro areas that may be related to degree of rurality and metro proximity.

In 2023, the lower limit for defining urban areas increased from 2,500 to 5,000 people.

Urban/Rural 2023 continued

Code	Definition	Rural Urban Grouping
1	Counties in metro areas of 1 million population or more	Metro
2	Counties in metro areas of 250,000 to 1 million population	Metro
3	Counties in metro areas of fewer than 250,000 population	Metro
4	Urban population of 20,000 or more, adjacent to a metro area	Urban
5	Urban population of 20,000 or more, not adjacent to a metro area	Urban
6	Urban population of 5,000 to 20,000, adjacent to a metro area	Urban
7	Urban population of 5,000 to 20,000, not adjacent to a metro area	Urban
8	Completely rural or less than 5,000 urban population, adjacent to a metro area	Rural
9	Completely rural or less than 5,000 urban population, not adjacent to a metro area	Rural
blank	Not available	Not available

Medicaid Expansion Status State Group

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: PUF_MEDICAID_EXPN_CODE

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 2, 9, blank

Description:

As of 2023, patient state at diagnosis grouped by Medicaid expansion status 2010 +.

Registry Coding Instructions: Not applicable.

Analytic Note: This variable is suppressed for ages 0-39.

Code	Definition	State Grouping
0	Non-Expansion States	WY, WI, KS, TX, TN, MS, AL, GA, SC, FL
1	January 2014 Expansion States	KY, NV, CO, OR, NM, WV, AR, RI, AZ, MD, MA, ND, OH, IA, IL, VT, HI, NY, DE
2	Early Expansion States (2010-2013)	WA, CA, NJ, MN, DC, CT
3	Late Expansion States (after Jan. 2014)	NH, IN, MI, PA, AK, MT, LA, NC, ID, MO, UT, SD, VA, OK, NE, ME
9	Suppressed for Ages 0-39	Not available
blank	State Missing or Out of U.S.	Not available

Reference: https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/

Great Circle Distance

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: CROWFLY

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: Numeric (0-999999.9), blank

Description:

The "great circle" distance in miles between the patient's residence and the hospital that reported the case.

Registry Coding Instructions: Not applicable.

Analytic Note:

Residential latitude and longitude are based on the patient's zip code centroid or on the city if the zip code was not available. Hospital locations are based on the street address for the facility. The great circle distance is calculated between those two points. In some instances, the residential city is outside of the United States, so the upper bound of distance may be quite large. A distance of 0 can result when the patient lives in the same zip code where the facility is located.

The Haversine (half-versed-sine) formula is used to calculate the distance between the two locations. It was published *by R W Sinnott in Sky and Telescope, 1984*, though known about for much longer by navigators.

Charlson-Deyo Score

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: CDCC_TOTAL_BEST

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 3

Description:

Comorbid conditions as described by Charlson-Deyo (1992)[1] are mapped from as many as ten reported ICD-9-CM or ICD-10 secondary diagnosis codes. The Charlson-Deyo value is a weighted score derived from the sum of the scores for each of the comorbid conditions listed in the Charlson Comorbidity Score Mapping Table

The range for this value is between 0 and 25. Starting with the 2015 PUF released in the Fall of 2017, ICD-10 codes are incorporated into the score calculation for cases diagnosed in 2006 to present.

Registries were able to submit ICD-10 codes starting in 2006. However, very few ICD-10 codes were submitted until 2015. The present Charlson-Deyo Score is derived from the highest score that is calculated from using either the ICD-9 codes or the ICD-10 codes.

More information about the Charlson-Deyo Comorbidity Index may be found on the University of Manitoba's website at:

http://mchp-appserv.cpe.umanitoba.ca/viewConcept.php?conceptID=1098

1

Source: Deyo RA, Cherkin DC, Ciol MA. Adapting a clinical comorbidity index for use with ICD-9-CM administrative databases. Journal of Clinical Epidemiology 1992;45(6):613-619.

Registry Coding Instructions: Not applicable

Analytic Note:

Because of the small proportion of cases with a Charlson-Deyo Comorbidity score exceeding 3, the data have been truncated to 0, 1, 2, 3 (greater than or equal to 3). A score of 0 indicates "no comorbid conditions recorded", or none of the values shown below. Patients with a score of 0 could still have comorbidities if they are conditions that are not included in the mapping table below. Note that the patient's cancer is not directly reflected in the recorded score.

Two examples illustrating how the Charlson-Deyo Score is summarized for the PUF data: If a patient had a myocardial infarction, diabetes, and renal disease, the cumulative score would be 4, and the value shown in the PUF would be 3. If a patient had severe liver disease, the value in the PUF would also be 3, since the Charlson-Deyo Score of severe liver disease is 3.

Values Reported in the PUF for Charlson-Deyo Score

Code	Definition
0	Total Charlson-Deyo Score of 0
1	Total Charlson-Deyo Score of 1
2	Total Charlson-Deyo Score of 2
3	Total Charlson-Deyo Score of 3 or more

Charlson-Deyo Comorbidity Score Mapping Table	
Condition	**Charlson-Deyo Score***
Myocardial Infarction	1
Congestive Heart Failure	1
Peripheral Vascular Disease	1
Cerebrovascular Disease	1
Dementia	1
Chronic Pulmonary Disease	1
Rheumatologic Disease	1
Peptic Ulcer Disease	1
Mild Liver Disease	1
Diabetes	1
Diabetes with Chronic Complications	2
Hemiplegia or Paraplegia	2
Renal Disease	2
Moderate or Severe Liver Disease	3
AIDS	6

*Individual Charlson scores are not provided in the PUF. Instead, the Charlson scores are summed for each patient and categorized by a value of 0, 1, 2 and 3 or more. A zero score means they had none of the conditions in the mapping table. They could have had other comorbid conditions however.

NCDB--SARSCoV2--Test

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: SARSCOV2_TEST

NAACCR Item #: 3943

Diagnosis Years Available: 2020 - 2021

Length: 1

Allowable Values: 0, 1, 9, blank

Description: Data item is designed to track whether patient received a SARS-CoV_2 test or not.

Rational: To evaluate the impact of COVID-19 diagnosis on cancer patients.

Registry Coding Instructions:

Collection based on diagnosis years 2020 and 2021.

Code only a confirmed diagnostic test for SARS-CoV-2, the virus that causes the 2019 novel coronavirus disease (COVID-19), as documented by a medical provider (i.e. lab report); preadmission or hospital testing is in the record.

If hospital is in a SEER registry area, registrar may use the existing SEER text fields may be used as a source to support the data item code selected.

Diagnostic tests [reverse transcriptase-polymerase chain reaction (RT-PCR) tests] are based on detection of viral ribonucleic acid (RNA). Serologic antibody tests (for total antibody or IgM, IgA, and/or IgG antibodies) are not diagnostic tests for active SARS-CoV-2 infection.

Testing can be either inpatient, outpatient or emergency room visit.

This item may be left blank.

Analytic Note: Not applicable.

Code	Definition
0	Patient not tested for SARS-CoV-2: facility records support that patient did not undergo pre-admit or in-hospital testing
1	Patient tested for Active SARS-CoV-2
9	Unknown if patient tested for SARS-CoV-2/No facility record of preadmit hospital testing of SARS-CoV-2

NCDB--SARSCoV2--Pos

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: SARSCOV2_POS

NAACCR Item #: 3944

Diagnosis Years Available: 2020 - 2021

Length: 1

Allowable Values: 0, 1, 9 blank

Description:

Data item is designed to track whether patient received a POSITIVE SARS-CoV-2 test or not.

Rational: To evaluate the impact of COVID-19 diagnosis on cancer patients.

Registry Coding Instructions:

Code a confirmed diagnostic SARS-CoV-2 test was performed to diagnose the 2019 novel coronavirus disease (COVID-19) as documented by a medical provider (i.e. lab report).

If hospital is in a SEER registry area, registrar may use the exiting SEER text fields as a source for coding.

Diagnostic tests [reverse transcriptase-polymerase chain reaction (RT-PCR) tests] are based on detection of viral ribonucleic acid (RNA). Serologic antibody tests (for total antibody or IgM, IgA, and/or IgG antibodies) are not diagnostic tests for active SARS-CoV-2 infection.

Testing can be either inpatient, outpatient or emergency room visit.

This item may be left blank.

Analytic Note: Not applicable.

Code	Definition
0	Patient did not test positive for active SARS-CoV-2: No positive test
1	Patient tested positive for active SARS-CoV-2; test positive on at least one test
9	Unknown if tested; test done, results unknown

Elapsed Days from DX to Date of First Positive COVID Test

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: SARSCOV2_POS_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2020 – 2021

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the Date of Initial Diagnosis (NAACCR Item #390) and the NCDB--SARSCoV2--Pos Date [what was the date of the first positive test?] (NAACCR Item #3945).

Rational: To evaluate the impact of COVID-19 diagnosis on cancer patients.

Registry Coding Instructions:

Record the date the patient had a positive test for SARS-CoV-2, the virus that causes the 2019 novel coronavirus disease (COVID-19), as documented by a medical provider.

When multiple interpretations are available for multiple viral tests, record the date of the first positive diagnostic SARS-CoV-2 test. Diagnostic tests [reverse transcriptase-polymerase chain reaction (RT-PCR) tests] are based on detection of viral ribonucleic acid (RNA). Serologic antibody tests (for total antibody or IgM, IgA, and/or IgG antibodies) are not diagnostic tests for active SARS-CoV-2 infection.

If both positive diagnostic tests and positive serologic tests are reported in the medical record, code the date for the first positive diagnostic test.

Leave the field blank when a date of the test is unknown or the date of a positive (diagnostic or serologic) test is unknown for SARS-CoV-2.

Analytic Note: Not applicable.

Code	Definition
-9999999 – 99999999	Number of elapsed days from date of initial diagnosis to date the patient had a positive test for SARS-CoV-2, the virus that causes the 2019 novel coronavirus (COVID-19), as documented by a medical provider
blank	Date of test is unknown or the date of a positive (diagnostic or serologic) test is unknown for SARS-CoV-2

Tobacco Use Smoking Status

Data Dictionary Category: Facility and Patient Demographics

PUF Data Item Name: TOBACCO_USE

NAACCR Item #: 344

Diagnosis Years Available: 2023+

Length: 1

Allowable Values: 0- 3, 9

Description:

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

Rational:

Cigarette smoking is the leading preventable cause of death in the United States and a major risk factor for cancer.

Reliable registry-based tobacco use data will help public health planners and clinicians target and assess tobacco control efforts.

Tobacco use data at diagnosis may help health professionals better understand how tobacco use impacts cancer outcomes, prognosis, and effectiveness of treatment.

Smoking status may be a useful covariate risk factor for cancer cluster investigations.

Registry Coding Instructions:

Record cigarette, cigar and/or pipe use only. Tobacco Use Smoking Status does not include marijuana, chewing tobacco, e-cigarettes, or vaping devices.

Tobacco smoking history can be obtained from sections such as the Nursing Interview Guide, Flow Chart, Vital Stats or Nursing Assessment section, or other available sources from the patient's hospital medical record or physician office record.

Use code 1 (Current smoker) if there is evidence in the medical record that the patient quit smoking within 30 days prior to diagnosis. The 30 days prior information is intended to differentiate patients who may have quit recently due to symptoms that led to a cancer diagnosis.

Use code 2 (Former smoker) if medical record indicates patient smoked tobacco in the past but does not smoke now. Patient must have quit 31 or more days prior to cancer diagnosis to be coded as ‘Former smoker’ (see above instruction).

Use code 3 (Ever Smoked, current status unknown) if it cannot be determined whether patient currently smokes or formerly smoked. For example, the medical record only indicates “Yes” for smoking without further information.

Use code 9 (Unknown if ever smoked) rather than code 0 (Never used),

if the medical record only indicates “No” for tobacco use

smoking status is not stated or provided

the method (cigarette, pipe, cigar) used cannot be verified in the chart.

Analytic Note: None

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

Cancer Identification

Sequence Number

Data Dictionary Category: Cancer Identification

PUF Data Item Name: SEQUENCE_NUMBER

NAACCR Item #: 560

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 - 88, 99

Description:

Indicates the sequence of malignant and non-malignant neoplasms over the lifetime of the patient.

Registry Coding Instructions:

Codes 00 - 59 and 99 indicate neoplasms of in situ or invasive malignant behavior (Behavior equals 2 or 3). Codes 60 - 88 indicate neoplasms of benign or borderline non-malignant behavior (Behavior equals 0 or 1).

Code 00 only if the patient has a single malignant primary. If the patient develops a subsequent malignant invasive or in situ primary tumor, change the code for the first tumor from 00 to 01, and number subsequent tumors sequentially.

Code 99 is used in the rare situation for which the sequence of a malignant invasive or in situ tumor is unknown.

Code 60 only if the patient has a single non-malignant primary. If the patient develops a subsequent non-malignant primary, change the code for the first tumor from 60 to 61, and assign codes to subsequent non-malignant primaries sequentially.

Code 88 is used in the rare situation for which the sequence of a benign or borderline tumor is unknown,

If two or more malignant invasive or in situ neoplasms are diagnosed at the same time, assign the lowest sequence number to the diagnosis with the worst prognosis. If no difference in prognosis is evident, the decision is arbitrary.

If two or more non-malignant neoplasms are diagnosed at the same time, assign the lowest sequence number to the diagnosis with the worst prognosis. If no difference in prognosis is evident, the decision is arbitrary.

Any tumor in the patient's past which is reportable or reportable-by-agreement must be taken into account when sequencing subsequently accessioned tumors.

Sequence numbers should be reassigned if the facility learns later of an unaccessioned tumor that affects the sequence.

Analytic Note: None.

Code	Definition	Type of Primaries
00	One malignant or *in situ* primary only in the patient's lifetime	Malignant or In Situ
01	First of two or more independent malignant or *in situ* primaries	Malignant or In Situ
02	Second of two or more independent malignant or *in situ* primaries	Malignant or In Situ
…		Malignant or In Situ
…	(Actual sequence of this malignant or *in situ* primary)	Malignant or In Situ
…		Malignant or In Situ
59	Fifty-ninth of 59 or more independent malignant or *in situ* primaries	Malignant or In Situ
60	One nonmalignant primary only in the patient's lifetime	Non-Malignant
61	First of two or more independent nonmalignant primaries	Non-Malignant
62	Second of two or more independent nonmalignant primaries	Non-Malignant
…		Non-Malignant
…	(Actual sequence of this nonmalignant primary)	Non-Malignant
…		Non-Malignant
87	Twenty-seventh of 27 or more independent nonmalignant primaries	Non-Malignant
88	Unspecified number of independent nonmalignant primaries	Non-Malignant
99	Unknown number of malignant or *in situ* primaries	Malignant or In Situ

Class of Case

Data Dictionary Category: Cancer Identification

PUF Data Item Name: CLASS_OF_CASE

NAACCR Item #: 610

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 10 - 14, 20 - 22

Description:

Classifies cases recorded in the database.

Registry Coding Instructions:

Class of Case has 24 categories. Analytic cases are coded 00-22. Non-analytic cases are coded 30-99. Abstracting for analytic cases is to be completed within six months of the date of first contact.

Analytic Note:

The CoC Accreditation Program does not require hospitals to abstract nonanalytic cases (30-99). Nonanalytic cases are not in the PUF data set, and are not included in the code definitions that follow.

The CoC Accreditation Program does not require Class of Case 00 cases diagnosed in 2006 or later to be staged or followed. They are included in the PUF, but PUF users may want to omit them from some forms of analysis.

Codes for Class of Case were expanded in 2010. For cases diagnosed prior to 2010, conversion of analytic cases was generally to Class of Case 00, 10 and 20; the other codes will not be well populated for earlier cases.

Only Analytic Class of Case codes are included in the table.	
Code	**Definition**
00	Diagnosis at the reporting facility and all treatment or a decision not to treat was done elsewhere
10	Initial diagnosis at the reporting facility, or in an office of a physician with admitting privileges, and part or all of first course treatment or a decision not to treat was at the reporting facility, NOS
11	Initial diagnosis in an office of a physician with admitting privileges, and part of first course treatment was done at the reporting facility
12	Initial diagnosis in an office of a physician with admitting privileges, and all of first course treatment or a decision not to treat was done at the reporting facility
13	Initial diagnosis at the reporting facility and part of first course treatment was done at the reporting facility; part of first course treatment was done elsewhere
14	Initial diagnosis at the reporting facility and all of first course treatment or a decision not to treat was done at the reporting facility
20	Initial diagnosis elsewhere and all or part of first course treatment or a decision not to treat was done at the reporting facility, NOS
21	Initial diagnosis elsewhere and part of first course treatment was done at the reporting facility; part of first course treatment was done elsewhere
22	Initial diagnosis elsewhere and all of first course treatment or a decision not to treat was done at the reporting facility

Year of Diagnosis

Data Dictionary Category: Cancer Identification

PUF Data Item Name: YEAR_OF_DIAGNOSIS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 4

Allowable Values: 2004 - 2024

Description:

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

Registry Coding Instructions:

Use *Date of Initial Diagnosis* (NAACC Item #390) whether clinically or histologically confirmed. If the physician states that in retrospect the patient had cancer at an earlier date, then use the earlier date as the date of diagnosis.

Use the date therapy was started as the date of diagnosis if the patient receives a first course of treatment before a definitive diagnosis.
Refer to the list of *Ambiguous Terms* in Section One of *Facility Oncology Registry Data Standards* (*FORDS*) for language that represents a diagnosis of cancer.

Analytic Note:

Cancer registries record the full date of initial diagnosis, only the year portion of the reported date is provided in the PUF based on *Date of Initial Diagnosis* (NAACC Item #390).

Cases with unknown year of diagnosis are not submitted to NCDB.

Primary Site

Data Dictionary Category: Cancer Identification

PUF Data Item Name: PRIMARY_SITE

NAACCR Item #: 400

Diagnosis Years Available: 2004 +

Length: 4

Allowable Values: C000 - C999, blank

Description:

Identifies the primary site, that is, the anatomic site of origin for the cancer.

Registry Coding Instructions:

Record the ICD-O-3 (*International Classification of Diseases for Oncology,* Third Edition) topography code for the site of origin.

Consult the physician advisor to identify the primary site or the most definitive site code if the medical record does not contain that information.

Primary site codes may be found in the ICD-O-3 Topography, Numerical List section (ICD-O-3, p. 43) and in the Alphabetic Index (ICD-O-3, p. 105).

Topography codes are indicated by a "C" preceding the three-digit code number (do not record the decimal point). Follow the coding rules outlined in ICD-O-3, pp. 20-40.

Use subcategory 8 for single tumors that overlap the boundaries of two or more sub-sites and the point of origin is not known.

Use subcategory 9 for multiple tumors that originate in one organ.

Code adenocarcinoma in multiple polyps as a single primary even if they involve more than one segment of the colon.

Code leukemias to bone marrow (C42.1).

Exception: Code myeloid sarcoma to the site of origin (see ICD-O-3 for coding rules).

Analytic Note:

The most current WHO ICD-O-3 manual is publicly available at https://apps.who.int/iris/bitstream/handle/10665/96612/9789241548496_eng.pdf

Laterality

Data Dictionary Category: Cancer Identification

PUF Data Item Name: LATERALITY

NAACCR Item #: 410

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 5, 9

Description:

Identifies the side of a paired organ or the side of the body on which the reportable tumor originated.

This applies to the primary site only.

Registry Coding Instructions:

Code laterality for all paired sites (see *Analytic Note*).

Code all non-paired sites 0 (see *Analytic Note*).

Record laterality for unknown primary site (C80.9) as 0 (not a paired site). Do not code metastatic sites as bilateral involvement.

Code midline lesions 5 (see *Analytic Note*).

Analytic Note:

Beginning with cases diagnosed in 2010, code 5 is used for midline of paired sites. This code is applicable for very few sites, because it requires that the two lateral portions be contiguous (laterality of the skin of most parts of the body has a midline; laterality of the breast does not). For cases diagnosed prior to 2010, the midline was coded 9. Those cases are rare, but will be coded 9 in pre-2010 PUF cases.

Laterality continued

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

The following are paired sites	The following are paired sites (Continued)
Parotid gland	Peripheral nerves and autonomic nervous system of lower limb and hip
Submandibular gland	
Sublingual gland	Connective, cutaneous and other soft tissue of upper limb and shoulder
Tonsillar fossa	
Tonsillar pillar	Connective, cutaneous and other soft tissue of lower limb and hip
Overlapping lesion of tonsil	
Tonsil, NOS	Breast
Nasal cavity (excluding nasal cartilage and nasal septum)	Ovary
	Fallopian tube
Middle ear	Testis
Maxillary sinus	Epididymis
Frontal sinus	Spermatic cord
Main bronchus (excluding carina)	Kidney, NOS
Lung	Renal pelvis
Pleura	Ureter
Long bones of upper limb and scapula	Eye and lacrimal gland
Short bones of upper limb	Cerebral meninges, NOS
Long bones of lower limb	Cerebrum
Short bones of lower limb	Frontal lobe
Rib and clavicle (excluding sterum)	Temporal lobe
Pelvic bones (excluding sacrum, coccyx, and symphysis pubis)	Parietal lobe
	Occipital lobe
Skin of eyelid	Olfactory lobe
Skin of external ear	Optic lobe
Skin of other and unspecified parts of face	Acoustic lobe

Laterality continued

Skin of trunk	Cranial nerve, NOS
Skin of upper limb and shoulder	Adrenal gland
Skin of lower limb and hip	Carotid body
Peripheral nerves and autonomic nervous system of upper limb and shoulder	

Histology

Data Dictionary Category: Cancer Identification

PUF Data Item Name: HISTOLOGY

NAACCR Item #: 522

Diagnosis Years Available: 2004 +

Length: 4

Allowable Values: See *Analytic Note*

Description:

> See *ICD-O-3* and the *Hematopoeitic and Lymphoid Manual Records* for the tumor histology of all cases reported to the NCDB in *International Classification of Disease for Oncology*, Third Edition (ICD-O-3) terms.

Registry Coding Instructions: None.

Analytic Note:

> A list of histologies and labels may be found on the online ICD-O-3 site: http://www.iacr.com.fr/index.php?option=com_content&view=category&layout=blog&id=100&Itemid=577.

Behavior Code

Data Dictionary Category: Cancer Identification

PUF Data Item Name: BEHAVIOR

NAACCR Item #: 523

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 3

Description:

Records the behavior of all cases reported to the NCDB. The fifth digit of the morphology code is the behavior code.

Registry Coding Instructions: None.

Analytic Note:

Benign tumors or tumors of uncertain behavior (behavior codes 0, 1) are not reported to the NCDB except for the following sites: meninges (C70._), brain (C71._), spinal cord, cranial nerves, and other parts of central nervous system (C72._), pituitary gland (C75.1), craniopharyngeal duct (C75.2) and pineal gland (C75.3).

Behavior Code continued

Code	Definition	Additional Definition and Examples
0	Benign	Benign
1	Borderline	Uncertain whether benign or malignant Borderline malignancy Low malignant potential Uncertain malignant potential
2	In-situ and synonymous with in-situ	Adenocarcinoma in an adenomatous polyp with no invasion of stalk Bowen disease (not reportable for C44._) Clark level 1 for melanoma (limited to epithelium) Comedocarcinoma, noninfiltrating (C50._) Confined to epithelium Hutchinson melanotic freckle, NOS (C44._) Intracystic, noninfiltrating (carcinoma) Intraductal (carcinoma) Intraepidermal, NOS (carcinoma) Intraepithelial, NOS (carcinoma) Involvement up to, but not including the basement membrane Lentigo maligna (C44._) Lobular neoplasia (C50._) Lobular, noninfiltrating (C50._) (carcinoma) Noninfiltrating (carcinoma) Noninvasive (carcinoma only) No stromal involvement Papillary, noninfiltrating or intraductal (carcinoma) Precancerous melanosis (C44._) Queyrat erythroplasia (C60._)
3	Invasive	Invasive or microinvasive

Grade/Differentiation

Data Dictionary Category: Cancer Identification

PUF Data Item Name: GRADE

NAACCR Item #: 440

Diagnosis Years Available: 2004 – 2017 (new grading system used in 2018 and later)

Length: 1

Allowable Values: 1 - 9

Description:

Describes the tumor's resemblance to normal tissue. Well differentiated (Grade I) is the most like normal tissue, and undifferentiated (Grade IV) is the least like normal tissue.

Registry Coding Instructions:

Code grade according to ICD-O-3 (pp. 30-31 and 67).

Code the grade or differentiation as stated in the final pathologic diagnosis. If the differentiation is not stated in the final pathologic diagnosis, use the information from the microscopic description or comments.

When the pathology report(s) lists more than one grade of tumor, code to the highest grade, even if the highest grade is only a focus (Rule G, ICD-O-3, p. 21).

Code the grade or differentiation from the pathologic examination of the primary tumor, not from metastatic sites.

When there is no tissue diagnosis, it may be possible to establish grade through magnetic resonance imaging (MRI) or positron emission tomography (PET). When available, code grade based on the recorded findings from these imaging reports.

If the primary site is unknown, code the grade/differentiation as 9 (Unknown).

Code the grade for in situ lesions if the information is available. If the lesion is both invasive and in situ, code only the invasive portion. If the invasive component grade is unknown, then code 9.

Do not use "high grade", "low grade", or "intermediate grade" descriptions for lymphomas as a basis for differentiation. These terms are categories in the Working Formulation of Lymphoma Diagnoses and do not relate to grade/differentiation.

Codes 5-8 define T-cell or B-cell origin for leukemias and lymphomas. T-cell, B-cell, or null cell classifications have precedence over grading or differentiation.

Do not use the WHO grade to code this data item.

If no grade is given for astrocytomas, then code 9 (Unknown).

If no grade is given for glioblastoma multiforme, then code 9 (Unknown).

Analytic Note:

Although ICD-O-2 and ICD-O-3 Grade/Differentiation are collected as separate items, the only difference between the two editions is that code 8 (NK cells) was added after ICD-O-2 was initially published. They are combined in the PUF, as an output to the ICD-O-2 to ICD-O-3 conversion used for histology and behavior. In 2018 a new grading system is used. See the description in the next section.

Code	Definition	Description	Specific Cancer Grouping
1	Grade I, 1, i	Well differentiated; differentiated, NOS	
2	Grade II,2, ii I/III or 1/3	Moderately differentiated; moderately well differentiated; intermediate differentiation	
3	Grade III,3, iii II/III or 2/3	Poorly differentiated; dedifferentiated	
4	Grade IV,4, iv III/III or 3/3	Undifferentiated; anaplastic	
5		T cell; T-precursor	Lymphomas and Leukemias
6		B cell; pre-B; B-precursor	Lymphomas and Leukemias
7		Null cell; non T-non B	Lymphomas and Leukemias
8		NK (natural killer) cell (effective with diagnosis 1/1/95 and after)	Lymphomas and Leukemias
9		Cell type not determined, not stated or not applicable; unknown primaries; high grade dysplasia (adenocarcinoma in situ)	All histologies

Grade/Differentiation 2018+

Data Dictionary Category: Cancer Identification

PUF Data Item Names: Grade_Clin, Grade_Path, Grade_Path_Post

NAACCR Items #: 3843, 3844, 3845

Diagnosis Years Available: 2018 +

Length: 1

Allowable Values: 1-5, 8, 9, A-E, L, H, M, S, blank

Description:

For solid tumors diagnosed 2018 and forward, grade will be collected in three different data items, Grade Clinical, Grade Pathological, and Grade Post Therapy Path, and the codes and coding instructions will depend on the type of cancer. The revised grade codes are based on the recommended grading systems specified in the relevant chapters of the AJCC 8th edition staging manual and/or the CAP cancer protocols (when applicable). For each AJCC chapter that has a recommended grading system, the categories and definitions can be found in the chapter's grade section. The recommended AJCC grading system for a particular chapter are also used for histologic types of tumors occurring in the relevant organs but not eligible for staging in AJCC 8th edition. For AJCC chapters for which there is no recommended grading system (for example, chapter 47, Melanoma of the Skin) or for sites for which there is no applicable AJCC chapter (for example, Trachea), the generic cancer registry grade categories used historically will still apply and will be used for all three grade fields. For cases not eligible for AJCC staging within a specific chapter (for example, a colon case with a specific histology not applicable for staging in chapter 20, Colon and Rectum), grade is still assigned. If the recommended grading system is documented, the registrar is to use that. If a recommended grading system is not documented, the generic cancer registry grade categories apply if they are included in the grade table for that site. Additionally, if a case/site is eligible for TNM staging, grade is still assigned using the recommended AJCC grade, if documented, even if grade is not necessary to determine the TNM stage group. If the recommended grading system is not documented, then the generic cancer registry grade categories apply if they are included in the grade table for site. The tables for grade have been re-structured for 2018 and beyond. There may be a combination of numeric and alphabetic codes within the same table, according to this template.

Template for a Cancer-Specific Grade Table

Code	Grade Description
1	Site Specific Grade System Category
2	Site Specific Grade System Category
3	Site Specific Grade System Category
4	Site Specific Grade System Category
5	Site Specific Grade System Category
8	Not applicable (Hematopoietic neoplasms only)
9	Grade cannot be assessed; Unknown
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated and anaplastic
E	Site Specific Grade System Category
H	High grade
L	Low grade
M	Site Specific Grade System Category
S	Site Specific Grade System Category
Blank	(Post therapy only)

Codes 1-5, H, L, M, S, and 9 all represent AJCC recommended grading systems. Categories L and H are applicable for the AJCC recommended grading systems of “low grade” and “high grade” for those cancers for which these are used (e.g. urinary cancers with urothelial histologies). It also includes M for intermediate grade to be used with L and H for breast in situ cancers. S is utilized for sarcomatous overgrowth in corpus uteri adenosarcoma, an AJCC registry data collection variable. Codes A-E are the generic grade categories (definitions) that have been used by the cancer surveillance community for many years. Codes A-E are not available for all cancers since although many AJCC chapters continue to use the traditional grade terms, many of the chapters now use a three-grade system, instead of the four-grade system. The Grade descriptions and definitions by cancer type are found in the Grade manual on the NAACCR website at: https://apps.naaccr.org/ssdi/list/

Diagnostic Confirmation

Data Dictionary Category: Cancer Identification

PUF Data Item Name: DIAGNOSTIC_CONFIRMATION

NAACCR Item #: 490

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 1 - 9

Description:

Records the most definitive method of diagnostic confirmation of the cancer being reported at any time in the patient's history.

Registry Coding Instructions:

For solid tumors only (histologies other than 9590-9992), this is a hierarchical schema to identify how the malignancy was determined - from histologic confirmation (1) being most precise to unknown (9) being the least. Lower numbered codes take precedence over higher numbered codes. The code must be changed to a lower code if a more definitive method confirms the diagnosis at any time during the course of the disease. Code 3 in the table below does NOT apply to solid tumors.

Separate rules were established for non-solid tumors (histology codes 9590-9992) in 2010. Prior to that, registrars were instructed to use Code 1 for positive hematologic findings and bone marrow specimens for leukemia, including peripheral blood smears and aspiration biopsies. Otherwise, to use Code 2 for positive brushings, washings, cell aspiration, and hematologic findings (except for leukemia).

For non-solid tumors (histology codes 9590-9992) beginning in 2010, the table below is NOT hierarchical, and the rules for assignment are specific to non-solid tumors.

Coding Instructions for All Tumors:

Assign Code 1 when the microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, autopsy, D&C or from aspiration or biopsy of bone marrow specimens.

Assign Code 2 when the microscopic diagnosis is based on cytologic examination of cells such as sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, pleural fluid, urinary sediment, cervical or vaginal smears, or from paraffin

block specimens from concentrated spinal, pleural or peritoneal fluid. These methods are rarely used for hematopoietic or lymphoid tumors.

Assign Code 5 when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that cancer.

Assign Code 6 when the diagnosis is based only on the surgeon's operative report or from a surgical exploration or endoscopy or from gross autopsy findings in the absence of tissue or cytologic findings.

Additional Coding Instructions for Hematopoietic or Lymphoid Tumors (Histologies 9590-9992):

There is no priority hierarchy for coding Diagnostic Confirmation for hematopoietic and lymphoid tumors. Most commonly, the specific histologic type is diagnosed by immunophenotyping or genetic testing. See the Hematopoietic Database (DB) for information on the definitive diagnostic confirmation for specific tumors.

For leukemia only, assign Code 1 when the diagnosis is based only on the complete blood count (CBC), white blood count (WBC) or peripheral blood smear. Do not use Code 1 if the diagnosis was based on immunophenotyping or genetic testing using tissue, bone marrow, or blood.

Assign Code 3 when there is a histologic positive for cancer AND positive immunophenotyping and/or positive genetic testing results. Do not use Code 3 for neoplasms diagnosed prior to January 1, 2010.

Assign Code 8 when the case was diagnosed by any clinical method that cannot be coded as 6 or 7. A number of hematopoietic and lymphoid neoplasms are diagnosed by tests of exclusion where the tests for the disease are equivocal and the physician makes a clinical diagnosis based on the information from the equivocal tests and the patient's clinical presentation.

Assign Code 6 when the diagnosis is based only on the surgeon's operative report from a surgical exploration or endoscopy or from gross autopsy findings in the absence of tissue or cytologic findings.

Assign Code 1 when microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, autopsy or D&C or from aspiration of biopsy bone marrow specimens.

Assign Code 2 when microscopic diagnosis is based on cytologic examination of cells such as sputum smears, bronchial brushings, bronchial washings, prostatic

secretions, breast secretions, gastric fluid, peritoneal fluid, urinary sediment, or peritoneal fluid. These methods are rarely used for hematopoietic or lymphoid cancers.

Assign Code 5 when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer.

Analytic Note:

In 2010, cancer registries in North America adopted new rules for coding hematopoietic and lymphoid tumors. At that time, this item was modified for cases diagnosed in 2010 or later to better reflect the ways these tumors are diagnosed. Code 3 was defined and implemented at that time, and the rules for coding were refined. The instructions and table presented here represent a combination of the new instructions and the older instructions that still apply to solid tumors.

Code	Definition	Description
1	Positive Histology	Histologic confirmation (tissue microscopically examined)
2	Positive Cytology	Cytologic confirmation (no tissue microscopically examined; fluid cells microscopically examined)
3	Positive Histology PLUS positive immunophenotyping and/or positive genetic studies	Histology is positive for cancer, and there are also immunophenotyping and/or genetic test results. For example, bone marrow examination is positive for acute myeloid leukemia (9861/3). Genetic testing shows AML with inv(16) (p13.1q22) (9871/3) Use this code only for histology range 9590-9992 where the year of diagnosis is 2010 or later
4	Positive microscopic confirmation; method not specified	Microscopic confirmation is all that is known. It is unknown if cells were from histology or cytology
5	Positive laboratory test/marker study	A clinical diagnosis of cancer is based on laboratory tests/marker studies which are clinically diagnostic for cancer. Examples include alpha-fetoprotein for liver primaries. Elevated PSA is non-diagnostic of cancer. However, if the physician uses PSA as a basis for diagnosing prostate cancer with no other workup, record as code 5
6	Direct visualization without microscopic confirmation	The tumor was visualized during a surgical/endoscopic procedure only with no tissue resected for microscopic examination
7	Radiography and other imaging techniques without microscopic confirmation	The malignancy was reported by the physician from an imaging technique report only
8	Clinical diagnosis only (other than 5, 6 or 7)	The malignancy was reported by the physician in the medical record, but there is no statement of how the cancer was diagnosed (usually non-analytic)
9	Unknown whether or not microscopically confirmed.	A statement of malignancy was reported in the medical record, but there is no statement of how the cancer was diagnosed. (usually non-analytic)

Regional Lymph Nodes Examined

Data Dictionary Category: Cancer Identification

PUF Data Item Name: REGIONAL_NODES_EXAMINED

NAACCR Item #: 830

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 - 90, 95 - 99

Description:

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

Rationale:

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

Coding Instructions:

Regional lymph nodes only. Record information about only regional lymph nodes in this field. Distant lymph node information should not be coded in this field.

This field is based on pathologic information only. This field is to be recorded regardless of whether the patient received preoperative treatment.

Use of Code 00. Code 00 may be used in several situations.

When the assessment of lymph nodes is clinical.

When no lymph nodes are removed and examined.

When a “dissection” of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination.

If Regional Nodes Examined is coded 00, Regional Nodes Positive is coded as 98.

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

The number of regional lymph nodes examined is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment with the exception of aspiration or core biopsies coded to 95.

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

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

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

When neither the type of lymph node removal procedure nor the number of lymph nodes examined is known, use code 98.

Priority of lymph node counts. If there is a discrepancy regarding the number of lymph nodes examined, use information in the following priority: final diagnosis, synoptic report (also known as CAP protocol or pathology report checklist), microscopic, gross.

Use of code 95. Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue).

Lymph node biopsy. If a lymph node biopsy was performed, code the number of nodes removed, if known. If the number of nodes removed by biopsy is not known, use code 96.

Definition of “sampling” (code 96). A lymph node “sampling” is removal of a limited number of lymph nodes. Other terms for removal of a limited number of nodes include lymph node biopsy, berry picking, sentinel lymph node procedure, sentinel node biopsy, selective dissection. Use code 96 when a limited number of nodes are removed but the number is unknown.

Definition of “dissection” (code 97). A lymph node “dissection” is removal of most or all of the nodes in the lymph node chain(s) that drain the area around the primary tumor. Other terms include lymphadenectomy, radical node dissection, lymph node stripping. Use code 97 when more than a limited number of lymph nodes are removed and the number is unknown.

Multiple lymph node procedures. If both a lymph node sampling and a lymph node dissection are performed and the total number of lymph nodes examined is unknown, use code 97.

Use of Code 99. If it is unknown whether nodes were removed or examined, code as 99.

Primary sites always coded 99. For the following primary sites and histologies, the Regional Nodes Examined field is always coded as 99: C420, C421, C423-C424, C589, C700-C709, C710-C729, C751- C753, C761-C768, C770-C779, or C809.

For the following schemas, the Regional Nodes Examined field is always coded as 99. Placenta, Brain and Cerebral Meninges, Other Parts of Central Nervous System, Intracranial Gland, Hodgkin and non-Hodgkin Lymphoma (Excludes cases collected in the following schemas: Lymphoma Ocular Adnexa, Primary Cutaneous Lymphomas and Mycosis Fungoides),

Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms, Myeloma and Plasma Cell Disorders (Excludes histology 9734), Other and Ill-Defined Primary Sites (Excludes Spleen (C422)), Unknown Primary Site.

When definition of regional nodes differs between the AJCC Cancer Staging Manual and the SEER Program Coding and Staging Manual, use the AJCC definition.

Analytic Note: None.

Code	Definition
00	No nodes were examined
01-89	1-89 nodes were examined. (Code the exact number of regional lymph nodes examined)
90	90 or more nodes examined
95	No regional nodes removed, but aspiration or core biopsy of regional nodes was performed
96	Regional lymph node removal was documented as sampling, and the number of nodes is unknown/not stated
97	Regional lymph node removal was documented as dissection, and the number of nodes is unknown/not stated
98	Regional lymph nodes surgically removed but number of lymph nodes unknown or not stated, and not documented as sampling or dissection; nodes were examined, but the number is unknown
99	Unknown if regional nodes examined. Not applicable or negative. Not stated in medical record.

Regional Lymph Nodes Positive

Data Dictionary Category: Cancer Identification

PUF Data Item Name: REGIONAL_NODES_POSITIVE

NAACCR Item #: 820

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 – 99

Description:

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

Rationale:

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

Coding Instructions:

Regional lymph nodes only. Record information about only regional lymph nodes in this field. Involved distant lymph nodes should not be coded in this field.

This field is based on pathologic information only. This field is to be recorded regardless of whether the patient received preoperative treatment.

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

The number of regional lymph nodes positive is cumulative from all procedures that remove lymph nodes through the completion of surgeries in the first course of treatment.

Do not count a positive aspiration or core biopsy of a lymph node in the same lymph node chain removed at surgery as an additional node in Regional Nodes Positive when there are positive nodes in the resection. In other words, if there are positive regional lymph nodes in a lymph node dissection, do not count the core needle biopsy or the fine needle aspiration if it is in the same chain. See also Use of Code 95 below.

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

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

Priority of lymph node counts. If there is a discrepancy regarding the number of positive lymph nodes, use information in the following priority: final diagnosis, synoptic report (also known as CAP protocol or pathology report checklist), microscopic, gross.

Positive Nodes in Multiple Primaries in Same Organ. If there are multiple primary cancers with different histologic types in the same organ and the pathology report just states the number of nodes positive, the registrar should first try to determine the histology of the metastases in the nodes and code the nodes as positive for the primary with that histology. If no further information is available, code the nodes as positive for all primaries.

Isolated tumor cells (ITCs) in lymph nodes. For all primary sites except cutaneous melanoma and Merkel cell carcinoma of skin, count only lymph nodes that contain micrometastases or larger (metastases greater than 0.2 millimeters in size). Do not include in the count of lymph nodes positive any nodes that are identified as containing isolated tumor cells (ITCs). If the path report indicates that nodes are positive but the size of metastasis is not stated, assume the metastases are larger than 0.2 mm and count the lymph node(s) as positive.

For cutaneous melanoma and Merkel cell carcinoma, count nodes with ITCs as positive lymph nodes.

Use of Code 95. Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue). Use code 95 when a positive lymph node is aspirated and there are no surgically resected lymph nodes. Use code 95 when a positive lymph node is aspirated and surgically resected lymph nodes are negative.

Definition of Code 97. Use code 97 for any combination of positive aspirated, biopsied, sampled or dissected lymph nodes if the number of involved nodes cannot be determined on the basis of cytology or histology. Code 97 includes positive lymph nodes diagnosed by either cytology or histology. Note: If the aspirated node is the only one that is microscopically positive, use code 95.

Use of Code 98. Code 98 may be used in several situations. When the assessment of lymph nodes is clinical only. When no lymph nodes are removed and examined. When a “dissection” of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination. If Regional Nodes Positive is coded as 98, Regional Nodes Examined is usually coded 00.

Use of code 99. Use code 99 if it is unknown whether regional lymph nodes are positive.

Primary sites always coded 99. For the following primary sites and histologies, the Regional Nodes Positive field is always coded as 99: C420, C421, C423-C424, C589,

C700-C709, C710-C729, C751-C753, C761-C768, C770-C779, or C809. For the following schemas, the Regional Nodes Positive field is always coded as 99. Placenta, Brain and Cerebral Meninges, Other Parts of Central Nervous System, Intracranial Gland, Hodgkin and non-Hodgkin Lymphoma (Excludes cases collected in the following schemas: Lymphoma Ocular Adnexa, Primary), Cutaneous Lymphomas and Mycosis Fungoides, Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms, Myeloma and Plasma Cell Disorders (Excludes histology 9734), Other and Ill-Defined Primary Sites (Excludes Spleen (C422)), Unknown Primary Site.

When definition of regional nodes differs between the AJCC Cancer Staging Manual and the SEER Program Coding and Staging Manual use the AJCC definition.

Analytic Note: None.

Code	Definition
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)
97	Positive nodes are documented, but the number are unspecified
98	No nodes examined
99	It is unknown whether nodes are positive; not applicable; not stated in medical record

Sentinel Lymph Nodes Examined

Data Dictionary Category: Cancer Identification

PUF Data Item Name: SLN_EXAM

NAACCR Item #: 834

Diagnosis Years Available: 2018 +

Length: 2

Allowable Values: 00-90, 95, 98, 99, Blank

Description:

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

Rationale:

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

Coding Instructions:

If, during a sentinel node biopsy procedure, a few non-sentinel nodes happen to be sampled, document the total number of nodes sampled during the sentinel node procedure in this data item. I.e., record the total number of nodes from the sentinel node biopsy procedure regardless of sentinel node status.

If a sentinel node biopsy procedure and then a subsequent, separate regional node dissection procedure are performed, record the total number of nodes biopsied during the sentinel node procedure in this data item, and record the total number of regional lymph nodes biopsied/dissected (which includes the number of nodes documented in this data item) in Regional Lymph Nodes Examined [830].

If a sentinel lymph node biopsy is performed during the same procedure as the regional node dissection, record the total number of nodes biopsied during the sentinel node procedure in this data item, and record the total number of regional lymph nodes biopsied/dissected (which includes the number of nodes documented in this data item) in Regional Lymph Nodes Examined [830].

If aspiration of sentinel lymph node(s) AND a sentinel node biopsy procedure were performed for same patient, record the results for the sentinel node biopsy.

The number of sentinel lymph nodes examined will typically be found in the pathology report; radiology reports, or documented by the physician. Determination of the exact number of sentinel lymph nodes examined may require assistance from the managing physician for consistent coding.

Sentinel node procedures are common for other sites, but data is only collected in these fields for breast and cutaneous melanoma. Use the AJCC N suffix to designate sentinel node procedures for ALL sites.

The number of sentinel nodes should be equal to or less than the number of regional nodes examined recorded in the Regional Lymph Nodes Examined [830] data item.

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

Sentinel Lymph Nodes Positive

Data Dictionary Category: Cancer Identification

PUF Data Item Name: SLN_POS

NAACCR Item #: 835

Diagnosis Years Available: 2018 +

Length: 2

Allowable Values: 00-90, 95, 97-99, Blank

Description:

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

Rationale:

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

Coding Instructions:

If, during a sentinel node biopsy procedure, a few non-sentinel nodes happen to be sampled and are positive, document the total number of positive nodes identified during the sentinel node procedure in this data item. I.e., record the total number of positive nodes from the sentinel node biopsy procedure regardless of whether the nodes contain dye or colloidal material (tracer or radiotracer).

If both a sentinel node biopsy procedure and then a subsequent, separate regional node dissection procedure are performed, record the total number of positive sentinel nodes identified during the sentinel node procedure in this data item, and record the total number of positive regional lymph nodes biopsied/dissected (which includes the number of sentinel nodes documented in this data item) in Regional Lymph Nodes Positive [820].

If a positive aspiration of sentinel lymph node(s) AND a positive sentinel node biopsy procedure were performed for same patient, record the results for the positive sentinel node biopsy procedure.

Sentinel node procedures are common for other sites, but data is only collected in these fields for breast and cutaneous melanoma. Use the AJCC N suffix to designate sentinel node procedures for ALL sites.

FOR BREAST ONLY: If a sentinel lymph node biopsy is performed during the same procedure as the regional node dissection, use code 97 in this data item, and record the total number of positive regional lymph nodes biopsied/dissected (both sentinel and regional) in Regional Lymph Nodes Positive [820]. The CAP Protocol for Breast is designed to capture information from the resection (there is no diagnostic protocol for breast). As a result, when the sentinel lymph node biopsy is performed during the same procedure as the regional node dissection, only the overall total number of positive regional nodes (both sentinel and regional) is recorded; the number of positive sentinel nodes is not captured.

FOR MELANOMA ONLY: If a sentinel lymph node biopsy is performed during the same procedure as the regional node dissection, record the total number of positive sentinel nodes identified in this data item, and record the total number of positive regional lymph nodes identified (which includes the number of positive sentinel nodes documented in this data item) in Regional Lymph Nodes Positive [820].

When the sentinel lymph node biopsy is performed during the same procedure as the regional node dissection the CAP Protocol for Melanoma captures both the number of positive sentinel nodes as well as the number of positive regional nodes (i.e., the number of positive sentinel nodes is captured).

The number of sentinel lymph nodes biopsied and found positive will typically be found in the pathology report; radiology reports, or documented by the physician. Determination of the exact number of sentinel lymph nodes positive may require assistance from the managing physician for consistent coding.

The number of sentinel nodes positive should be less than or equal to than the total number of Regional Nodes Positive [820].

For carcinoma of the breast, if only positive Isolated Tumor Cells (ITC) are identified the sentinel lymph nodes are considered negative.

For melanoma, if only positive Isolated Tumor Cells (ITC) are identified the sentinel lymph nodes are considered positive.

mi (microscopic or micro mets) sentinel lymph nodes are considered positive.

Sentinel Lymph Nodes Positive continued

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

Sentinel Lymph Node Biopsy, Days from Diagnosis

Data Dictionary Category: Cancer Identification

PUF Data Item Name: SENTINEL_LNBX_STARTED_DAY

NAACCR Item #: Not applicable

Diagnosis Years Available: 2018 +

Length: 8

Allowable Values: 0000-9999, blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of Sentinel Node Biopsy* (NAACCR Item #832).

This is a new variable collected in 2018 and later. **This item is only collected for breast and cutaneous melanoma**. The AJCC N suffix to designate sentinel node procedures for ALL sites.

For more information, see NAACCR Item 832, Date of Sentinel Node Biopsy in the STORE manual at: store-manual-2024.pdf

Regional Lymph Node Dissection, Days from Diagnosis

Data Dictionary Category: Cancer Identification

PUF Data Item Name: REG_LN_DISS_STARTED_DAY

NAACCR Item #: Not applicable

Diagnosis Years Available: 2018 +

Length: 8

Allowable Values: 0000-9999, blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of Regional Lymph Node Dissection* (NAACCR Item #682).

This is a new variable collected in 2018 and later.

For more information, see NAACCR Item 682, Date of Regional Lymph Node Dissection in the STORE manual at: store-manual-2024.pdf

Surgical Diagnostic and Staging Procedure

Data Dictionary Category: Cancer Identification

PUF Data Item Name: RX_SUMM_DXSTG_PROC

NAACCR Item #: 1350

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 - 07, 09

Description:

Records the type of surgical diagnostic and/or staging procedure performed.

Registry Coding Instructions:

Code the type of procedure performed as part of the initial diagnosis and workup, whether this is done at the reporting institution or another facility.

Code 02 is used if both an incisional biopsy of the primary site and an incisional biopsy of a metastatic site are done.

Surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose and/or stage disease are not coded in this item. The item *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) is used to code these procedures.

Brushings, washings, cell aspiration, and hematologic findings (peripheral blood smears) as positive cytologic diagnostic confirmation are coded in the data item *Diagnostic Confirmation* (NAACCR Item #490). These are not considered surgical procedures and are not be coded in this item.

Excisional biopsies with clear or microscopic margins are not coded in this data item. Item *Surgical Procedure of Primary Site* (NAACCR Item #1290) is used to code these procedures.

Palliative surgical procedures are not coded in this data item. The item *Palliative Care* (NAACCR Item #3270) is used to code these procedures.

Analytic Note: None.

Surgical Diagnostic and Staging Procedure continued

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

Surgical Diagnostic and Staging Procedure at this Facility

Data Dictionary Category: Cancer Identification

PUF Data Item Name: RX_HOSP_DXSTG_PROC

NAACCR Item #: 740

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 - 07, 09

Description:

Records the type of surgical diagnostic and/or staging procedure performed at the reporting facility. This data item was added to the 2015 PUF (data released in Fall 2017), and does not appear in prior versions of the PUF data.

Registry Coding Instructions:

Code the type of procedure performed as part of the initial diagnosis and workup, whether this is done at the reporting institution or another facility.

Code 02 is used if both an incisional biopsy of the primary site and an incisional biopsy of a metastatic site are done.

Surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose and/or stage disease are not coded in this item. The item *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) is used to code these procedures.

Brushings, washings, cell aspiration, and hematologic findings (peripheral blood smears) as positive cytologic diagnostic confirmation are coded in the data item *Diagnostic Confirmation* (NAACCR Item #490). These are not considered surgical procedures and are not be coded in this item.

Excisional biopsies with clear or microscopic margins are not coded in this data item. Item *Surgical Procedure of Primary Site* (NAACCR Item #1290) is used to code these procedures.

Palliative surgical procedures are not coded in this data item. The item *Palliative Procedure* (NAACCR Item #3270) is used to code these procedures.

Analytic Note: None.

Surgical Diagnostic and Staging Procedure at this Facility continued

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

Surgical Diagnostic and Staging Procedure, Days from Dx

Data Dictionary Category: Cancer Identification

PUF Data Item Name: DX_STAGING_PROC_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: 0 - 9999, blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of Surgical Diagnostic and Staging Procedure* (NAACCR Item #1280).

Registry Coding Instructions: None.

Analytic Note: None.

Code	Definition
0 - 9999	Number of elapsed days
blank	No surgical diagnostic and staging procedure, procedure unknown, elapsed days cannot be computed, or not available for these diagnosis

Stage of Disease: Traditional AJCC Staging System

AJCC Clinical T

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_CLIN_T

NAACCR Item #: 940

Diagnosis Years Available: 2004 - 2017

Length: 5

Allowable Values: Alphanumeric (uppercase and lowercase), blank

Description:

Identifies the clinically-determined size and/or extension of the primary tumor (cT) as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item though the review of full range of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document found in the patient record, as recorded by the managing physician. PUF users may notice an increase in the proportion of cases with cT reported as X as a consequence of the CoC restriction on the allowable range of registry coding of information beyond that documented by the managing physician.

The rules changed again with cases diagnosed in 2008. Beginning with 2008 diagnoses, registrars were required to record clinical stage. If it was not available from a physician, it was to be coded from information available in the patient record.

Cases are coded using the *AJCC Cancer Staging Manual* edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC *TNM Edition Number* (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version occurred, and edition numbers are not included in the PUF for those older cases.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations.

There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	Definition
Blank	Not available in patient record
X, cX	cTX
0, c0	cT0
A, pA	pTa
IS, pIS	pTis
ISPU, pISPU	pTispu
ISPD, pISPD	pTispd
1MI, c1MI	cT1mic
1, c1	cT1
1A, c1A	cT1a
1A1, c1A1	cT1a1
1A2, c1A2	cT1a2
1B, c1B	cT1b
1B1, c1B1	cT1b1
1B2, c1B2	cT1b2
1C, c1C	cT1c
1D, c1D	cT1d
2, c2	cT2

Code	Definition
2A, c2A	cT2a
2A1, c2A1	cT2a1
2A2, c2A2	cT2a2
2B, c2B	cT2b
2C, c2C	cT2c
2D, c2D	cT2d
3, c3	cT3
3A, c3A	cT3a
3B, c3B	cT3b
3C, c3C	cT3c
3D, c3D	cT3d
4, c4	cT4
4A, c4A	cT4a
4B, c4B	cT4b
4C, c4C	cT4c
4D, c4D	cT4d
4E, c4E	cT4e
88	Not applicable

AJCC Clinical N

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_CLIN_N

NAACCR Item #: 950

Diagnosis Years Available: 2004 - 2017

Length: 5

Allowable Values: Alphanumeric (uppercase and lowercase), blank

Description:

Identifies the clinically-determined absence or presence of regional lymph node (cN) metastasis and describes the extent of the regional lymph node metastasis as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item though the review of full range of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document found in the patient record, as recorded by the managing physician. PUF users may notice an increase in the proportion of cases with cN reported as X as a consequence of the CoC restriction on the allowable range of registry coding of information beyond that documented by the managing physician.

The rules changed again with cases diagnosed in 2008. Beginning with 2008 diagnoses, registrars were required to record clinical stage. If it was not available from a physician, it was to be coded from information available in the medical record.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version occurred, and edition numbers are not included in the PUF for those older cases.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations.

There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	Definition
blank	Not available in patient record
X	cNX
0, c0	cN0
0I-, c0I-	cN0i-
0I+, c0I+	cN0i+
0M-, c0M-	cN0m-
0M+, c0M+	cN0m+
1MI, c1MI	cN1mi
0A, c0A	cN0a
0B, c0B	cN0b
1, c1	cN1
1A, c1A	cN1a
1B, c1B	cN1b
1C, c1C	cN1c
2, C2	cN2
2A, c2A	cN2a
2B. c2B	cN2b
2C, c2C	cN2c
3, c3	cN3
3A, c3A	cN3a
3B, c3B	cN3b
3C, c3C	cN3c
4, c4	cN4
88	Not applicable

AJCC Clinical M

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_CLIN_M

NAACCR Item #: 960

Diagnosis Years Available: 2004 - 2017

Length: 5

Allowable Values: Alphanumeric (uppercase and lowercase), blank

Description:

Identifies the clinically-determined absence or presence of distant metastasis (cM) as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules in force for the particular edition.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item though the review of full range of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document found in the patient record, as recorded by the managing physician. PUF users may notice an increase in the proportion of cases with cM reported as X as a consequence of the CoC restriction on the allowable range of registry coding of information beyond that documented by the managing physician.

The rules changed again with cases diagnosed in 2008. Beginning with 2008 diagnoses, registrars were required to record clinical stage. If it was not available from a physician, it was to be coded from information available in the medical record.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site-specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version occurred, and edition numbers are not included in the PUF for those older cases.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations.

There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	**Definition***
blank	Not available in patient record
X, cX	cMX
0, c0	cM0
0I+, c0I+	cM0(i+)
1, c1, p1	cM1, pM1
1A, c1A, p1A	cM1a, pM1a
1B, c1B, p1B	cM1b, pM1b
1C, c1C, p1C	cM1c, pM1c
1D, c1D, p1D	cM1d, pM1d
88	Not applicable (not defined)

*P prefixes were allowed starting in 2016 but can occur before 2016 for resubmitted cases

AJCC Clinical Stage Group

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_CLIN_STAGE_GROUP

NAACCR Item #: 970

Diagnosis Years Available: 2004 - 2017

Length: 4

Allowable Values: Alphanumeric (uppercase), blank

Description:

Identifies the applicable stage group based on the T, N, and M elements as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the current *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item through the review of the full range of clinical and patient notes available to registry staff.

For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging items from a standardized document found in the patient record, as recorded by the managing physician. PUF users may notice an increase in the proportion of 99s as a consequence of the CoC restriction on the allowable range of registry coding of information beyond that documented by the managing physician.

The rules changed again with cases diagnosed in 2008. Beginning with 2008 diagnoses, registrars were required to record clinical stage. If it was not available from a physician, it was to be coded from information available in the patient record.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version occurred, and edition numbers are not included in the PUF for those older cases.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations.

There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	Definition
0	cStage 0
0A	cStage 0A
0IS	cStage 0is
1	cStage I
1A	cStage IA
1A1	cStage IA1
1A2	cStage IA2
1B	cStage IB
1B1	cStage IB1
1B2	cStage IB2
1C	cStage IC
1S	cStage IS
2	cStage II
2A	cStage IIA
2A1	cStage IIA1
2A2	cStage IIA2
2B	cStage IIB

Code	Definition
2C	cStage IIC
3	cStage III
3A	cStage IIIA
3B	cStage IIIB
3C	cStage IIIC
3C1	cStage IIIC1
3C2	cStage IIIC2
4	cStage IV
4A	cStage IVA
4A1	cStage IVA1
4A2	cStage IVA2
4B	cStage 4B
4C	cStage IVC
OC	Occult
88	Not applicable
99	Unknown
blank	Not available

AJCC Pathologic T

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_PATH_T

NAACCR Item #: 880

Diagnosis Years Available: 2004 - 2017

Length: 5

Allowable Values: Alphanumeric (uppercase and lowercase), blank

Description:

Identifies the pathologically determined tumor size and/or extension (pT) as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item through the review of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document found in the patient record, as recorded by the managing physician.

Beginning with 2008 diagnoses, the rules changed again. Physicians were no longer required to stage, but cancer committees in CoC programs were required to devise plans to ascertain that staging was used appropriately to make treatment decisions. Registries were encouraged to record physician staging when it was available, but were not required to do so. The CoC determined that the stage groups derived from the Collaborative Stage Data Collection System met the criteria expected of pathologic staging, in providing an AJCC "final stage". PUF users are likely to see a decrease in the completeness of pathologic staging recorded in the "AJCC" staging items in the years following 2008.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version occurred, and edition numbers are not included in the PUF for those older cases.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations.

There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	Definition
blank	Not available in patient record. Not collected (2008+)
X, px	pTX
0, p0	pT0
A, pA	pTa
IS, pIS	pTis
ISPU, pISPU	pTispu
ISPD, pISPD	pTispd
1MI, p1MI	pT1mic
1, p1	pT1
1A, p1A	pT1a
1A1, p1A1	pT1a1
1A2, p1A2	pT1a2
1B, p1B	pT1b
1B1, p1B1	pT1b1
1B2, p1B2	pT1b2
1C, p1C	pT1c
1D, p1D	pT1d

Code	Definition
2, p2	pT2
2A, p2A	pT2a
2A1, p2A1	pT2a1
2A2, p2A2	pT2a2
2B, p2B	pT2b
2C, p2C	pT2c
2D, p2D	pT2d
3, p3	pT3
3A, p3A	pT3a
3B, p3B	pT3b
3C, p3C	pT3c
3D, p3D	pT3d
4, p4	pT4
4A, p4A	pT4a
4B, p4B	pT4b
4C, p4C	pT4c
4D, p4D	pT4d
4E, p4E	pT4e
88	Not applicable

AJCC Pathologic N

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_PATH_N

NAACCR Item #: 890

Diagnosis Years Available: 2004 - 2017

Length: 5

Allowable Values: Alphanumeric (uppercase and lowercase), blank

Description:

Identifies the pathologically determined absence or presence or extent of regional lymph node (pN) metastasis as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item though the review of full range of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document found in the patient record, as recorded by the managing physician.

Beginning with 2008 diagnoses, the rules changed again. Physicians were no longer required to stage, but cancer committees in CoC programs were required to devise plans to ascertain that staging was used appropriately to make treatment decisions. Registries were encouraged to record physician staging when it was available, but were not required to do so. The CoC determined that the stage groups derived from the Collaborative Stage Data Collection System met the criteria expected of pathologic staging, in providing a AJCC "final stage". PUF users are likely to see a decrease in the completeness of pathologic staging recorded in the "AJCC" staging items in the years following 2008.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version was allowed, such that some codes for cases diagnosed the year prior to implementation of a given edition and the year following its replacement may also have codes from the edition.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations.

There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

For pathologic N, some cancer sites in which lymph node involvement is rare, patients whose nodal status is not determined to be positive for tumor should be designated as cN0, not pN0. See the AJCC 8th edition Chapter 1 Principles of Cancer Staging: Node Status Not Required in Rare Circumstances, at [AJCC Cancer Staging System Products | ACS (facs.org)]

Code	Definition
blank	Not available in patient record. Not collected (2008+)
X	pNX
0, p0, c0	pN0, cN0
0I-, p0I-	pN0i-
0I+, p0I+	pN0i+
0M-, p0M-	pN0m-
0M+, p0M+	pN0m+
1MI, p1MI	pN1mi
0A, p0A	pN0a
0B, p0B	pN0b
1, p1	pN1
1A, p1A	pN1a
1B, p1B	pN1b
1C, p1C	pN1c
2, p2	pN2
2A, p2A	pN2a
2B, p2B	pN2b
2C, p2C	pN2c
3, p3	pN3
3A, p3A	pN3a
3B,p3B	pN3b
3C, p3C	pN3c
4, p4	pN4
88	Not applicable

AJCC Pathologic M

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_PATH_M

NAACCR Item #: 900

Diagnosis Years Available: 2004 - 2017

Length: 5

Allowable Values: Alphanumeric (uppercase and lowercase), blank

Description:

Identifies the pathologically determined absence or presence of distant metastasis (pM) as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed on or prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item though the review of full range of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document found in the patient record, as recorded by the managing physician.

Beginning with 2008 diagnoses, the rules changed again. Physicians were no longer required to stage, but cancer committees in CoC programs were required to devise plans to ascertain that staging was used appropriately to make treatment decisions. Registries were encouraged to record physician staging when it was available, but were not required to do so. The CoC determined that the stage groups derived from the Collaborative Stage Data Collection System met the criteria expected of pathologic staging, in providing an AJCC "final stage". PUF users are likely to see a decrease in the completeness of pathologic staging recorded in the "AJCC" staging items in the years following 2008.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version was allowed, such that some codes for cases diagnosed the year prior to implementation of a given edition and the year following its replacement may also have codes from the edition.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations. There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	**Definition***
blank	Not available in patient record. No positive pM. Not collected (2008+)
X, px, cx	pMX, cMX
0, p0, c0	pM0, cM0
0I+, p0I+, c0I+	pM0(i+), cM0(i+)
1, p1, c1	pM1, cM1
1A, p1A, c1A	pM1a, cM1a
1B, p1B, c1B	pM1b, cM1b
1C. p1C, c1C	pM1c, cM1c
1D, p1D, c1D	pM1d, cM1d
88	Not applicable (not defined)

*C prefixes were allowed starting in 2016 but can occur before 2016 for resubmitted cases

AJCC Pathologic Stage Group

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_PATH_STAGE_GROUP

NAACCR Item #: 910

Diagnosis Years Available: 2004 - 2017

Length: 4

Allowable Values: Alphanumeric (uppercase), blank

Description:

Identifies the pathologically-determined anatomic extent of disease based on the T, N, and M elements as defined by the American Joint Committee on Cancer (AJCC).

Registry Coding Instructions:

Refer to the applicable *AJCC Cancer Staging Manual* for coding rules.

Analytic Note:

For cases diagnosed prior to December 31, 2003, this item was expected to be completed by an attending physician, though registry staff were frequently involved in the determination of the information coded in this item through the review of clinical and patient notes available to registry staff. For cases diagnosed January 1, 2004, through December 31, 2007, the CoC required registries to copy the staging elements from a standardized document, as recorded by the managing physician.

Beginning with 2008 diagnoses, the rules changed again. Physicians were no longer required to stage, but cancer committees in CoC cancer programs were required to devise plans to ascertain that staging was used appropriately to make treatment decisions. Registries were encouraged to record physician staging when it was available, but were not required to do so.

The CoC determined that the stage groups derived from the Collaborative Stage Data Collection System met the criteria expected of pathologic staging, in providing an AJCC "final stage". PUF users are likely to see a decrease in the completeness of pathologic staging in the "AJCC' staging items in the years following 2008.

Cases are coded using the AJCC Cancer Staging Manual edition in use during the year in which the case was diagnosed. Consult the appropriate edition of this manual for organ or site specific codes and their definitions. See AJCC TNM Edition Number (NAACCR Item #1060). Prior to implementation of the 5th edition of the manual, some "slippage" in version was allowed, such that some codes for cases diagnosed the year prior to implementation of a given edition and the year following its replacement may also have codes from the edition.

Codes on this list comprise all codes valid for any AJCC manual through the 7th edition and for any chapter. Please consult the applicable manual and chapter for codes that are valid for specific site, histology and AJCC edition combinations. There is no standard mechanism to recode AJCC items from one edition to another. Careful review of the individual definitions in the respective AJCC manuals is necessary before combining or comparing data across two or more AJCC editions.

Code	Definition
0	pStage 0
0A	pStage 0A
0IS	pStage 0is
1	pStage I
1A	pStage IA
1A1	pStage IA1
1A2	pStage IA2
1B	pStage IB
1B1	pStage IB1
1B2	pStage IB2
1C	pStage IC
1S	pStage IS
2	pStage II
2A	pStage IIA
2A1	pStage IIA1
2A2	pStage IIA2
2B	pStage IIB
2C	pStage IIC

Code	Definition
3	pStage III
3A	pStage IIIA
3B	pStage IIIB
3C	pStage IIIC
3C1	pStage IIIC1
3C2	pStage IIIC2
4	pStage IV
4A	pStage IVA
4A1	pStage IVA1
4A2	pStage IVA2
4B	pStage 4B
4C	pStage IVC
OC	Occult
88	Not applicable
99	Unknown
blank	No pathologic staging for this case (2008+ only)

TNM Edition Number

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TNM_EDITION_NUMBER

NAACCR Item #: 1060

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 06-08, 88, 99

Description:

Identifies the edition number of the *AJCC Cancer Staging Manual* used to stage the case.

Registry Coding Instructions:

None; this item may be auto-coded by cancer registry software.

Analytic Note:

AJCC staging is coded according to the version of the *AJCC Cancer Staging Manual* in use at the time the case was diagnosed. Prior to implementation of the 5th edition of the manual, some "slippage" in version occurred, and edition numbers are not included in the PUF for those older cases.

Code	Definition
00	Not staged (cases that have AJCC staging scheme and staging was not done)
06	Sixth Edition
07	Seventh Edition
08	Eighth Edition
88	Not applicable (cases that do not have an AJCC staging scheme)
99	Staged, but the edition is unknown

NCDB Analytic Stage Group

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: ANALYTIC_STAGE_GROUP

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 5, 8, 9

Description:

Analytic Stage Group is assigned the value of reported *Pathologic Stage Group* (NAACCR Item #910). *Clinical Stage Group* (NAACCR Item #970) is used if Pathologic Stage Group (NAACCR Item #910) is not reported. Sub-stage groups are collapsed into the corresponding general stage designation. The alphanumeric representation of stage group is provided for ease of display.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
0	Stage 0
1	Stage I
2	Stage II
3	Stage III
4	Stage IV
5	Occult (lung only)
8	AJCC staging not applicable
9	AJCC stage group unknown

Mets at Diagnosis – Bone

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: METS_AT_DX_BONE

NAACCR Item #: 1112

Diagnosis Years Available: 2016 +

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description: This data item identifies whether bone is an involved metastatic site.

Rationale:

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

Registry Coding Instructions:

1. **Code information about bone metastases only** (discontinuous or distant metastases to bone) identified at the time of diagnosis. This data item should not be coded for bone marrow involvement.

   a. Bone involvement may be single or multiple

   b. Information about bone involvement may be clinical or pathological

   c. Code this data item for bone metastases even if the patient had any preoperative systemic therapy

   d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites

2. **Use of codes.** Assign the code that best describes whether the case has bone metastases at diagnosis.

   a. Use code 0 when the medical record

      i. indicates that there are no distant (discontinuous) metastases at all

      ii. includes a clinical or pathologic statement that there are no bone metastases

      iii. includes imaging reports that are negative for bone metastases

iv. indicates that the patient has distant (discontinuous) metastases but bone is not mentioned as an involved site

Example: use code 0 when the patient has lung and liver metastases but not bone

b. Use code 0 when:

i. Tumor is a borderline or benign brain or CNS tumor

ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

c. Use code 1 when the medical record

i. indicates that the patient has distant (discontinuous) metastases and bone is mentioned as an involved site

ii. indicates that bone is the primary site and there are metastases in a different bone or bones

iii. do not assign code 1 for a bone primary with multifocal bone involvement of the same bone

iv. indicates that the patient is diagnosed as an unknown primary (C80.9) and bone is mentioned as a distant metastatic sited.

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

i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.

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

Analytic Note: This is a new item in 2016, replacing the *CS Mets at DX-Bone* (NAACCR Item #2851) item.

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

Mets at Diagnosis – Brain

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: METS_AT_DX_BRAIN

NAACCR Item #: 1113

Diagnosis Years Available: 2016 +

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description: This data item identifies whether brain is an involved metastatic site.

Rationale:

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

Registry Coding Instructions:

1. **Code information about brain metastases only** (discontinuous or distant metastases to brain) identified at the time of diagnosis. This data item should not be coded for involvement of spinal cord or other parts of the central nervous system.
    a. Brain involvement may be single or multiple
    b. Information about brain involvement may be clinical or pathological
    c. Code this data item whether or not the patient had any preoperative systemic therapy
    d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites

2. **Use of codes.** Assign the code that best describes whether the case has brain metastases at diagnosis.
    a. Use code 0 when the medical record
        i. indicates that there are no distant (discontinuous) metastases at all
        ii. includes a clinical or pathologic statement that there are no brain metastases
        iii. includes imaging reports that are negative for brain metastases
        iv. indicates that the patient has distant (discontinuous) metastases but brain is not mentioned as an involved site

Example: use code 0 when the patient has lung and liver metastases but not brain

b. Use code 0 when:

i. Tumor is a borderline or benign brain or CNS tumor

ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

c. Use code 1 when the medical record

i. indicates that the patient has distant (discontinuous) metastases and brain is mentioned as an involved site

ii. indicates that the patient is diagnosed as an unknown primary (C80.9) and brain is mentioned as a distant metastatic site

d. Use code 8 (Not applicable) forthe following site/histology combinationsfor which a code for distant metastasis is not clinically relevant

i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.

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

Analytic Note: This is a new item in 2016, replacing the *CS Mets at DX-Brain* (NAACCR Item #2852) item.

Code	Definition
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

Mets at Diagnosis - Distant Lymph Nodes

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: METS_AT_DX_DISTANT_LN

NAACCR Item #: 1114

Diagnosis Years Available: 2016 +

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description:

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

Rationale:

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

Registry coding instructions:

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

ii. includes a clinical or pathologic statement that there are no distant lymph node metastases

iii. includes imaging reports that are negative for distant lymph node metastases

iv. indicates that the patient has distant (discontinuous) metastases but distant lymph node(s) are not mentioned as an involved site

Example: use code 0 when the patient has lung and liver metastases but not distant lymph node(s)

b. Use code 0 when:

i. Tumor is a borderline or benign brain or CNS tumor

ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

c. Use code 1 when the medical record

i. indicates that the patient has distant (discontinuous) metastases and distant lymph node(s) are mentioned as an involved site

ii. indicates that the patient is diagnosed as an unknown primary (C80.9) and distant lymph node(s) are mentioned as a metastatic site

d. Use code 8 (Not applicable) forthe following site/histology combinationsfor which a code for distant metastasis is not clinically relevant.

i. Use code 8 when primary site is C420, C421, C423, C424, C770-C779 or histology is 9671, 9734, 9731 or 9761 for any primary site

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

Analytic note: This variable was added as a *FORDS* item in 2016.

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

Mets at Diagnosis – Liver

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: METS_AT_DX_LIVER

NAACCR Item #: 1115

Diagnosis Years Available: 2016 +

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description: This data item identifies whether liver is an involved metastatic site.

Rationale:

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

Registry Coding Instructions:

1. **Code information about liver metastases only** (discontinuous or distant metastases to liver) identified at the time of diagnosis.
   a. Liver involvement may be single or multiple
   b. Information about liver involvement may be clinical or pathological
   c. Code this data item whether or not the patient had any preoperative systemic therapy
   d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites

2. **Use of codes.** Assign the code that best describes whether the case has liver metastases at diagnosis.

   a. Use code 0 when the medical record
      i. indicates that there are no distant (discontinuous) metastases at all
      ii. includes a clinical or pathologic statement that there are no liver metastases

iii. includes imaging reports that are negative for liver metastases
iv. indicates that the patient has distant (discontinuous) metastases but liver is not mentioned as an involved site
Example: use code 0 when the patient has lung and brain metastases but not liver

b. Use code 0 when:

i. Tumor is a borderline or benign brain or CNS tumor

ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1),

or in situ (/2)

c. Use code 1 when the medical record
i. indicates that the patient has distant (discontinuous) metastases and liver is mentioned as an involved site
ii. indicates that the patient is diagnosed as an unknown primary (C80.9) and liver is mentioned as a distant metastatic site

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

i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site.

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

Analytic Note: This is a new item in 2016, replacing the *CS Mets at DX-Liver* (NAACCR Item #2853) item.

Code	Definition
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

Mets at Diagnosis – Lung

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: METS_AT_DX_LUNG

NAACCR Item #: 1116

Diagnosis Years Available: 2016 +

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description: This data item identifies whether lung is an involved metastatic site.

Rationale:

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

Registry Coding Instructions:

1. **Code information about lung metastases only** (discontinuous or distant metastases to lung) identified at the time of diagnosis. This data item should not be coded for pleural or pleural fluid involvement.

   a. Lung involvement may be single or multiple
   b. Information about lung involvement may be clinical or pathological
   c. Code this data item whether or not the patient had any preoperative systemic therapy
   d. This data item should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites

2. **Use of codes.** Assign the code that best describes whether the case has lung metastases at diagnosis.

   a. Use code 0 when the medical record
      i. indicates that there are no distant (discontinuous) metastases at all
      ii. includes a clinical or pathologic statement that there are no lung metastases
      iii. includes imaging reports that are negative for lung metastases

iv. indicates that the patient has distant (discontinuous) metastases but lung is not mentioned as an involved site.

Example: use code 0 when the patient has liver and brain metastases but not lung

b. Use code 0 when:

i. Tumor is a borderline or benign brain or CNS tumor

ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

c. Use code 1 when the medical record

i. indicates that the patient has distant (discontinuous) metastases and lung is mentioned as an involved site

ii. indicates that lung is the primary site and there are metastases in the contralateral lung 1) do not assign code 1 for a lung primary with multifocal involvement of the same lung iii. indicates that the patient is diagnosed as an unknown primary (C80.9) and lung is mentioned as a distant metastatic site

c. Use code 8 (Not applicable) for the following site/histology combinations for which a code for distant metastasis is not clinically relevant. Use code 8 (Not applicable) for benign/borderline brain and CNS tumors.

d. Use code 8 (Not applicable) forthe following site/histology combinationsfor which a code for distant metastasis is not clinically relevant

i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site

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

Analytic Note: This is a new item in 2016, replacing the *CS Mets at DX-Lung* (NAACCR Item #2854) item.

Code	Definition
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

Mets at Diagnosis – Other

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: METS_AT_DX_OTHER

NAACCR Item #: 1117

Diagnosis Years Available: 2016 +

Length: 1

Allowable Values: 0 - 2, 8, 9, blank

Description:

This data item identifies whether other metastatic involvement, other than bone, brain, liver, lung or distant lymph nodes exists. Some examples include but are not limited to the adrenal gland, bone marrow, pleura, peritoneum, and skin. The five Mets at Dx Metastatic Sites variables provide information on specific metastatic sites for data analysis.

Rationale:

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

Registry coding instructions:

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

ii. includes a clinical or pathologic statement that there are no other metastases

iii. includes imaging reports that are negative for other metastases

iv. indicates that the patient has distant (discontinuous) metastases but other sites are not mentioned as involved Example: use code 0 when the patient has lung and liver metastases only

b. Use code 0 when:

i. Tumor is a borderline or benign brain or CNS tumor

ii. Any other reportable tumor with a behavior of benign (/0), borderline (/1), or in situ (/2)

c. Use code 1 when the medical record

i. indicates that the patient has distant (discontinuous) metastases in any site(s) other than bone, brain, liver, lung or distant lymph node(s)

ii. includes but not limited to the adrenal gland, bone marrow, pleura, malignant pleural effusion, peritoneum and skin

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

i. Use code 8 when primary site is C420, C421, C423, C424 or histology is 9671, 9734, 9731 or 9761 for any primary site

e. Use code 9 when it cannot be determined from the medical record whether the patient has metastases other than bone, brain, liver, lung and distant lymph node(s). In other words, use code 9 when there are known distant metastases but it is not known specifically what they are.

Analytic note: This variable was added as a *FORDS* item in 2016.

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

Tumor Size Summary

Data Dictionary Category: Stage of Disease Traditional AJCC Staging System

PUF Data Item Name: TUMOR_SIZE_SUMMARY_2016

NAACCR Item #: 756

Diagnosis Years Available: 2016 +

Length: 3

Allowable Values: 000 - 990, 998, 999, blank

Description:

Describes the most accurate measurement of a solid primary tumor, usually measured on the surgical resection specimen. Describes the largest dimension of the diameter of the primary tumor in millimeters.

Rationale:

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

Registry coding instructions:

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

Record size in specified order:

1. Size measured on the surgical resection specimen, when **surgery is administered as the first definitive treatment, i.e. no pre-surgical treatment administered.**
   a. If there is a discrepancy among tumor size measurements in the various sections of the pathology report, code the size from the synoptic report (also known as CAP protocol or pathology report checklist.) If only a text report is available, use: final diagnosis, microscopic, or gross examination, in that order.

      Example: Chest x-ray shows 3.5 cm mass; the pathology report from the surgery states that the same mass is malignant and measures 2.8 cm. Record tumor size as 028 (28 mm).

      Example: Pathology report states lung carcinoma is 2.1 cm x 3.2 cm x 1.4 cm. Record tumor size as 032 (32 mm).

2. If neoadjuvant therapy followed by surgery, do not record the size of the pathologic specimen. Code the largest size of tumor prior to neoadjuvant treatment; if unknown code size as 999.

Example: Patient has a 2.2 cm mass in the oropharynx; fine needle aspiration of mass confirms squamous cell carcinoma. Patient receives a course of neoadjuvant combination chemotherapy. Pathologic size after total resection is 2.8 cm. Record tumor size as 022 (22 mm).

3. If no surgical resection, then largest measurement of the tumor from physical exam, imaging, or other diagnostic procedures prior to any other form of treatment. (See Coding Rules below).

4. If 1,2 and 3 do not apply, the largest size from all information available within four months of the date of diagnosis, in the absence of disease progression.

Coding Rules:

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

   Examples:
   Breast cancer described as 6.5 millimeters in size. Round up Tumor Size as 007.
   Cancer in polyp described as 2.3 millimeters in size. Round down Tumor Size as 002.
   Focus of cancer described as 1.4 mm in size. Round down as 001.

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

4. Priority of imaging/radiographic techniques: Information on size from imaging/radiographic techniques can be used to code size when there is no more specific size information from a pathology or operative report, but is should be taken as low priority, over a physical exam.

5. Tumor size discrepancies among imaging and radiographic techniques. If there is a difference in reported tumor size among imaging and radiographic techniques, unless the physician specifies which imaging is most accurate, record the largest size in the record, regardless of which imaging technique reports it.
6. Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastases. However, if the tumor is described as a "cystic mass," and only the size of the entire mass is given, code the size of the entire mass, since the cysts are part of the tumor itself.
7. Record the size of the invasive component, if given.
   a. If both an in situ and invasive component are present and the invasive component is measured, record the size of the invasive component, even if it is smaller.
      Example: Tumor is mixed in situ and invasive adenocarcinoma, total 3.7 cm in size, of which
      1.4 cm is invasive. Record tumor size as 014 (14 mm).
   b. If the size of the invasive component is not given, record the size of the entire tumor from the surgical report, pathology report, radiology report or clinical examination.
      Example: A breast tumor with infiltrating duct carcinoma with extensive in situ component; total size 2.3 cm. Record tumor size as 023 (23 mm).

      Example: Duct carcinoma in situ measuring 1.9 cm with an area of invasive ductal carcinoma. Record tumor size as 019 (19 mm).
8. Record the largest dimension or diameter of the tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor.
   Example: Tumor is described as 2.4 x 5.1 x 1.8 cm in size. Record tumor size as 051 (51 mm).
9. Record the size as stated for purely in situ lesions.
10. Disregard microscopic residual or positive surgical margins when coding tumor size. Microscopic residual tumor does not affect overall tumor size. The status of primary tumor margins may be recorded in a separate data item.
11. Do not add the size of pieces or chips together to create a whole; they may not be from the same location, or they may represent only a very small portion of a large tumor. However, if the pathologist states an aggregate or composite size (determined by fitting the tumor pieces together and measuring the total size), record that size. If the only measurement describes pieces or chips, record tumor size as 999.
12. Multifocal/multcentric tumors: If the tumor is mult-focal or if multiple tumors are reported as a single primary, code the size of the largest invasive tumor or if all of the tumors are in situ, code the size of the largest in situ tumor.
13. Tumor size code 999 is used when size is unknown or not applicable. Sites/morphologies where tumor size is not applicable are listed here: Hematopoietic, Reticuloendothelial, and Myeloproliferative neoplasms: histology codes: 9590-9992; Kaposi's sarcoma, Melanoma Choriod, Melanoma Ciliary Body, Melanoma Iris.
14. Document the information to support coded tumor size in the appropriate text data item of the abstract.
15. Document the information to support coded tumor size in the appropriate text data item of the abstract.

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

Analytic note:

This variable was added as a *FORDS* item in 2016, replacing the *CS Tumor Size* (NAACCR Item #2800) variable collected in 2004 - 2015. Use the *CS Tumor Size* (NAACCR Item #2800) variable for 2004 - 2015 diagnosis years, and the *Tumor Size Summary* (NAACCR Item #756) for cases diagnosed in 2016 and later. This field is blank for melanoma of the skin. Use *CS Site-Specific Factor 1* (NAACCR Item #2880) to obtain Breslow's depth for melanoma of the skin. The codes for *Tumor Size Summary* (NAACCR Item #756) are slightly different from those in the *CS Tumor Size* (NAACCR Item #2800) variable.

Code	Definition
000	No mass/tumor found
001	1 mm or described as less than 1 mm
002-988	Exact size in millimeters (2 mm to 988 mm)
989	989 millimeters or larger
990	Microscopic focus or foci only and no size of focus is given
998	SITE SPECIFIC CODES Alternate descriptions of tumor size for specific sites: Familial/multiple polyposis: Rectosigmoid and rectum (C19.9, C20.9) and 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, C50.9-C50.9)
999	Unknown; size not stated. Not documented in medical record. Size of tumor cannot be assessed. Not applicable
blank	Not available

Stage of Disease: AJCC 8th Edition Staging System

AJCC 8th Edition Clinical T

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_CLIN_T

NAACCR Item #: 1001

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018, the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized.

Codes and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The clinical T category staging data item must be recorded for Class of Case 10-22.

It is strongly recommended that the clinical T category staging data item be recorded for Class of Case 00 cases if the patient's workup at the facility allows assigning of clinical T.

Assign clinical T category as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded clinical T, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging System for detailed staging rules.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org).

AJCC TNM Clin T Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_CLIN_T_SFX

NAACCR Item #: 1031

Diagnosis Years Available: 2018 +

Length: 4

Allowable Values: (m), (s), Blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Codes and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

Record the clinical T category suffix as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the suffix when applicable, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC manual, leave this data item blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

AJCC TNM Clin T Suffix continued

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

AJCC 8th Edition Clinical N

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_CLIN_N

NAACCR Item #: 1002

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Codes and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions

The clinical N category staging data item must be assigned for Class of Case 10-22.

It is strongly recommended that the clinical N category staging data item be recorded for Class of Case 00 cases if the patient's workup at the facility allows assigned of clinical N category.

Record clinical N category as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded clinical N, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org).

AJCC TNM Clin N Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_CLIN_N_SFX

NAACCR Item #: 1034

Diagnosis Years Available: 2018 +

Length: 4

Allowable Values: (sn), (f), Blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

To distinguish lymph nodes identified during diagnostic evaluation by sentinel node biopsy or FNA or core needle biopsy from those identified by physical examination and imaging, the following suffixes are used in assigning the clinical N (cN) category.

If SLN biopsy is performed as part of the diagnostic workup, the cN category should have the sn suffix: for example, cN1(sn).

If an FNA or a core biopsy is performed on lymph nodes as part of the diagnostic workup, the cN category should have the f suffix: for example, cN1(f).

If you do not know which procedure was done, leave it blank.

Record the clinical N category suffix as documented by the managing physician in the medical record.

If the managing physician has not recorded the suffix, registrars will code this item based on the best

available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC manual, leave this data item blank.

Refer to the current AJCC Cancer Staging System for staging rules.

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

AJCC 8th Edition Clinical M

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_CLIN_M

NAACCR Item #: 1003

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

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

Registry Coding Instructions:

The clinical M category staging data item must be assigned for Class of Case 10-22.

It is strongly recommended that the clinical M category staging data item be recorded for Class of Case 00 cases if the patient's workup at the facility allows assigning of clinical M.

Record clinical M category as documented by the first treating physician or managing physician in the medical record.

If the managing physician has not recorded clinical M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC 8th Edition Clinical Stage Group

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_CLIN_STG_GRP

NAACCR Item #: 1004

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are still utilized for the stage groups only due to the decision to maintain Arabic numerals in the stage groups. New groups will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

Record the clinical stage group as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the clinical stage, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

Code 99 for clinical, pathological, post therapy clinical or post therapy pathological stage group if the TNM combination along with any required prognostic factors does not result in a valid stage group according to the current AJCC system.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Convert all Roman numerals to Arabic numerals and use upper-case (capital letters) only.

Refer to the current AJCC Cancer Staging System for staging rules.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC 8th Edition Pathologic T

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_PATH_T

NAACCR Item #: 1011

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The pathological T category staging data item must be assigned for Class of Case 10-22.

Assign pathological T as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded pathological T category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

For lung, occult carcinoma is assigned TX.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org).

AJCC TNM Path T Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_ TNM_PATH_T_SFX

NAACCR Item #: 1032

Diagnosis Years Available: 2018 +

Length: 4

Allowable Values: (m), (s), blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2008 the CoC requires that AJCC clinical TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Registry Coding Instructions:

Record the pathological stage T category suffix as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the descriptor, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC manual, leave this data item blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

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

AJCC 8th Edition Pathologic N

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_PATH_N

NAACCR Item #: 1012

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Coding Instructions:

The pathological N category staging data item must be assigned for Class of Case 10-22.

Assign pathological N category as documented by the treating physician(s) or managing physician in the medical record.

If the managing physician has not recorded pathological N category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org).

AJCC TNM Path N Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_PATH_N_SFX

NAACCR Item #: 1035

Diagnosis Years Available: 2018 +

Length: 4

Allowable Values: (sn), (f), blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2008 the CoC requires that AJCC pathological TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Registry Coding Instructions*:*

Record the pathological N category suffix as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the descriptor, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC manual, leave this data item blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

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

AJCC 8th Edition Pathologic M

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_PATH_M

NAACCR Item #: 1013

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The pathological M category staging data item must be assigned for Class of Case 10-22.

Assign pathological M category as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded pathological M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC 8th Edition Pathologic Stage Group

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_ TNM_PATH_STG_GRP

NAACCR Item #: 1014

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2015 the CoC requires that AJCC pathological TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Registry Coding Instructions:

Record the pathological stage group as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded the pathological stage, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician(s).

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Convert all Roman numerals to Arabic numerals and use upper-case (capital letters) only.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer

to the most current list of valid codes and labels:
https://cancerstaging.org/Pages/Vendors.aspx

AJCC TNM Post Therapy Clin (yc) T

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_CLIN_YC_T

NAACCR Item #: 1062

Diagnosis Years Available: 2021 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The post therapy clin T category staging data item must be assigned for Class of Case 10-22.

Assign post therapy clin T category as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded post therapy clin T category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC system and for in situ tumors that are not staged according to the current AJCC system. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

For lung, occult carcinoma is assigned TX according to the definition in the current AJCC system.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging System for staging rules.
The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC TNM Post Therapy Clin (yc) T Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_CLIN_T_SFX

NAACCR Item #: 1063

Diagnosis Years Available: 2021 +

Length: 4

Allowable Values: (m), (s), blank

Description:

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

Rationale:

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

Registry Coding Instructions

Record the post therapy clin T category suffix as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the post therapy clin T category suffix, registrars will

assign this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC system, leave this data item blank.

Refer to the current AJCC Cancer Staging System for staging rules.

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

AJCC TNM Post Therapy Clin (yc) N

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_CLIN_YC_N

NAACCR Item #: 1064

Diagnosis Years Available: 2021 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The post therapy clin N category staging data item must be assigned for Class of Case 10-22.

Assign post therapy clin N category as documented by the treating physician(s) or managing physician in the medical record.

If the managing physician has not recorded post therapy clin N category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ

tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging System for staging rules.
The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC TNM Post Therapy Clin (yc) N Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_CLIN_YC_N_SUF

NAACCR Item #: 1065

Diagnosis Years Available: 2021 +

Length: 4

Allowable Values: (sn), (f), blank

Description:

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

Rationale:

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

Registry Coding Instructions

If SLN biopsy is performed in the absence of complete dissection of the nodal basin, the ypN category should have the sn suffix: for example, ypN0(sn).

If an FNA or a core biopsy is performed in the absence of a complete dissection of the nodal basin, the ypN category should have the f suffix: for example, ypN0(f).

If you do not know which procedure was done, leave it blank.

Record the post therapy clinical N category suffix as documented by the managing physician in the medical record.

If the managing physician has not recorded the suffix, registrars will code this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC System, leave this data item blank.

Refer to the current AJCC Cancer Staging System for staging rules.

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

AJCC TNM Post Therapy Clin (yc) M

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_CLIN_YC_M

NAACCR Item #: 1066

Diagnosis Years Available: 2021 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. The CoC requires use of the current AJCC Staging System in its accredited program cancer registries when the planned post-neoadjuvant therapy surgery has been canceled. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the current system (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The post therapy clin M category staging data item must be assigned for Class of Case 10-22.

Assign post therapy clin M category as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded post therapy clin M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ

tumors that are not staged according to the current AJCC edition. Code 88, only if the case qualifies, for post therapy clinical or for post therapy pathological T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging System for staging rules.
The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

Grade Post Therapy Clin (yc)

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: GRADE_POST_THERAPY_CLIN_YC

NAACCR Item #: 1068

Diagnosis Years Available: 2021+

Length: 1

Allowable Values: 1-5, 8, 9, A, B, C, D, E, L, H, M, S, Blank

Description:

This data item records the grade of a solid primary tumor that has been resected following neoadjuvant therapy. If AJCC staging is being assigned, the tumor must have met the surgical resection requirements in the AJCC manual. Record the highest grade documented from the surgical treatment resection specimen of the primary site following neoadjuvant therapy. For cases diagnosed January 1, 2021 and later, this data item, along with Grade Clinical [3843], Grade Pathological [3844], and Grade Post Therapy Path [3845] replaces Grade/Differentiation [440] as well as SSF's for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

Rationale:

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

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

Registry Coding Instructions:

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

AJCC TNM Post Therapy Clin (yc) Stage Group

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_THER_CLIN_YC_GRP

NAACCR Item #: 1067

Diagnosis Years Available: 2021 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

Identifies the remaining anatomic extent of disease based on the T and N following the completion of neoadjuvant therapy (satisfying the definition for that disease site) before planned surgical resection or primary treatment consisting of systemic and/or radiation therapy, and the M status defined during the diagnostic workup.

Rationale:

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

Registry Coding Instructions:

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

Code	Label
88	Not applicable, no code assigned for this case in the current AJCC Staging Manual
99	Unknown, not staged

AJCC TNM Post Therapy Path (yp) T

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_PATH_T

NAACCR Item #: 1021

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The post therapy T category staging data item must be assigned for Class of Case 10-22.

Assign post therapy T category as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded post therapy T category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

For lung, occult carcinoma is assigned TX.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC TNM Post Therapy Path (yp) T Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_PATH_T_SFX

NAACCR Item #: 1033

Diagnosis Years Available: 2018 +

Length: 4

Allowable Values: (m), (s), blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2008 the CoC requires that AJCC clinical TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Registry Coding Instructions:

Record the post therapy T category suffix as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the post therapy T category suffix, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC manual, leave this data item blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

AJCC TNM Post Therapy Path (yp) T Suffix continued

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

AJCC TNM Post Therapy Path (yp) N

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_PATH_N

NAACCR Item #: 1022

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The post therapy N category staging data item must be assigned for Class of Case 10-22.

Assign post therapy N category as documented by the treating physician(s) or managing physician in the medical record.

If the managing physician has not recorded post therapy N category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current listof valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC TNM Post Therapy Path (yp) N Suffix

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_PATH_N_SFX

NAACCR Item #: 1036

Diagnosis Years Available: 2018 +

Length: 4

Allowable Values: (sn), (f), blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2008 the CoC requires that AJCC clinical TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Registry Coding Instructions

Record the post therapy N category suffix as documented by the first treating physician or the managing physician in the medical record.

If the managing physician has not recorded the post therapy N category suffix, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

If the tumor is not staged according to the AJCC manual, leave this data item blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

AJCC TNM Post Therapy Path (yp) N Suffix continued

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

AJCC TNM Post Therapy Path (yp) M

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_PATH_M

NAACCR Item #: 1023

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

Identifies the presence or absence of distant metastasis (M) of the tumor known following the completion of neoadjuvant therapy (satisfying the definition for that disease site) and planned post- neoadjuvant therapy surgical resection.

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2018 the CoC requires use of the AJCC 8th Edition Staging System in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results. With the implementation of the 8th Edition, storage codes are no longer utilized. Values and Labels for the different categories are exact matches to what is listed in the 8th Edition Manual (except for code 88). The new categories will be used for cases diagnosed in 2018 and later.

Registry Coding Instructions:

The post therapy M category staging data item must be assigned for Class of Case 10-22.

Assign post therapy M category as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded post therapy M category, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician.

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

AJCC TNM Post Therapy Path (yp) Stage Group

Data Dictionary Category: Stage of Disease**:** AJCC 8th Edition

PUF Data Item Name: AJCC_TNM_POST_PATH_STG_GRP

NAACCR Item #: 1024

Diagnosis Years Available: 2018 +

Length: 15

Allowable Values: Alphanumeric, blank

Description:

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

Rationale:

The CoC requires that AJCC TNM staging be used in its accredited cancer programs. Effective January 1, 2015 the CoC requires that AJCC pathological TNM staging be recorded in its accredited program cancer registries. The AJCC developed this staging system for evaluating trends in the treatment and control of cancer. This staging system is used by physicians to estimate prognosis, plan treatment, evaluate new types of therapy, analyze outcomes, design follow-up strategies, and to assess early detection results.

Registry Coding Instructions:

Record the post therapy stage group as documented by the treating physician(s) or the managing physician in the medical record.

If the managing physician has not recorded the post therapy stage, registrars will assign this item based on the best available information, without necessarily requiring additional contact with the physician(s).

Code 88 for clinical and pathological or post therapy T, N, and M as well as stage group if a site/histology combination is not defined in the current AJCC edition and for in situ tumors that are not staged according to the current AJCC edition.

If the value does not fill all 15 characters, then record the value to the left and leave the remaining spaces blank.

Convert all Roman numerals to Arabic numerals and use upper-case (capital letters) only.

Refer to the current AJCC Cancer Staging Manual for staging rules.

The valid codes and labels for the AJCC Cancer Staging Manual, Eighth Edition have been expanded and are now consistent for clarity.

The valid codes and labels for the AJCC Cancer Staging System have been expanded and are now consistent for clarity. They are provided on the AJCC Web site. Refer to the most current list of valid codes and labels: AJCC Cancer Staging System Products | ACS (facs.org)

Histologic Subtype

Data Dictionary Category: Stage of Disease: AJCC 8th Edition

PUF Data Item Name: HISTOLOGIC_SUBTYPE

NAACCR Item #: 3960

Diagnosis Years Available: 2023

Length: 1

Allowable Values: 0, 1, 2, 3, 4

Description:

Histology code for appendiceal tumors (8480) is defined as “Mucinous Adenocarcinoma (in situ or invasive).” In the AJCC 8th chapter for Appendix-Carcinoma, there are also low-grade appendiceal mucinous neoplasm (LAMN) and high-grade appendiceal mucinous neoplasm (HAMN) diagnoses that are assigned the same histology.

Due to the different natures of these histologies, there is interest in tracking these different types of tumors. With the current histology codes, a distinction cannot be made. A histology subtype data item is needed.

Registry Coding Instructions:

Code	Label
0	Histology is NOT 8480
1	Low-grade appendiceal mucinous neoplasm LAMN
2	High-grade appendiceal mucinous neoplasm HAMN
3	Mucinous Adenocarcinoma/carcinoma Mucus Adenocarcinoma/carcinoma Mucoid adenocarcinoma/carcinoma Colloid adenocarcinoma/carcinoma
4	Other terminology coded to 8480
Blank	NA-Diagnosis year is prior to 2023

Stage of Disease: Collaborative Stage Data Collection System

CS Site-Specific Factors 1-25

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_SITESPECIFIC_FACTOR_1 through CS_SITESPECIFIC_FACTOR_25

NAACCR Item #: 2861- 2880, 2890, 2900, 2910, 2920, 2930

Diagnosis Years Available: Version 1: 2004-2009, Version 2: 2010-2017

Length: 3

Allowable Values: 000 - 999, blank Site-specific (see variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*)

Note: These were no longer collected starting in 2018. These were replaced by Site Specific Data Items (SSDIs) in 2018.

Description:

The CS Site-Specific Factors are part of the *Collaborative Stage Data Collection System*, which was implemented in 2004 and expanded in 2010. CS Site-Specific Factors 1-24, when used for a particular site, contain information that is used to assign AJCC 6th and/or 7th edition T, N, M and stage group, or prognostic information identified in the *AJCC Cancer Staging Manual*, 7th edition. CS Site- Specific Factor 25 is used to distinguish between or among staging schema when site and histology codes are not sufficient, for consistency with the AJCC 7th edition for the following: Nasopharynx/ Pharyngeal Tonsil; Esophagus GE Junction / Stomach; Bile Ducts Distal / Bile Ducts Perihilar / Cystic Duct; Peritoneum / Peritoneum Female Genital; Melanoma Ciliary Body / Melanoma Iris; Lacrimal Gland / Lacrimal Sac.

Registry coding instructions: Instructions are found on the Collaborative Stage website for each Site Specific Factor. See below for more information.

Analytic Note:

Using the Site Specific Factors (SSF) from the *Collaborative Stage Data Collection System* (CS)

PUF projects may examine one or more laboratory prognostic indicators. These are available as SSF collected as part of the CS. The term “collaborative” means that the data collection tool was devised to meet the various needs of cancer registry data standard setters such as the Commission on Cancer (CoC), Surveillance Epidemiology and End Results (SEER), and the National Program of Cancer Registries (NPCR).

Up to 25 data fields are used to collect SSFs. Being site specific, they contain different information depending on the type of cancer in the report. For example, for breast cancer

reports SSF1 contains "Estrogen Receptor (ER) Assay" results, but for colon cancer reports SSF1 contains "Carcinoembryonic Antigen (CEA)" results.

SSFs also may convey non-laboratory site specific information that is relevant to prognosis for some cases. For example, SSF1 for gastric cancers is "Clinical Assessment of Regional Lymph Nodes", and for melanoma of skin it is "Measured Thickness (Depth), Breslow Measurement".

Some detective work is required to identify the data fields of interest, the applicable codes, and the adequacy of the data for the particular study.

The codes, and occasionally the fields used, for a particular prognostic factor changed over time. In the PUF the SSF data are retained in the form in which they were submitted. That means that it will be necessary to identify the CS Version Numbers that are used in the PUF file, and use those to identify whether the data contents for the desired SSF may have changed or moved over time. Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative System*.

The quality of the SSF data items has undergone minimal review by NCDB, and PUF users are advised to examine the data consistency and completeness of these items carefully before proceeding with the study.

All SSF data items are edited for validity and internal consistency before the case report is submitted, and the submitter is required to correct any edit errors. However, some coding errors remain.

Case coverage of the SSFs is limited for a variety of reasons, potentially seriously affecting their applicability for some studies.

The availability of the measures to hospital registrars at the time of data entry is sparse for many prognostic measures. The source of information is usually the laboratory report as it appears in the hospital patient record. The information may not be available in the hospital if it was requested by a physician and the report was sent to the physician's office. Or it may be delayed and not picked up later.

The individual tests are not run at all locations or for all patients, even if the test is part of an acknowledged treatment protocol.

Finally, many hospital registries began abstracting data for the years the measures were introduced prior to the hospital's upgrade of the software necessary to collect those items, and they did not necessarily return to the cases to abstract the missed data.

Some SSFs were first introduced in 2004, and are underrepresented for cases diagnosed that year compared to later years. Most prognostic SSFs were introduced in 2010, and are certainly underrepresented for 2010 diagnoses; they are not available at all for earlier years.

The SSFs in use in for Versions 2.02 through 2.05, and whether the field was required for CoC registries are described in http://seer.cancer.gov/csreqstatus/index.html. To access the list of Site-Specific Factors required by the Commission on Cancer, click the *Get Started* button in the Collaborative Stage Requirements Status box on the right-hand side of the page. Then, press the plus sign in the middle of the page, select *Required Factors* as Report, *CoC* as the Standard Setter, and the applicable version under Version. As noted above, the fields in which these items were stored and the codes used may have changed over time.

CS Version Derived

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_VERSION_LATEST

NAACCR Item #: 2936

Diagnosis Years Available: 2004 - 2015

Length: 6

Allowable Values: 000900 - 020599, blank

Description: This is the version number of the most recent derivation of CS data items in the record.

Registry coding instructions: None.

Analytic Note: This item is a 6-digit code. The first two digits represent the major version number; the second two digits represent minor version changes; and the last two digits represent even less significant changes (from correction of spelling errors to tracking of conversion processes). Use the codes listed above to interpret contents of CS Site-Specific items. See data item *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System* for the links to respective site-specific schema. As of 2016, this item was no longer required.

The following are the allowable codes (XX stands for "any two digits"):		
Code	**Definition**	**CS Version**
0009XX	This was a trial version, consider the same as 0101XX	CSv01
0101XX		CSv01
0102XX		CSv01
0103XX		CSv01
0104XX		CSv01
0200XX		CSv02
0201XX		CSv02
0202XX		CSv02
0203XX		CSv02
0204XX		CSv02
0205XX		CSv02

Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: Not applicable

NAACCR Item #: Not Applicable

Diagnosis Years Available: Version 1: 2004-2009, Version 2: 2010:2017

Length: Varies

Allowable Values: Varies

Description:

> The most recent version of CS is located at https://www.facs.org/quality-programs/cancer/ajcc/cs-schema. You may search the primary site by natural order or alphabetically. Select the primary site of interest and the CS variables for the primary site will appear. To see the associated codes with each variable, click on the variable name.

Registry coding instructions: See CS manuals referenced below

Analytic note: None

CS Extension

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_EXTENSION

NAACCR Item #: 2810

Diagnosis Years Available: 2004 - 2015

Length: 3

Allowable Values: 00 - 80, 95, 99 Site-specific (see variable Site-Specific Code Definitions for data items from the *Collaborative Stage Data Collection System*)

Description:

Identifies contiguous growth (extension) of the primary tumor within the organ or origin or its direct extension into neighboring organs. For some sites such as ovary, discontinuous metastasis is coded in *CS Extension* (NAACCR Item # 2810).

Registry coding instructions:

None

Analytic Note:

CS Extension (NAACCR Item #2810) is used to derive some AJCC T-values and some SEER Summary Stage codes. This item was discontinued in 2016.

Some detective work is required to interpret codes in the *CS Extension* (NAACCR Item #2810) field. The codes differ by type of cancer and by the version of CS in which the case was coded. In the PUF, CS fields are retained in the form in which they were submitted. That means that it will be necessary to identify the *CS Version Derived* (NAACCR Item #2936) that are used in the PUF file, and use those to identify whether the contents of the *CS Extension* (NAACCR Item #2810) field may have changed over time. Links to the site specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

CS Tumor Size/Ext Eval

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_TUMOR_SIZEEXT_EVAL

NAACCR Item #: 2820

Diagnosis Years Available: 2004 - 2015

Length: 1

Allowable Values: 0 - 3, 5, 6, 8, 9, blank Site-specific (see variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*)

Description:

Records how the codes for the two items, *CS Tumor Size* (NAACCR Item #2800) and *CS Extension* (NAACCR Item #2810) were determined, based on the diagnostic methods employed.

Registry coding instructions: See CS manual

Analytic Note:

CS Tumor Size/Ext Eval (NAACCR Item #2820) is used to describe whether the staging basis for the AJCC T value is clinical or pathologic to record whether systemic treatment was performed prior to assignment of either *CS Tumor Size* (NAACCR Item #2800) or *CS Extension* (NAACCR Item #2810) codes. This item was discontinued in 2016.

Some detective work is required to interpret codes in the *CS Tumor Size/Ext* (NAACCR Item #2820) field. The codes differ by type of cancer and occasionally by the version of CS in which the case was coded. In the PUF, CS fields are retained in the form in which they were submitted. That means that it will be necessary to identify the *CS Version Derived* (NAACCR Item #2936) that are used in the PUF file, and to use those to identify whether the contents of the *CS Tumor Size/Ext Eval* (NAACCR Item #2820) fields may have changed over time. Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

Lymph-Vascular Invasion

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: LYMPH_VASCULAR_INVASION

NAACCR Item #: 1182

Diagnosis Years Available: 2010 +

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description:

Indicates the presence or absence of tumor cells in lymphatic channels (not lymph nodes) or blood vessels within the primary tumor as noted microscopically by the pathologist. This data item is separate from the CS data items but is included in this manual because of its relationship to the Collaborative Stage Data Collection System. Lymph-vascular invasion is an item of interest to both pathologists and clinicians and is mentioned in many chapters of the AJCC Cancer Staging Manual, seventh edition. This field is required for mapping of T in some sites, such as testis and penis.

Registry Coding Instructions:

This coding convention has been developed and implemented for use in the AJCC Cancer Staging Manual, Seventh Edition, and updated with new codes in the AJCC 8th Edition staging manual for appropriate disease sites. Additional clarifications implemented for thyroid and adrenal per suggestions from CAP.

Revised CAP Protocols and 8th Edition chapters will indicate which chapters will use the new codes (2, 3, and 4) and which will only use the existing codes (0, 1, 8, 9), as there are some disease sites where distinguishing between L and V is not medically appropriate.

Code 8, Not Applicable for benign/borderline brain and CNS tumors and GastrointestinalStromal Tumors (GIST).

For cases diagnosed January 1, 2018 and later, new codes indicating lymphatic, small vessel, and/or large vessel invasion were added.

1. Code from pathology report(s). Code the absence or presence of Lymphovascular invasion as described in the medical record.

a. The primary sources of information about lymphovascular invasion are the pathology check lists (synoptic reports) developed by the College of American Pathologists. If the case does not have a checklist or synoptic report, code from the pathology report or a physician's statement, in that order.

b. Do not code perineural invasion in this field.

c. Information to code this field can be taken from any specimen from the primary tumor (biopsy or resection.)

d. If lymphovascular invasion is identified in any specimen, it should be coded as present/identified.

e. For cases with benign or borderline behavior, code the lymphovascular invasion documented (negative or positive) and, if not documented, code unknown.

f. For cases treated with neoadjuvant therapy, refer to table below in order to code this field. However, if documentation in the medical record indicates information that conflicts with this table, code lymphovascular invasion with the documentation in the medical record.

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

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

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

2. Use of codes.

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

b. Use code 1 when the pathology report or a physician's statement indicates that lymphovascular invasion (or one of its synonyms) is present in the specimen.

c. Lymphovascular invasion must be coded 0, 1, 2, 3, 4, or 9 for the Schema IDs in the following list: 00071 Lip 00072 Tongue Anterior 00073 Gum 00074 Floor of Mouth 00075 Palate Hard 00076 Buccal Mucosa 00077 Mouth Other 00080 Major Salivary Glands 00100 Oropharynx (p16+) 00111 Oropharynx (p16-) 00112 Hypopharynx 00121 Maxillary Sinus 00122 Nasal Cavity and Ethmoid Sinus 00130 Larynx Other 00131 Larynx Supraglottic 00132 Larynx Glottic 00133 Larynx Subglottic 00161 Esophagus (incl GE Junction) Squamous 00169 Esophagus (incl GE Junction) (excl Squamous) 00170 Stomach 00180 Small Intestine 00190 Appendix 00200 Colon and Rectum 00230 Bile Ducts Intrahepatic 00250 Bile Ducts Perihilar 00260 Bile Ducts Distal 00270 Ampulla Vater 00280 Pancreas 00290 NET Stomach 00301 NET Duodenum 00302 NET Ampulla of Vater 00320 NET Appendix 00330 NET Colon and Rectum 00340 NET Pancreas 00350 Thymus 00360 Lung 00460 Merkel Cell Skin 00470 Melanoma Skin 00500 Vulva 00510 Vagina 00520 Cervix 00530 Corpus Carcinoma 00541 Corpus Sarcoma 00542 Corpus Adenosarcoma 00560 Placenta 00570 Penis 00590 Testis 00620 Bladder 00730 Thyroid 00740 Thyroid Medullary

d. Lymphovascular invasion must be coded 0, 2, 3, 4, or 9 for the Schema IDs in the following list: 00730 thyroid 00740 thyroid medullary 00760 adrenal gland

e. Lymphovascular invasion may be coded any code (0, 1, 2, 3, 4, 8, or 9) for the remaining Schema IDs (shown in the following list): 00060 Cervical Lymph Nodes, Occult Head and Neck 00090 Nasopharynx 00118 Pharynx Other 00119 Middle Ear 00128 Sinus Other 00140 Melanoma Head and Neck 00150 Cutaneous Carcinoma Head and Neck 00210 Anus 00220 Liver 00241 Gallbladder 00242 Cystic Duct 00278 Biliary Other 00288 Digestive Other 00310 Net Jejunum and Ileum 00358 Trachea 00370 Pleural Mesothelioma 00378 Respiratory Other 00381 Bone Appendicular Skeleton 00382 Bone Spine 00383 Bone Pelvis 00400 Soft Tissue Head and Neck 00410 Soft Tissue Trunk and Extremities 00421 Soft Tissue Abdomen and Thorax 00422 Heart, Mediastinum, and Pleura 00430 GIST (2018-2020) 00440 Retroperitoneum 00450 Soft Tissue Other 00458 Kaposi Sarcoma 00478 Skin Other 00480 Breast (Invasive) 00551 Ovary 00552 Primary Peritoneal Carcinoma 00553 Fallopian Tube 00558 Adnexa Uterine Other 00559 Genital Female Other 00580 Prostate 00598 Genital Male Other 00600 Kidney Parenchyma 00610 Kidney Renal Pelvis 00631 Urethra 00633 Urethra-Prostatic 00638 Urinary Other 00640 Skin Eyelid 00650 Conjunctiva 00660 Melanoma Conjunctiva 00671 Melanoma Iris 00672 Melanoma Choroid and Ciliary Body 00680 Retinoblastoma 00690 Lacrimal Gland 00698 Lacrimal Sac 00700 Orbital Sarcoma 00718 Eye Other 00721 Brain 00722 CNS Other 00723 Intracranial Gland 00750 Parathyroid 00760 Adrenal Gland 00770 NET Adrenal Gland 00778 Endocrine Other 99999 Ill-Defined Other

f. Lymphovascular invasion must be coded 8 (not applicable) for all other Schema IDs: 00430 GIST (2021+) 00710 Lymphoma Ocular Adnexa 00790 Lymphoma 00795

Lymphoma (CLL/SLL) 00811 Mycosis Fungoides 00812 Primary Cutaneous Lymphoma non MF 00821 Plasma Cell Myeloma 00822 Plasma Cell Disorder 830 HemeRetic

g. Use code 9 when:

i. there is no microscopic examination of a primary tissue specimen

ii. the primary site specimen is cytology only or a fine needle aspiration

iii. the biopsy is only a very small tissue sample

iv. it is not possible to determine whether lymphovascular invasion is present

v. the pathologist indicates the specimen is insufficient to determine lymphovascular invasion

vi. lymphovascular invasion is not mentioned in the pathology report vii. primary site is unknown

h. Clarification between codes 8 and 9:

Code 8 should only be used in the following situations: 1. Standard-setter does not require this item and you are not collecting it. 2. Those schemas noted above described in code 8 for which LVI is always not applicable.

For those cases where there is no information/documentation from the pathology report or other sources, use code 9.

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

CS Mets at DX

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_METS_AT_DX

NAACCR Item #: 2850

Diagnosis Years Available: 2004 - 2015

Length: 2

Allowable Values: Site-specific (see variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*)

Description:

Identifies whether there is metastatic involvement of distant site(s) at the time of diagnosis.

Registry coding instructions: None.

Analytic Note:

CS Mets at DX (NAACCR Item #2850) is used to derive some AJCC M values and SEER Summary Stage codes. This item was discontinued in 2016.

Some detective work is required to interpret codes in the *CS Mets at DX* (NAACCR Item #2850) field. The codes differ by type of cancer and by the version of CS in which the case was coded. In the PUF, CS fields are retained in the form in which they were submitted. That means that it will be necessary to identify the *CS Version Derived* (NAACCR Item #2936) that are used in the PUF file, and use those to identify whether the contents of the *CS Mets at DX* (NAACCR Item #2850) filed may have changed over time. Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

CS Mets at DX-Bone

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_METS_DX_BONE

Diagnosis Years Available: 2010 - 2015

NAACCR Item #: 2851

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description:

Identifies the presence of distant metastatic involvement of bone at the time of diagnosis.

Registry Coding Instructions:

Code information about bone metastases only (discontinuous or distant metastases to bone) identified at the time of diagnosis. This field should not be coded for bone marrow involvement. Bone involvement may be single or multiple. Information about bone involvement may be clinical or pathologic.

Code this field whether or not the patient had any preoperative systemic therapy. This field should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Sites.

Use code 8 for Hematopoietic, reticuloendothelial, Immunopolifereative and Myeloproliferative Neoplasms, and Hodgkin's and non-Hodgkin's Lymphoma.

Use code 9 when it cannot be determined from the medical record whether the patient specifically had bone metastases; for example, when *CS Mets at DX* (NAACCR Item #2850) is coded as carcinomatosis but bone is not specifically mentioned as a metastatic site. Also use code 9 when it is not known whether the patient had any distant metastases.

Analytic Note:

This item was first collected in 2010. Because of delays in some hospitals in implementing registry software updates, data may be incomplete for 2010 diagnoses. This item was discontinued in 2016, and replaced by the *FORDS* manual variable, *Mets at Diagnosis – Bone* (NAACCR Item #1112). Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

Code	Definition
0	None; no bone metastases
1	Yes
8	Not applicable
9	Unknown whether bone is involved metastatic site; Not documented in patient record
blank	Not available

CS Mets at DX-Brain

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_METS_DX_BRAIN

NAACCR Item #: 2852

Diagnosis Years Available: 2010 - 2015

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description:

Identifies the presence of distant metastatic involvement of the brain at the time of diagnosis.

Registry Coding Instructions:

Code information about brain metastases only (discontinuous or distant metastases to brain) known at the time of diagnosis. This field should not be coded for involvement of the spinal cord or other parts of the central nervous system.

Brain involvement may be single or multiple. Information about brain involvement may be clinical or pathologic. Code this field whether or not the patient had any preoperative systemic therapy.

This field should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites.

Use code 8 for Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms, and Hodgkin and non-Hodgkin Lymphoma.

Use code 9 when it cannot be determined from the medical record whether the patient specifically had brain metastases; for example, when *CS Mets at DX* (NAACCR Item #2850) is coded as carcinomatosis but the brain is not specifically mentioned as a metastatic site. Also use code 9 when it is not known whether the patient had any distant metastases.

Analytic Note:

This item was first collected in 2010. Because of delays in some hospitals in implementing registry software updates, data may be incomplete for 2010 diagnoses. This item was discontinued in 2016. It was replaced by the *FORDS* manual variable *Mets at Diagnosis – Brain* (NAACCR Item #1113) in 2016.

Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

Code	Definition
0	None; no brain metastases
1	Yes
8	Not applicable
9	Unknown whether bone is involved metastatic site; Not documented in patient record
blank	Not available

CS Mets at DX-Liver

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_METS_DX_LIVER

NAACCR Item #: 2853

Diagnosis Years Available: 2010 - 2015

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description:

Identifies the presence of distant metastatic involvement of the liver at the time of diagnosis.

Registry Coding Instructions:

Code information about liver metastases only (discontinuous or distant metastases to the liver) identified at the time of diagnosis.

Liver involvement may be single or multiple. Information about liver involvement may be clinical or pathologic. Code this field whether or not the patient had any preoperative systemic therapy.

This field should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Sites.

Use code 8 for Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms, and Hodgkin and non-Hodgkin Lymphoma.

Use code 9 when it cannot be determined from the medical record whether the patient had liver metastases; for example, when *CS Mets at DX* (NAACCR Item #2850) is coded as carcinomatosis but the liver is not specifically mentioned as a metastatic site. Also use code 9 when it is not known whether the patient had any distant metastases.

Analytic Note:

This item was first collected in 2010. Because of delays in some hospitals in implementing registry software updates, data may be incomplete for 2010 diagnoses. This item was discontinued in 2016 and replaced by the *FORDS* manual variable *Mets at Diagnosis – Liver* (NAACCR Item #1115). Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

CS Mets at DX-Liver continued

Code	Definition
0	None; no liver metastases
1	Yes
8	Not applicable
9	Unknown whether bone is involved metastatic site; Not documented in patient record
blank	Not available

CS Mets at DX-Lung

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_METS_DX_LUNG

NAACCR Item #: 2854

Diagnosis Years Available: 2010 - 2015

Length: 1

Allowable Values: 0, 1, 8, 9, blank

Description:

Identifies the presence of distant metastatic involvement of the lung at the time of diagnosis.

Registry Coding Instructions:

Code information about lung metastases only (discontinuous or distant metastases to the lung) identified at the time of diagnosis. This field should not be coded for pleural or pleural fluid involvement.

Lung involvement may be single or multiple. Information about lung involvement may be clinical or pathologic. Code this field whether or not the patient had any preoperative systemic therapy.

This field should be coded for all solid tumors, Kaposi sarcoma, Unknown Primary Site, and Other and Ill-Defined Primary Sites.

Use code 8 for Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms, and Hodgkin and non-Hodgkin Lymphoma.

Use code 9 when it cannot be determined from the medical record whether the patient specifically had lung metastases; for example, when *CS Mets at Dx* (NAACCR Item #2850) is coded as carcinomatosis but the lung is not specifically mentioned as a metastatic site.

Also use code 9 when it is not known whether the patient had any distant metastases.

Analytic Note:

This item was first collected in 2010. Because of delays in some hospitals in implementing registry software updates, data may be incomplete for 2010. This item was discontinued in 2016 and replaced by the *FORDS* manual variable *Mets at Diagnosis – Lung* (NAACCR Item #1116). Links to the site-specific codes can be found

within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

Code	Definition
0	None; no lung metastases
1	Yes
8	Not applicable
9	Unknown whether bone is involved metastatic site; Not documented in patient record
blank	Not available

CS Mets Eval

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: CS_METS_EVAL

NAACCR Item #: 2860

Diagnosis Years Available: 2004 - 2015

Length: 1

Allowable Values: 0 - 3, 5, 6, 8, 9, blank Site-specific (see variable *Site Specific Code Definitions for Data Items from the Collaborative* Stage Data Collection System)

Description:

Records how the code for *CS Mets at DX* (NAACCR Item #2850) was determined based on the diagnostic methods employed.

Registry coding instructions:

None.

Analytic Note:

CS Mets Eval (NAACCR Item #2860) describes whether the staging basis for *CS Mets at DX* (NAACCR Item #2850) was clinical or pathologic, and whether any systemic treatment was given prior to that code assignment. This item was discontinued in 2016.

Some detective work is required to interpret codes in *CS Mets Eval* (NAACCR Item #2860). The codes may differ by type of cancer and by the version of CS in which the case was coded. In the PUF, CS fields are retained in the form in which they are submitted.

That means that it will be necessary to identify the *CS Version Derived* (NAACCR Item # 2936) that are used in the PUF file, and use those to identify whether the contents of the *CS Mets Eval* (NAACCR Item #2860) field may have changed over time. Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

CS Tumor Size

Data Dictionary Category: Stage of Disease Collaborative Stage Data Collection System

PUF Data Item Name: TUMOR_SIZE

NAACCR Item #: 2800

Length: 3

Diagnosis Years Available: 2004 - 2015

Allowable Values: 000 - 999

Description:

Describes the largest dimension of the diameter of the primary tumor in millimeters (mm).

Registry Coding Instructions:

Refer to the site and histology-specific instructions in the current CS manual for coding instructions at: https://www.facs.org/quality-programs/cancer/ajcc/cs-schema CoC does not require that registrars report information for this item that is not readily available in the facility's records. However, if that information is obtained along with other material from another source, it may be used.

Analytic Note:

This field is blank in the melanoma PUF. Use *CS Site-Specific Factor 1* (NAACCR Item #2880) to obtain Breslow's depth. *CS Tumor Size* (NAACCR Item #2800) is part of the *Collaborative Stage Data Collection System* (CS), and was implemented in 2004 through 2015. This item was discontinued in 2016 and replaced by a new *Tumor Size Summary* (NAACCR Item #756) variable. It is used to describe tumor size at diagnosis as an independent prognostic indicator for many tumors and it is used by Collaborative Stage to derive some TNM-T codes.

Links to the site-specific codes can be found within the variable *Site Specific Code Definitions for Data Items from the Collaborative Stage Data Collection System*.

Site Specific Data Items (SSDIs)

Site Specific Data Items (SSDIs)

Data Dictionary Category: Site Specific Data Items (SSDIs)

PUF Data Item Names: Various

NAACRR Item Number: Various

Length: Various

Diagnosis Years Available: 2018 +

Allowable Values: Various

Description:

In 2018, Site Specific Data Items replaced the Site Specific Factors. What is a SSDI? A "SSDI'" is a site- specific data item. "Site" in this instance is based on the primary site, the AJCC chapter, Summary Stage chapter and the EOD schema. SSDIs were preceded by Collaborative Stage Site Specific Factors (CS SSFs), which were first introduced in 2004 with CSv1, and went through major revisions in 2010 with Collaborative Stage v2 (CSv2). CS SSFs were discontinued as of 12/31/2017. SSDIs have their own data item name and number and can be collected for as many sites/chapters/schemas as needed. Each Site- Specific Data Item (SSDI) applies only to selected schemas. SSDI fields should be blank for schemas for which they do not apply.

Number of SSDIs compared to CS SSFs

Approximately 260 unique CS SSFs in CSv0205

101 discontinued

12 obsolete

147 required

Of these, 27 are not required for 1/1/2018+

120 SSDIs added to the NAACCR v18 layout. CS SSF data will be retained for cases diagnosed 2004- 2017.

The SSDI manuals which include descriptions and definitions of each SSDI are found on the NAACCR Website at: https://apps.naaccr.org/ssdi/list/

Macroscopic Evaluation of the Mesorectum

Data Dictionary Category: Site Specific Data Items (SSDIs)

PUF Data Item Name: MACROSCOPIC_EVAL_TMESORECTUM

NAACCR Item #: 3950

Diagnosis Years Available: 2022+

Length: 2

Allowable Values: 00, 10, 20, 30, 40, 99 or Blank

Description:

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

Rational:

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

Registry Coding Instructions:

The American Society of Colon and Rectal Surgeons most recent Practice Parameters for the Management of Rectal Cancer states that total mesorectal excision is used for curative resection of tumors of the middle and lower thirds of the rectum, either as part of low anterior or abdomino- perineal resection. For tumors of the upper third of the rectum, a tumor-specific mesorectal excision should be used with the mesorectum divided ideally no less than 5 cm below the lower margin of the tumor. Pathologic evaluation of the resection specimen has been shown to be a sensitive means of assessing the quality of rectal surgery. Macroscopic pathologic assessment of the completeness of the mesorectum, is scored as complete, partially complete, or incomplete.

Information for this data item comes from the pathology report only.

Leave this field blank if primary site is other than C20.9

Neoadjuvant therapy does not alter coding of this data item

Code 00 if patient did not have a Total Mesorectal Excision.

Codes 10, 20, and 30 must be based on pathology report

Registrar should assign codes 10-30 based on criteria used by pathologist to assess completeness status

If the pathologist does not indicate incomplete, nearly complete, or complete for a TME specimen assign code 40.

Analytic Note: None

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

Rx Hosp -- Surg Breast

Data Dictionary Category: Site Specific Data Items (SSDIs)

PUF Data Item Name: RX_HOSP_SURG_BREAST

NAACCR Item #: 10104

Diagnosis Years Available: 2022-2023

Length: 4

Allowable Values: B000, B200-B990, Alphanumeric, Blank

Description:

Records the surgical procedure performed of the primary site at this facility. This data item is required beginning with diagnosis year 2022 breast cases only.

Rational:

Field study for updating the surgery codes in Appendix A, to support the Synoptic Operative Reporting and to allow for more descriptive surgery codes. This data item can be used to compare the efficacy of treatment options.

Registry Coding Instructions:

Review the operative report or procedure note to code the appropriate surgical code.

Code the surgical resection code for Breast primaries performed at this facility with diagnosis date ≥ 1/1/2022.

Code the most definitive surgical procedure for the primary site performed at this facility.

Reconstruction performed immediately after the surgical resection (codes B200-B900) at this facility should be coded in the Rx Hosp – Recon Breast [Item# 10106] site specific data item.

If reconstruction is not performed, assign code A000 to data item Rx Hosp-Recon Breast [10106].

Use code B600, B610 or B620 if patient had a modified radical mastectomy.

For codes B200 to B760, code in order of hierarchy, the response positions are hierarchical. Last-listed responses take precedence over responses written above.

Use codes B800 and B900 only if more precise information about the surgery performed at this facility is not available.

Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item using code 210.

Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site.

If contralateral breast reveals a second primary, each breast is abstracted separately.

This data item is effective for Breast cases diagnosed 2022 only.

Leave this data item blank for:

Breast cases diagnosed prior year 2022

All other sites

Analytic Note: None.

Code	Definition
B000	None; no surgery of primary site; autopsy ONLY
B200	Partial mastectomy; less than total mastectomy; lumpectomy, segmental mastectomy, quadrantectomy, tylectomy, with or without nipple resection
B210	Excisional breast biopsy - Diagnostic excision, no pre-operative biopsy proven diagnosis of cancer
Note: An excisional biopsy can occur when the nodule was previously not expected to be cancer. Example: Use code B210, when a surgeon removes the mass and it comes back cancer and there is no biopsy (either core or FNA) done prior to the mass being removed.	
B215	Excisional breast biopsy, for atypia
Note: An excisional breast biopsy removes the entire tumor and/or leave only microscopic margins. This surgical code was added to collect code when atypia tissue is excised and found to be reportable. Approx. 10-15% of excised atypia are cancer and reportable. Example: Use code B215 when patient has biopsy that shows atypical ductal hyperplasia, an excision is then performed, and pathology shows in situ or invasive cancer. The excisional breast biopsy for the ADH diagnosed the cancer, not the core biopsy.	
B240	Re-excision of margins from primary tumor site for gross or microscopic residual disease when less than total mastectomy performed.
B290	Central lumpectomy, only performed for a prior diagnosis of cancer, which includes removal of the nipple areolar complex
Note: A central lumpectomy removes the nipple areolar complex, whereas a lumpectomy does not. Central lumpectomy and central portion lumpectomy, central portion excision, central partial mastectomy are interchangeable terms. Example: Use code B290, when patients with Paget's disease or cancer directly involving the nipple areolar complex, where the nipple areolar complex needs to be removed.	

B300	Skin-sparing mastectomy
B310	WITHOUT removal of uninvolved contralateral breast
B320	WITH removal of uninvolved contralateral breast
Note: A skin sparing mastectomy removes all breast tissue and the nipple areolar complex and preserves native breast skin. It is performed with and without sentinel node biopsy or ALND.	
B400	Nipple-sparing mastectomy
B410	WITHOUT removal of uninvolved contralateral breast
B420	WITH removal of uninvolved contralateral breast
Note: A nipple sparing mastectomy removes all breast tissue but preserves the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B500	Areolar-sparing mastectomy
B510	WITHOUT removal of uninvolved contralateral breast
B520	WITH removal of uninvolved contralateral breast
Note: An areolar sparing mastectomy removes all breast tissue and the nipple but preserves the areola and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B600	Total (simple) mastectomy
B610	WITHOUT removal of uninvolved contralateral breast
B620	WITH removal of uninvolved contralateral breast
Note: A total (simple) mastectomy removes all breast tissue, the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND. Use code B600, B610 or B620 if patient had a modified radical mastectomy.	
B700	Radical mastectomy, NOS
B710	WITHOUT removal of uninvolved contralateral breast
B720	WITH removal of uninvolved contralateral breast
Note: A radical mastectomy removes all breast tissue, the nipple areolar complex, breast skin, and pectoralis muscle. It is performed with level l-III ALND.	

B760	Bilateral mastectomy for a single tumor involving both breasts, as for bilateral inflammatory carcinoma
B800	Mastectomy, NOS (including extended radical mastectomy)
B900	Surgery, NOS
B990	Unknown if surgery was performed; death certificate ONLY

Rx Summ-- Surg Breast

Data Dictionary Category: Site Specific Data Items (SSDIs)

PUF Data Item Name: RX_SUMM_SURG_BREAST

NAACCR Item #: 10105

Diagnosis Years Available: 2022-2023

Length: 4

Allowable Values: B000, B200-B990, Alphanumeric, Blank

Description:

Records the surgical procedure performed of the primary site performed at any facility. This data item is required beginning with diagnosis year 2022 breast cases only.

Rational:

Field study for updating the surgery codes in Appendix A to support the Synoptic Operative Reporting and allow for more descriptive surgery codes. This data item can be used to compare the efficacy of treatment options.

Registry Coding Instructions:

Review the operative report or procedure note to code the appropriate surgical code.

Code the surgical resection code for Breast primaries performed at any facility with diagnosis date ≥ 1/1/2022.

Code the most definitive surgical procedure for the primary site performed at any facility.

Reconstruction that is performed immediately after surgical resection (codes B200-B900) at any facility should be coded in the Rx Summ – Recon Breast [Item # 10107] site specific data item.

If reconstruction is not performed, assign code A000 to data item Rx Summ-Recon Breast [10107].

Use code B600, B610 or B620 if patient had a modified radical mastectomy.

For codes B200 to B760, code in order of hierarchy, the response positions are hierarchical. Last-listed responses take precedence over responses written above.

Use codes B800 and B900 only if more precise information about the surgery performed at any facility is not available.

Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item using code 210.

Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site.

If contralateral breast reveals a second primary, each breast is abstracted separately.

This data item is effective for Breast cases diagnosed 2022 only.

Leave this data item blank for:

Breast cases diagnosed prior year 2022

All other sites

Analytic Note: None.

Code	Definition
B000	None; no surgery of primary site; autopsy ONL
B200	Partial mastectomy; less than total mastectomy; lumpectomy, segmental mastectomy, quadrantectomy, tylectomy, with or without nipple resection
B210	Excisional breast biopsy - Diagnostic excision, no pre-operative biopsy proven diagnosis of cancer
Note: An excisional biopsy can occur when the nodule was previously not expected to be cancer. Example: Use code B210, when a surgeon removes the mass and it comes back cancer and there is no biopsy (either core or FNA) done prior to the mass being removed.	
B215	Excisional breast biopsy, for atypia
Note: An excisional breast biopsy removes the entire tumor and/or leave only microscopic margins. This surgical code was added to collect code when atypia tissue is excised and found to be reportable. Approx. 10-15% of excised atypia are cancer and reportable. Example: Use code B215 when patient has biopsy that shows atypical ductal hyperplasia, an excision is then performed, and pathology shows in situ or invasive cancer. The excisional breast biopsy for the ADH diagnosed the cancer, not the core biopsy.	
B240	Re-excision of margins from primary tumor site for gross or microscopic residual disease when less than total mastectomy performed.

B290	Central lumpectomy, only performed for a prior diagnosis of cancer, which includes removal of the nipple areolar complex
Note: A central lumpectomy removes the nipple areolar complex, whereas a lumpectomy does not. Central lumpectomy and central portion lumpectomy, central portion excision, central partial mastectomy are interchangeable terms. Example: Use code B290, when patients with Paget's disease or cancer directly involving the nipple areolar complex, where the nipple areolar complex needs to be removed.	
B300	Skin-sparing mastectomy
B310	WITHOUT removal of uninvolved contralateral breast
B320	WITH removal of uninvolved contralateral breast
Note: A skin sparing mastectomy removes all breast tissue and the nipple areolar complex and preserves native breast skin to cover the immediate reconstruction. It is performed with and without sentinel node biopsy or ALND.	
B400	Nipple-sparing mastectomy
B410	WITHOUT removal of uninvolved contralateral breast
B420	WITH removal of uninvolved contralateral breast
Note: A nipple sparing mastectomy removes all breast tissue but preserves the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B500	Areolar-sparing mastectomy
B510	WITHOUT removal of uninvolved contralateral breast
B520	WITH removal of uninvolved contralateral breast
Note: An areolar sparing mastectomy removes all breast tissue and the nipple but preserves the areola and breast skin. It is performed with and without sentinel node biopsy or ALND.	
B600	Total (simple) mastectomy
B610	WITHOUT removal of uninvolved contralateral breast
B620	WITH removal of uninvolved contralateral breast
Note: A total (simple) mastectomy removes all breast tissue, the nipple areolar complex and breast skin. It is performed with and without sentinel node biopsy or ALND. Use code B600, B610 or B620 if patient had a modified radical mastectomy.	

B700	Radical mastectomy, NOS
B710	WITHOUT removal of uninvolved contralateral breast
B720	WITH removal of uninvolved contralateral breast
Note: A radical mastectomy removes all breast tissue, the nipple areolar complex, breast skin, and pectoralis muscle and is performed with reconstruction. It is performed with level l-III ALND.	
B760	Bilateral mastectomy for a single tumor involving both breasts, as for bilateral inflammatory carcinoma
B800	Mastectomy, NOS (including extended radical mastectomy
B900	Surgery, NOS
B990	Unknown if surgery was performed; death certificate ONLY

Rx Hosp-- Recon Breast

Data Dictionary Category: Site Specific Data Items (SSDIs)

PUF Data Item Name: RX_HOSP_RECON_BREAST_2024

NAACCR Item #: 751

Diagnosis Years Available: 2022+

Length: 4

Allowable Values: A000, A100-A640, A900-A980, A990, Alphanumeric, Blank

Description:

Records the reconstruction procedure immediately following resection performed at this facility. This data item is required beginning with diagnosis year 2022 and breast cases only.

Rational:

Breast reconstruction was previously collected within the breast surgery codes. CoC will collect these data items to support the Synoptic Operative Reports and allow for more descriptive reconstruction codes. This is being collected in anticipation for a Site Specific Disease Item.

Registry Coding Instructions:

Code the breast reconstruction code for Breast primaries performed at this facility with diagnosis date ≥ 1/1/2022.

Code only the ipsilateral breast reconstruction.

Immediate reconstruction is defined as reconstruction performed during the same operative session as the operative procedure coded in Data item Rx Hosp—Surg Breast [Item # 671]

One surgeon can perform the surgical resection to primary site and another surgeon can perform the reconstruction during the same day procedure. As long as reconstruction was done during the same day as the surgical resection, an immediate reconstruction code should be assigned.

Reconstruction performed on a different day than the breast primary definitive resection is not collected/coded.

For Codes, A600-A900, information for this data item may be found in the Breast Plastic Reconstructive operative report.

Oncoplastic surgery is typically coded by the surgeon but sometimes found in the plastics operative note. Oncoplastic surgery is defined as rebuilding the breast tissue after breast cancer

resection and is a way to reconstruct and reshape the breast after a lumpectomy or mastectomy and involves rearrangement of breast tissue to correct a defect.

Oncoplastic surgery and breast tissue rearrangement, mastopexy, batwing mastopexy, crescent mastopexy, donut mastopexy, mammaplasty, and breast reduction are interchangeable terms.

Direct to implant placement is found in the operative report. This is when the surgeon places an implant and does not state placement of a tissue expander.

Breast resection procedure at this facility should be coded in the Rx Hosp—Surg Breast [Item # 10104] data item.

Leave this data item blank if primary site is not breast or breast primary not diagnosed in 2022.

Leave this data item blank for:

Breast cases diagnosed prior year 2022

All other sites

Analytic Note: None.

Code	Definition
A000	No Reconstruction
Note: Code A000 when no immediate reconstruction was performed at any facility.	
A100	Tissue expander placement
Note: Code A100 when tissue expanders were placed without implant or tissue placement.	
A200	Direct to implant placement
Note: Code A200 when a permanent implant is placed immediately following resection. Example: A mastectomy is performed by the breast surgeon and an implant is placed at the same time by a plastic surgeon (some general /breast surgeons may place implants, but most are placed by plastics).	
A300	Oncoplastic tissue rearrangement (not a formal mastopexy/reduction)
A400	Oncoplastic reduction and/or mastopexy
Note: Code A400 when patient has breast conserving resection and a breast reduction/lift is performed.	
A500	Oncoplastic reconstruction with regional tissue flaps

Note: Code A500 when patient has breast conserving resection and reconstruction is performed with skin flaps.	
A600	Mastectomy reconstruction with autologous tissue, source not specified
A610	WITH abdominal tissue
A620	WITH thigh tissue
A630	WITH gluteal tissue
A640	WITH back tissue
Note: Code A600 when patient's autologous tissue source is unknown or not specified.	
A900	Reconstruction performed, method unknown
Note: Code A900 when reconstruction is done, but the type of reconstruction is not known.	
A970	Implant based reconstruction, NOS
A980	Autologous tissue-based reconstruction, NOS
A990	Unknown if reconstruction performed
Note: Code A990 when it's unknown if immediate reconstruction was performed.	

Rx Summ-- Recon Breast

Data Dictionary Category: Site Specific Data Items (SSDIs)

PUF Data Item Name: RX_SUMM_RECON_BREAST_2024

NAACCR Item #: 1335

Diagnosis Years Available: 2022+

Length: 4

Allowable Values: A000, A100-A640, A900-A980, A990, Alphanumeric, Blank

Description:

Records the reconstruction procedure immediately following resection performed at any facility. This data item is required beginning with diagnosis year 2022 and breast cases only.

Rational:

Breast reconstruction was previously collected within the breast surgery codes. CoC will collect these data items to support the Synoptic Operative Reports and allow for more descriptive reconstruction codes. This is being collected in anticipation for a Site Specific Disease Item.

Registry Coding Instructions:

Code the breast reconstruction code for Breast primaries performed at any facility with diagnosis date ≥ 1/1/2022.

Code only the ipsilateral breast reconstruction.

Immediate reconstruction is defined as reconstruction performed during same day the operative procedure coded in Data items RX Summ—Surg Breast [Item # 671].

One surgeon can perform the surgical resection to primary site and another surgeon can perform the reconstruction during the same day procedure. As long as reconstruction was done during the same day as the surgical resection, an immediate reconstruction code should be assigned.

Reconstruction performed on a different day than the breast primary definitive resection is not collected/coded.

For Codes, A600-A900, information for this data item may be found in the Breast Plastic Reconstructive operative report.

Oncoplastic surgery is typically coded by the surgeon but sometimes found in the plastics operative note. Oncoplastic surgery is defined as rebuilding the breast tissue after breast cancer

resection and is a way to reconstruct and reshape the breast after a lumpectomy or mastectomy and involves rearrangement of breast tissue to correct a defect.

Oncoplastic surgery and breast tissue rearrangement, mastopexy, batwing mastopexy, crescent mastopexy, donut mastopexy, mammaplasty, and breast reduction are interchangeable terms.

Direct to implant placement is found in the operative report. This is when the surgeon places an implant and does not state placement of a tissue expander.

Breast resection procedure performed same day as definitive breast resection should be coded in the Rx Hosp—Surg Breast [Item # 10105] data item.

Leave this data item blank if primary site is not breast or breast primary not diagnosed in 2022.

Leave this data item blank for:

Breast cases diagnosed prior year 2022

All other sites

Analytic Note: None.

Code	Definition
A000	No Reconstruction
Note: Code A000 when no immediate reconstruction was performed at any facility.	
A100	Tissue expander placement
Note: Code A100 when tissue expanders were placed without implant or tissue placement.	
A200	Direct to implant placement
Note: Code A200 when a permanent implant is placed immediately following resection. Example: A mastectomy is performed by the breast surgeon and an implant is placed at the same time by a plastic surgeon (some general /breast surgeons may place implants, but most are placed by plastics).	
A300	Oncoplastic tissue rearrangement (not a formal mastopexy/reduction)
A400	Oncoplastic reduction and/or mastopexy
Note: Code A400 when patient has breast conserving resection and a breast reduction/lift is performed.	
A500	Oncoplastic reconstruction with regional tissue flaps

Note: Code A500 when patient has breast conserving resection and reconstruction is performed with skin flaps.	
A600	Mastectomy reconstruction with autologous tissue, source not specified.
A610	WITH abdominal tissue
A620	WITH thigh tissue
A630	WITH gluteal tissue
A640	WITH back tissue
Note: Code A600 when patient's tissue autologous source is unknown or not specified.	
A900	Reconstruction performed, method unknown
Note: Code A900 when reconstruction is done, but the type of reconstruction is not known.	
A970	Implant based reconstruction, NOS
A980	Autologous tissue-based reconstruction, NOS
A990	Unknown if reconstruction performed
Note: Code A990 when it's unknown if immediate reconstruction was performed.	

Treatment

RX Summ Treatment Status

Data Dictionary Category: Treatment

PUF Data Item Name: RX_SUMM_TREATMENT_STATUS

NAACCR Item #: 1285

Diagnosis Years Available: 2010 +

Length: 1

Allowable Values: 0 - 2, 9, blank

Description:

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

Registry Coding Instructions:

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

Analytic Note:

This item may be left blank for cases diagnosed prior to 2010.

Treatment given after a period of active surveillance is considered subsequent treatment, and it is not coded in this item.

Use code 0 when treatment is refused or the physician decides not to treat for any reason such as the presence of comorbidities.

Assign code 0 when the patient does not receive any treatment a. Scope of Regional Lymph Node Surgery may be coded 0, 1-7, or 9

Assign code 1 when the patient receives treatment collected in any of the following data items

a. Surgery of Primary Site

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

Code	Definition
0	No treatment given
1	Treatment given
2	Active surveillance (watchful waiting)
9	Unknown if treatment given
blank	Not available

Treatment Started, Days from Dx

Data Dictionary Category: Treatment

PUF Data Item Name: DX_RX_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of First Course of Treatment* [surgery, radiation, systemic, or other therapy] (NAACCR Item #1270) of the patient began at any facility.

Registry coding instructions: None

Analytic note:

The elapsed time from diagnosis to date of first treatment will be zero for some cases due to the surgery codes consisting of a mix of both diagnostic and surgical procedures. Registrars must interpret ambiguous terms according to registry rules, and this may keep them from recording an imaging or physical exam date as the date of diagnosis. Because either a diagnostic or surgical procedure will trigger a set date of first course treatment, there is no correction that can be done. We recognize this flaw and there are ongoing discussions to revise the coding instructions. You may elect to use the NCCN treatment guidelines to determine which procedures listed in the *FORDS* surgery codes are curative and use the Days from Diagnosis to the earliest curative treatment as the number of days from diagnosis to First Treatment.

Code	Definition
0000 - 9999	Number of elapsed days.
blank	No first course therapy administered, first course therapy unknown, or cannot compute days elapsed due to missing or incomplete dates

Treatment: Surgery

First Surgical Procedure, Days from Dx

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: DX_SURG_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of First Surgical Procedure* (NAACCR Item #1200). The surgery may be *Surgical Procedure of Primary Site* (NAACCR Item #1290), *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) or *Surgical Procedure/Other Site* (NAACCR Item #1294). Incisional biopsies are not coded as treatment surgery.

Registry Coding Instructions: Not applicable.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Surgical treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the first surgical procedure for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	No first course surgery, first course surgery unknown, or cannot compute days elapsed due to missing or incomplete dates

Definitive Surgical Procedure, Days from Dx

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: DX_DEFSURG_STARTED_DAYS

NAACCR Item #: Not Available

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of Most Definitive Surgical Resection of the Primary Site* (NAACCR Item #3170).

Registry Coding Instructions:

None.

Analytic Note:

The *Date of the Most Definitive Surgical Resection of the Primary Site* (NAACCR Item #3170) refers to the last date that first course surgery of the primary site was performed for the patient. For example, a breast cancer patient may have been treated with an excisional biopsy, followed by a lumpectomy, followed by a mastectomy. This item identifies the time period between the *Date of Initial Diagnosis* (NAACCR Item #390) and the date of the mastectomy (*Date of the Most Definitive Surgical Resection of the Primary Site* NAACCR Item #3170). The *Surgical Procedure of Primary Site* (NAACCR Item #1290) will record the mastectomy.

CoC cancer programs are required to identify treatment their patients received from all sources. Surgical treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the final surgery of the primary site, cumulative for all procedures, for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	No first course surgery, surgery unknown, or cannot compute days elapsed due to incomplete or missing dates

Surgical Procedure of Primary Site

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_SUMM_SURG_PRIM_SITE

NAACCR Item #: 1290

Diagnosis Years Available: 2004 - 2022

Length: 2

Allowable Values: 00, 10 - 80, 90, 98, 99

Description:

Records the surgical procedure performed to the primary site at any facility.

Registry Coding Instructions:

Site-specific codes for this data item are found in Appendix A.

If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.

If registry software allows multiple procedures to be recorded, this item refers to the most invasive surgical procedure of the primary site.

For codes 00 through 79, the response positions are hierarchical. Last-listed responses take precedence over responses written above.

Use codes 80 and 90 only if more precise information about the surgery is not available.

Code 98 for any case coded to primary site C420, C421, C423, C424, C760-C768,C809

Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.

If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure [1350] and the excisional biopsy or more extensive surgery in the Surgical Procedure of the Primary Site[1290].

Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site, except where noted in Appendix A.

If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.

If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item Palliative Care [3270].

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

Analytic Note:

If multiple first course surgeries are performed on the primary site, the code represents the cumulative effect of all primary site surgeries. For example, if a breast cancer patient is treated with an excisional biopsy, then a lumpectomy, then a mastectomy, the mastectomy is coded in this field. The date of the mastectomy is represented in *Date of the Most Definitive Surgical Resection of the Primary Site* (NAACCR Item #3170).

CoC cancer programs are required to identify treatment their patients received from all sources. Surgical treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the final surgery of the primary site, cumulative for all procedures, for the cancer by any facility.

Descriptions of surgical codes have been revised over time. Please refer to the versions of *FORDS* corresponding to the diagnosis years covered in your analyses to find out whether any changes have occurred in your primary site(s) of interest in your study. All versions of *FORDS* may be accessed via the following:

https://www.facs.org/quality-programs/cancer/ncdb/call-for-data/fordsolder.

The site-specific surgical codes may also be found in the *Surgical Procedure of Primary Site* (NAACCR Item #1290) codes in *Appendix A: Site-Specific Surgery Codes* of this document.

Surgical Procedure of Primary Site continued

Code	Definition	Description
00	None	No surgical procedure of primary site
10-19	Site-specific codes; tumor destruction	Tumor destruction, no pathologic specimen produced. Refer to *Appendix A: Site-Specific Surgery Codes* for the correct site-specific code for the procedure
20-80	Site-specific codes; resection	Refer to *Appendix A: Site-Specific Surgery Codes* for the correct site-specific code for the procedure
90	Surgery, NOS	A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided
98	Site-specific codes; special	Special code. Refer to *Appendix A: Site-Specific Surgery Codes* for the correct site-specific code for the procedure Code 98 for the following sites/schema unless the case is death certificate only: a. Any case coded to primary site C420, C421, C423, C424, C760- C768, C809 When Surgery of Primary Site is coded 98 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
99	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available

Surgical Procedure of Primary Site at This Facility

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_HOSP_SURG_PRIM_SITE

NAACCR Item #: 670

Diagnosis Years Available: 2004 - 2022

Length: 2

Allowable Values: 00, 10 - 80, 90, 98, 99

Description:

This item records the surgical procedure performed to the primary site at the facility that submitted this record.

Registry Coding Instructions:

Site-specific codes for this data item are found in Appendix A.

If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.

If registry software allows multiple procedures to be collected, this item refers to the most invasive surgical procedure for the primary site.

For codes 00 through 79, the response positions are hierarchical. Last-listed responses take precedence over responses written above.

Use codes 80 and 90 only if more precise information about the surgery is not available.

Code 98 for any case coded to primary site C420, C421, C423, C424, C760-C768,C809

Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.

If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure [1350] and the excisional biopsy or more extensive surgery in the Surgical Procedure of the Primary Site[1290].

Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site.

If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.

If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item Palliative Care at This Facility [3280].

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Surgical treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the final surgery of the primary site, cumulative for all procedures, for the cancer by the reporting facility. Additional surgery, or prior surgery, may have been performed elsewhere. The item *Surgical Procedure of Primary Site* (NAACCR Item #1290) describes the cumulative primary site surgery performed on the patient at any facility.

The site-specific surgical codes may be found in *Appendix A: Site-Specific Surgery Codes*.

Code	Definition	Description
00	None	No surgical procedure of primary site
10-19	Site-specific codes; Tumor destruction	Tumor destruction; no pathologic specimen produced. Refer to *Appendix A: Site-Specific Surgery Codes* for the correct site-specific code for the procedure
20-80	Site-specific codes; Resection	Refer to *Appendix A: Site-Specific Surgery Codes* for the correct site-specific code for the procedure
90	Surgery, NOS	A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided
98	Site specific codes; special	Special code. Refer to *Appendix A: Site-Specific Surgery Codes* for the correct site-specific code for the Procedure Code 98 for the following sites/schema unless the case is death certificate only: a. Any case coded to primary site C420, C421, C423, C424, C760- C768, C809 When Surgery of Primary Site is coded 98 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
99	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available

Approach – Surgery of the Primary Site at this Facility

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_HOSP_SURG_APPR_2010

NAACCR Item #: 668

Diagnosis Years Available: 2010 +

Length: 1

Allowable Values: 0 - 5, 9, blank

Description:

This item is used to monitor patterns and trends in the adoption and utilization of minimally-invasive surgical techniques.

Registry Coding Instructions:

This item may be left blank for cases diagnosed prior to 2010.

If the patient has multiple surgeries of the primary site, this item describes the approach used for the most invasive, definitive surgery.

For ablation of skin tumors, assign code 3.

Assign code 2 or 4 if the surgery began as robotic assisted or endoscopic and was converted to open.

If both robotic and endoscopic or laparoscopic surgery are used, code to robotic (codes 1 or 2).

Analytic Note: This item was first used for 2010 diagnoses.

Code	Definition
0	No surgical procedure of primary site at this facility
1	Robotic assisted
2	Robotic converted to open
3	Minimally invasive (such as endoscopic or laparoscopic)
4	Minimally invasive (endoscopic or laparoscopic) converted to open
5	Open or approach unspecified
9	Unknown whether surgery was performed at this facility
blank	Not available

Surgical Margins of the Primary Site

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_SUMM_SURGICAL_MARGINS

NAACCR Item #: 1320

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 3, 7 - 9

Description:

Records the final status of the surgical margins after resection of the primary tumor

Registry Coding Instructions:

Record the margin status as it appears in the pathology report.

Codes 0-3 are hierarchical; if two codes describe the margin status, use the numerically higher code.

If no surgery of the primary site was performed, code 8.

For lymphomas with a lymph node primary site (C77.0-C77.9), code 9.

For an unknown or ill-defined primary (C76.0-C76.8, C80.9) or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease, code 9.

For Brain and CNS sites, the NCDB converts codes 0, 1, 2, 3, and 7 to code 9 for this item due to unreliability

Analytic note: None.

Code	Definition	Description
0	No residual tumor	All margins are grossly and microscopically negative
1	Residual tumor, NOS	Involvement is indicated, but not otherwise specified
2	Microscopic residual tumor	Cannot be seen by the naked eye
3	Macroscopic residual tumor	Gross tumor of the primary site which is visible to the naked eye
7	Margins not evaluable	Cannot be assessed (indeterminate)
8	No primary site surgery	No surgical procedure of the primary site
9	Unknown or not applicable	It is unknown whether a surgical procedure to the primary site was performed; for lymphomas with a lymph node primary site; an unknown or ill-defined primary; or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease

Scope of Regional Lymph Node Surgery

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_SUMM_SCOPE_REG_LN_SUR

NAACCR Item #: 1292

Diagnosis Years Available: 2004 - 2011

Length: 1

Allowable Values: 0, 1, 9

Description:

Identifies the removal, biopsy, or aspiration of regional lymph node(s) at the time of surgery of the primary site or during a separate surgical event.

Registry Coding Instructions:

The scope of regional lymph node surgery is collected for each surgical event even if surgery of the primary site was not performed.

Record surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose or stage disease in this data item.

Record the date of this surgical procedure in data item *Date of First Course of Treatment* (NAACCR Item #1270) and/or *Date of First Surgical Procedure* (NAACCR Item #1200) as appropriate.

For primaries of the meninges, brain, spinal cord, cranial nerves, and other parts of the central nervous system (C70.0-C70.9, C71.0-C71.9, C72.0-C72.9), code 9.

For lymphomas with a lymph node primary site (C77.0-C77.9), code 9.

For an unknown or ill-defined primary (C76.0-C76.8, C80.9) or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease regardless of site, code 9.

Do not code distant lymph nodes removed during surgery to the primary site for this data item. Distant nodes are coded in the data field *Surgical Procedure/Other Site* (NAACCR Item #1294).

Refer to the applicable *AJCC Cancer Staging Manual* for site-specific identification of regional lymph nodes.

If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care* (NAACCR Item #3270).

Analytic note: None.

Code	Definition
0	No regional lymph node surgery
1	Regional lymph node surgery
9	Unknown if there was any regional lymph node surgery

Scope of Regional Lymph Node Surgery 2012

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_SUMM_SCOPE_REG_LN_2012

NAACCR Item #: 1292

Diagnosis Years Available: 2012 +

Length: 1

Allowable Values: 0 - 7, 9, blank

Description:

The revised *Scope of Regional Lymph Node Surgery 2012* (NAACCR Item #1292) field is for cases diagnosed on and after January 1, 2012. *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) was found to under-report Sentinel Lymph Node Biopsy (SLNBx) procedures, either alone or with Axillary Dissection (ALND). Reviews by the Commission on Cancer (CoC), the Centers for Disease Control and Prevention's National Program of Cancer Registries (CDC/NPCR), and the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program confirmed miscoding of this data element. Revised coding rules and associated instructions have been developed that put emphasis on securing information from the operative report in contrast to the pathology report. CoC use of the item *Scope of Regional Lymph Node Surgery* (NAACCR Item #1292) remains curtailed in all pre-2012 data years contained in the PUF. The item is used only to identify whether or not a patient underwent regional lymph node surgery, effectively removing any distinction between the type or extent of surgical intervention.

Note that this item is primarily of interest for researchers who received Breast and Melanoma PUF files.

Registry coding instructions: None.

Analytic note: None.

Code	Label	General Instructions Applying to All Sites	Additional Notes Specific to Breast (C50.x)
		Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx), or a more extensive dissection of regional lymph nodes, or a combination of both SLNBx and regional lymph node dissection. The operative report will designate the surgeon's planned procedure as well as a description of the procedure that was actually performed. The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and regional lymph node dissection or a combination of these two procedures. Do not use the number of lymph nodes removed and pathologically examined as the sole means of distinguishing between a SLNBx and a regional lymph node dissection.	Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx), an axillary lymph node dissection (ALND), or a combination of both SLNBx and ALND. The operative report will designate the surgeon's planned procedure as well as a description of the procedure that was actually performed. The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and ALND, or a combination of these two procedures. Do not use the number of lymph nodes removed and pathologically examined as the sole means of distinguishing between a SLNBx and an ALND.
0	No regional lymph node surgery	No regional lymph node surgery.	

1	Biopsy or aspiration of regional lymph node(s)	Review the operative report to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed, and it did not include the use of dye or tracer for a SLNBx procedure (code 2). If additional procedures were performed on the lymph nodes, use the appropriate code 2-7.	Excisional biopsy or aspiration of regional lymph nodes for breast cancer is uncommon. Review the operative report of to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed; it is highly possible that the procedure is a SLNBx (code 2) instead. If additional procedures were performed on the lymph nodes, such as axillary lymph node dissection, use the appropriate code 2-7.
2	Sentinel Lymph Node Biopsy	• The operative report states that a SLNBx was performed. • Code 2 SLNBx when the operative report describes a procedure using injection of a dye, radio label, or combination to identify a lymph node (possibly more than one) for removal/examination. • When a SLNBx is performed, additional non-sentinel nodes can be taken during the same operative procedure. These additional non-sentinel nodes are palpably abnormal and selectively removed (or harvested) as part of the SLNBx procedure by the surgeon or may be discovered by the pathologist. Code this as a SLNBx (code 2). If review of the operative report confirms that a regional lymph node dissection followed the SLNBx, code these cases as6.	• If a relatively large number of lymph nodes, more than 5, are pathologically examined, review the operative report to confirm the procedure was limited to a SLNBx and did not include an axillary lymph node dissection (ALND). • Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection) and no sentinel nodes are removed. Review the operative report to confirm that an axillary incision was made and a node exploration was conducted. Patients undergoing SLNBx who fail to map will often undergo ALND. Code these cases as 2 if no ALND was performed, or 6 when ALND was performed during the same operative event. Enter the appropriate number of nodes examined and positive in the data items Regional Lymph Nodes Examined [830] and Regional Lymph Nodes Positive [820].
Codes 3 -5 are used for regional lymph node dissection/removal; these do NOT include sentinel lymph node biopsy (SLNBx).			

3	Number of regional lymph nodes removed unknown or not stated; regional lymph nodes removed, NOS	The operative report states that a regional lymph node dissection was performed (a SLNBx was not done during this procedure or in a prior procedure). • Code 3 (Number of regional lymph nodes removed unknown, not stated; regional lymph nodes removed, NOS). Check the operative report to ensure this procedure is not a SLNBx only (code 2), or a SLNBx with a regional lymph node dissection (code 6 or 7). • Code 4 (1-3 regional lymph nodes removed) should be used infrequently. Review the operative report to ensure the procedure was not a SLNBxonly. • Code 5 (4 or more regional lymph nodes removed). If a relatively small number of nodes was examined pathologically, review the operative report to confirm the procedure was not a SLNBx only (code 2). If a relatively large number of nodes was examined pathologically, review the operative report to confirm that there was not a SLNBx in addition to a more extensive regional lymph node dissection during the same, or separate, procedure (code 6 or 7). Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection). When mapping fails, surgeons usually perform a more extensive dissection of regional lymph nodes. Code these cases as 2 if no further dissection of regional lymph nodes was undertaken, or 6when regional lymph nodes were dissected during the same operative event.	Generally, ALND removes at least 7-9 nodes. However, it is possible for these procedures to remove or harvest fewer nodes. Review the operative report to confirm that there was not a SLNBx in addition to a more extensive regional lymph node dissection during the same procedure (code 6 or 7).
4	1-3 regional lymph nodes removed		
5	4 or more regional lymph nodes removed		

6	Sentinel node biopsy and code 3, 4, or 5 at same time, or timing not stated	SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known. Generally, look for a report to the Operating Room(OR) by the pathologist on the SLNBx results prior to the regional node dissection. If the SLNBx shows positive nodes, then a dissection may be done. If the nodes are negative, it is rare that a node dissection is performed. • Generally, SLNBx followed by a regional lymph node completion will yield a relatively large number of nodes. However it is possible for these procedures to harvest only a few nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only. • Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection.) When mapping fails, the surgeon usually performs a more extensive dissection of regional lymph nodes. Code these cases as 6.	• SLNBx and regional lymph node dissection (code 3, 4, or 5) during the same surgical event, or timing not known. Generally, look for a report to the Operating Room (OR) by the pathologist on the SLNBx results prior to the regional node dissection. If the SLNBx shows positive nodes, then a dissection may be done. If the nodes are negative, it is rare that a node dissection is performed. • Generally, SLNBx followed by ALND will yield a minimum of 7-9 nodes. However it is possible for these procedures to harvest fewer (or more) nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx, or whether a SLNBx plus an ALND was performed.
7	Sentinel node biopsy and code 3, 4, or 5 at different times	SLNBx and regional lymph node dissection (code 3, 4, or 5) in separate surgical events. • Generally, SLNBx followed by regional lymph node completion will yield a relatively large number of nodes. However, it is possible for these procedures to harvest only a few nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only.	Generally, SLNBx followed by ALND will yield a minimum of 7-9 nodes. However, it is possible for these procedures to harvest fewer (or more) nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only, or whether a SLNBx plus an ALND was performed.

9	Unknown or not applicable	The status of regional lymph node evaluation should be known for surgically-treated cases (i.e., cases coded 19-90 in the data item Surgery of Primary Site [1290]. Review surgically treated cases coded 9 in Scope of Regional Lymph Node Surgery to confirm the code.

Examples:

Code	Reason
0	No effort was made to locate sentinel lymph nodes, and no nodes were found in pathologic analysis.
2	**(C50.1-Breast)** There was an attempt at sentinel lymph node dissection, but no lymph nodes were found in the pathologic specimen.
1	**(C14.0-Pharynx)** Aspiration of regional lymph node to confirm histology of widely metastatic disease.
2	**(C44.5-Skin of Back)** Patient has melanoma of the back. A sentinel lymph node dissection was done with the removal of one lymph node. This node was negative for disease.
3	**(C61.9-Prostate)** Bilateral pelvic lymph node dissection for prostate cancer.
6	**(C50.3-Breast)** Sentinel lymph node biopsy (SLNBx) of right axilla, followed by right axillary lymph node dissection (ALND) during the same surgical event.
7	**(C50.4-Breast)** Sentinel lymph node biopsy (SLNBx) of left axilla, followed in a second procedure 5 days later by a left axillary lymph node dissection (ALND).
9	**(C34.9-Lung)** Patient was admitted for radiation therapy following surgery for lung cancer. There is no documentation on the extent of the lymph node surgery in patient record.

Surgical Procedure Other Site

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_SUMM_SURG_OTH_REGDIS

NAACCR Item #: 1294

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 5, 9

Description:

Records the surgical removal of distant lymph nodes or other tissue(s)/organ(s) beyond the primary site.

Registry Coding Instructions:

Assign the highest numbered code that describes the surgical resection of distant lymph node(s) and/or regional/distant tissue or organs.

Incidental removal of tissue or organs is not recorded as a *Surgical Procedure/Other Site* (NAACCR Item #1294).

Code 1 if any surgery is performed to treat tumors of unknown or ill-defined primary sites (C76.0-C76.8, C80.9) or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease (C42.0, C42.1, C42.3, C42.4 or any site with hematopoietic histologies).

If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care* (NAACCR Item#3270).

For single primaries only, code removal of contralateral breast under the data item Surgical Procedure/Other Site (NAACCR Item #1294) or Surgical Procedure/Other Site at This Facility (NAACCR Item #674).

Analytic Note: None.

Surgical Procedure Other Site continued

Code	Definition	Description
0	None	No surgical procedure of non-primary site was performed
1	Non-primary surgical procedure performed	Non-primary surgical resection to other site(s), unknown if whether the site(s) is regional or distant
2	Non-primary surgical procedure to other regional sites	Resection of regional site
3	Non-primary surgical procedure to distant lymph node(s)	Resection of distant lymph node(s)
4	Non-primary surgical procedure to distant site	Resection of distant site
5	Combination of codes	Any combination of surgical procedures 2, 3, or 4
9	Unknown	It is unknown whether any surgical procedure of a non-primary site was performed

Surgical Inpatient Stay, Days from Surgery

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: SURG_DISCHARGE_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Most Definitive Surgical Resection of the Primary Site* (NAACCR Item #3170) and the *Date of Surgical Discharge* (NAACCR Item #3180).

Registry Coding Instructions: Not applicable

Analytic Note: None.

Code	Definition
0000 - 9999	Number of elapsed days
blank	No first course surgery, surgery unknown, elapsed days cannot be computed, or not available for these diagnosis years

Readmission to the Same Hospital within 30 Days of Surgical Discharge

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: READM_HOSP_30_DAYS

NAACCR Item #: 3190

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 3, 9

Description:

Records a readmission to the same hospital, for the same illness, within 30 days of discharge following hospitalization for surgical resection of the primary site.

Registry Coding Instructions:

Consult patient record or information from the billing department to determine if a readmission to the same hospital occurred within 30 days of the date recorded in the item *Date of Surgical Discharge* (NAACCR Item #3180). Only record a readmission related to the treatment of this cancer. Review the treatment plan to determine whether the readmission was planned.

If there was an unplanned admission following surgical discharge, check for an ICD-9-CM "E" code and record it, space allowing, as an additional ICD-9-CM *Comorbidities and Complications* item (NAACCR #3110, 3120, 3130, 3140, 3150, 3160, 3161, 3162, 3163, 3164).

Analytic Note: None.

Code	Definition
0	No surgical procedure of the primary site was performed, or the patient was not readmitted to the same hospital within 30 days of discharge
1	A patient was surgically treated and was readmitted to the same hospital within 30 days of being discharged. This readmission was unplanned
2	A patient was surgically treated and was then readmitted to the same hospital within 30 days of being discharged. This readmission was planned (chemotherapy port insertion, revision of colostomy, etc.)
3	A patient was surgically treated and, within 30 days of being discharged, the patient had both a planned and an unplanned readmission to the same hospital
9	It is unknown whether surgery of the primary site was recommended or performed. It is unknown whether the patient was readmitted to the same hospital within 30 days of discharge

Reason for No Surgery of Primary Site

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: REASON_FOR_NO_SURGERY

NAACCR Item #: 1340

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 2, 5 - 9

Description:

Records the reason that no surgery was performed on the primary site.

Registry Coding Instructions:

If *Surgical Procedure of Primary Site* (NAACCR Item #1290) is coded 00, then record the reason based on documentation in the patient record.

Code 1 if the treatment plan offered multiple options and the patient selected treatment that did not include surgery of the primary site, or if the option of "no treatment" was accepted by the patient.

Code 1 if *Surgical Procedure of Primary Site* (NAACCR Item #1290) is coded 98.

Code 7 if the patient refused recommended surgical treatment, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Cases coded 8 should be followed and updated to a more definitive code as appropriate.

Code 9 if the treatment plan offered multiple choices, but it is unknown which treatment, if any was provided.

Analytic Note: None.

Reason for No Surgery of Primary Site continued

Code	Definition
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 patient record
7	Surgery of the primary site was not performed; it was recommended by the patient's physician, but this treatment was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in patient record
8	Surgery of the primary site was recommended, but it is unknown if it was performed. Further follow up is recommended
9	It is unknown whether surgery of the primary site was recommended or performed

Rx Hosp--Surg 2023

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_HOSP_SURG_PRIM_SITE_2023

NAACCR Item #: 671

Diagnosis Years Available: 2023+

Length: 4

Allowable Values: A000, B000, A200-A990, B200-B990, Alphanumeric, Blank

Description:

Records the surgical procedure(s) performed to the primary site at this facility with a diagnosis year of 2023 and forward.

Rational: This data item can be used to compare the efficacy of treatment options.

Registry Coding Instructions:

Site-specific surgical codes for this data item are found in store-manual-2024.pdf Appendix A.

All surgery codes begin with the letter A except for skin, colon, pancreas, lung, breast and thyroid.

Surgery codes begin with the letter B to indicate a significant change in coding.

For diagnosis year 2023 and forward, this data item must be completed.

For diagnosis years 2003 – 2022, this data item should be left blank.

Complete data item Surgical Procedure of Primary Site at this Facility [NAACCR #670] utilizing the STORE manual that is applicable for the date of diagnosis.

If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.

If registry software allows multiple procedures to be recorded, this item refers to the most invasive surgical procedure for the primary site.

For codes A000 or B000 through A790 or B790, the response positions are hierarchical. Last-listed responses take precedence over responses written above.

Use codes A800 or B800 and A900 or B900 only if more precise information about the surgery is not available.

Code A980 for any case coded to primary site C420, C421, C423, C424, C760-C768, C809

Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.

If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure [1350] and the excisional biopsy or more extensive surgery in the RX Summ-Surg 2023 [1291].

Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site.

If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.

If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item Palliative Care at This Facility [3280].

For cases diagnosed prior to January 1, 2023, this data item should be blank.

For any site other than C420, C421, C423, C424, C760-768, C809, this data item can be blank.

Clinical Margin Width [3961] collected in the Site-Specific Data Item following SEER coding rules and instructions.

For melanoma skin surgical codes ONLY:

The priority order for sources used to assign surgery codes:

Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure.

Do not code base on margin status documented in the pathology report.

Analytic Note: Not applicable

Code	Label	Definition
A000 Or B000	None	No surgical procedure of primary site. Diagnosed at autopsy.
A100 - A190 Or B100 - B190	Site-specific codes; tumor destruction	Tumor destruction, no pathologic specimen produced. Refer to store-manual-2024.pdf Appendix A for the correct site-specific code for the procedure.
A200 - A800 Or B200 - B800	Site-specific codes; resection	Refer to store-manual-2024.pdf Appendix A for the correct site-specific code for the procedure.
A900 Or B900	Surgery, NOS	A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided.
A980	Site-specific codes; special	Special code. Refer to store-manual-2024.pdf Appendix A for the correct site-specific code for the procedure. Code A980 for the following sites/schema unless the case is death certificate only: a. Any case coded to primary site C420, C421, C423, C424, C760-C768, C809 When Surgery of Primary Site is coded A980 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
A990 Or B990	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available. Death certificate only.

Rx Sum--Surg 2023

Data Dictionary Category: Treatment: Surgery

PUF Data Item Name: RX_SUMM_SURG_PRIM_SITE_2023

NAACCR Item #: 1291

Diagnosis Years Available: 2023+

Length: 4

Allowable Values: A000, B000, A200-A990, B000-B990, Alphanumeric, Blank

Description:

Records the surgical procedure(s) performed to the primary site with a diagnosis year of 2023 and forward.

Rational: This data item can be used to compare the efficacy of treatment options.

Registry Coding Instructions:

Site-specific surgical codes for this data item are found in store-manual-2024.pdf Appendix A.

All surgery codes begin with the letter A except for skin, colon, pancreas, lung, breast, and thyroid.

Surgery codes begin with the letter B to indicate a significant change in coding.

For diagnosis year 2023 and forward, this data item must be completed.

For diagnosis years 2003 – 2022, this data item should be left blank.

Complete data item Surgical Procedure of Primary Site [NAACCR #1290] utilizing the STORE manual that is applicable for the date of diagnosis.

If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.

If registry software allows multiple procedures to be recorded, this item refers to the most invasive surgical procedure of the primary site.

For codes A000 or B000 through A790 or B790, the response positions are hierarchical. Last-listed responses take precedence over responses written above.

Use codes A800 or B800 and A900 or B900 only if more precise information about the surgery is not available.

Code A980 for any case coded to primary site C420, C421, C423, C424, C760-C768, C809

Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.

If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure [1350] and the excisional biopsy or more extensive surgery in the RX Summ-Surg 2023[1291].

Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site, except where noted in store-manual-2024.pdf Appendix A.

If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.

If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item Palliative Care [3270].

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

For cases diagnosed prior to January 1, 2023, this data item should be blank.

For any site other than C420, C421, C423, C424, C760-768, C809, this data item can be blank.

Clinical Margin Width [3961] collected in the Site Specific Data Item following SEER coding rules and instructions.

For melanoma skin surgical codes ONLY:

The priority order for sources used to assign surgery codes:

Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure.

Do not code base on margin status documented in the pathology report.

Analytic Note: Not applicable

Code	Label	Definition
A000 Or B000	None	No surgical procedure of primary site. Diagnosed at autopsy.
A100 - A190 Or B100 - B190	Site-specific codes; tumor destruction	Tumor destruction, no pathologic specimen produced. Refer to store-manual-2024.pdf Appendix A for the correct site-specific code for the procedure.
A200 - A800 Or B200 - B800	Site-specific codes; resection	Refer to store-manual-2024.pdf Appendix A for the correct site-specific code for the procedure.
A900 Or B900	Surgery, NOS	A surgical procedure to the primary site was done, but no information on the type of surgical procedure is provided.
A980	Site-specific codes; special	Special code. Refer to store-manual-2024.pdf Appendix A for the correct site-specific code for the procedure. Code A980 for the following sites/schema unless the case is death certificate only: a. Any case coded to primary site C420, C421, C423, C424, C760-C768, C809 When Surgery of Primary Site is coded A980 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
A990 Or B990	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available. Death certificate only.

Treatment: Radiation

Radiation, Days from Dx

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: DX_RAD_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date Radiation Started* (NAACCR Item #1210).

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
0000 - 9999	Number of elapsed days
blank	Radiation therapy not administered, radiation therapy unknown, or cannot compute days elapsed due to missing or incomplete dates

Location of Radiation Therapy

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: RAD_LOCATION_OF_RX

NAACCR Item #: 1550

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 4, 8, 9

Description:

Identifies the location where radiation therapy was administered during the first course of treatment, as "at the reporting facility" or "elsewhere".

Registry Coding Instructions:

If the radiation treatment was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the radiation administered in the items *Palliative Care* (NAACCR Item #3270) and/or *Palliative Care at this Facility* (NAACCR Item #3280), as appropriate.

Analytic Note: None.

Code	Definition	Description
0	No radiation treatment	No radiation therapy was administered to the patient
1	All radiation treatment at this facility	All radiation therapy was administered at the reporting facility
2	Radiation started at reporting facility, continued elsewhere	Radiation was started at the reporting facility; one or more phases of radiation were administered elsewhere
3	Radiation started elsewhere, continued at this facility	Radiation was started elsewhere; one or more phases of radiation were administered at the reporting facility
4	All radiation treatment elsewhere	All radiation therapy was administered elsewhere
8	Other	Radiation therapy was administered, but the pattern does not fit the above categories
9	Unknown	Radiation therapy was administered, but the location of the Treatment facility is unknown or not stated in patient record; or it is unknown whether radiation therapy was administered, or diagnosis was by Death certificate only

Phase I-II-III Radiation Primary Treatment Volume

Phase	Data Dictionary Category	PUF Data Item Name	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_RT_VOLUME	1504	2004 +	2	00-07, 09-14, 20-26, 29-32, 39-42, 50- 68, 70-73, 80-86, 88, 90-99
II	Treatment: Radiation	PHASE_II_RT_VOLUME	1514	2004 +	2	00-07, 09-14, 20-26, 29-32, 39-42, 50- 68, 70-73, 80-86, 88, 90-99, Blank
III	Treatment: Radiation	PHASE_III_RT_VOLUME	1524	2018 +	2	00-07, 09-14, 20-26, 29-32, 39-42, 50- 68, 70-73, 80-86, 88, 90-96, 98-99, Blank

Description:

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

Rationale:

This data items provides information describing the anatomical structure targeted by radiation therapy during the phases of radiation treatment and can be used to determine whether the site of the primary disease was treated with radiation or if other regional or distant sites were targeted. This information is useful in evaluating the patterns of care within a facility and on a regional or national basis.

Registry Coding Instructions:

Phase I [1504] data item should be used to indicate the primary target volume, which is typically the primary tumor or tumor bed. If the primary tumor or primary tumor bed was not targeted, record the other regional or distant site that wastargeted.

Phase II-III of radiation treatment also commonly includes draining lymph node regions that are associated with the primary tumor or tumor bed. The draining lymph nodes are recorded in the Phase II Radiation to Draining Lymph Nodes [1515, 1525].

Subsequent phase may be referred to as a boost or cone down, and would be recorded in fields with subsequent phases recorded as Phase II [1514], Phase III [1524], etc. accordingly. If one or more discrete volumes are treated and one of those includes the primary site, record the Phase II -III treatment to the primary site in this data item. Draining lymph nodes may also be concurrently targeted during the first phase. Whether draining lymph nodes were targeted and which ones were targeted will be

identified in a separate data item Phase I-II-III Radiation to Draining Lymph Nodes [1505, 1515, 1525].

When the primary volume is lymph nodes, draining lymph nodes are not targeted. Record code 88in the Phase I-II-III Radiation to Draining Lymph Nodes[1505, 1515, 1525]. Use codes 01 to 09 only when the lymph nodes are the primary target, for example, in lymphomas.

Note that for many of the treatment volumes, the same code should be used when the anatomic structure is targeted or when the surgical bed of the resected anatomical structure is targeted. For example, when prostate cancer istreated with radiation alone, code 64 will be the Primary Treatment Volume. Similarly, when prostate cancer is treated with radiation after radical prostatectomy, code 64 will be the Primary Treatment Volume. There is an exception to the rule for breast cancer. In patients with breast cancer, code 41 (Breast- partial) in patients who have had a lumpectomy and were treated with partial breast irradiation (sometimes called accelerated partial breast irradiation (APBI)), code 40 (Breast – whole) in patients who had a lumpectomy and whole breast radiation, and code 42 (chest wall) in patients who had a mastectomy and post-mastectomy radiation.

A new paradigm of treatment called on-line adaptive (or on-table) adaptive radiation may be a source of confusion when coding the Primary Treatment Volume. New linear accelerators may now be attached to such high-quality imaging devices that they can function as both simulation scanners for planning and radiation delivery systems. If a new radiation plan is created while the patient is on the radiation delivery table to take into account that day's anatomy, this is referred to "on-line" (or "on-table") adaptive radiation. If a new radiation plan is created while the patient is not on the delivery table, then it is referred to as "off-line" (or "off-table") adaptive therapy. Off-line adaptive therapy treatments are relatively common, but MR-guided and CT-guided on-line adaptive therapy treatments are just emerging. In adaptive therapy, new radiation plans are created to account for changes in the position or shape of a target volume, but this does NOT mean that there has been a change in "phase". When the adaptive therapy paradigm is being used, a new phase should be documented only when there has been a change in the conceptual anatomic target volume (for example, a change from whole prostate to partial prostate) or if there has been a change in the draining lymph node target, dose per fraction, modality or planning technique.

Code 00 if the tumor was diagnosed at autopsy.

This data item, in conjunction with Phase I-II-III Radiation to Draining Lymph Nodes [1505, 1515, 1525], replaces the Radiation Treatment Volume [1540] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

If the patient received just one phase of treatment, code the phase II Radiation Treatment Volume to "00" (No treatment). All other phase II and phase III data fields should be left blank.

If the patient received just two phases of treatment, code the phase III Radiation Treatment Volume to "00" and leave all other phase III data fields blank.

Analytic Note: None

Code	Definition	Description
00	No radiation treatment	Radiation therapy was not administered to the patient. Diagnosed at autopsy
01	Neck lymph node regions	The primary treatment is directed at lymph node regions of the neck. Examples include treatment of lymphoma or lymph node recurrence (in the absence of primary site failure) following definitive surgery of the primary tumor. If radiation to the neck lymph nodes includes the supraclavicular region use code 03
02	Thoracic lymph node regions	Radiation therapy is directed to some combination of hilar, mediastinal, and supraclavical lymph nodes without concurrent treatment of a visceral organ site. Examples include mantle or mini-mantle for lymphomas, and treatment of lymphatic recurrence after complete surgical excision of a thoracic primary. Note that the supraclavical region may be part of a head and neck lymph node region. Use code 03 for treatments directed at neck nodes and supraclavicular lymph nodes with a head and neck primary. Use code 04 if supraclavicular lymph nodes are part of breast treatment
03	Neck and thoracic lymph node regions	Treatment is delivered to lymph nodes in the neck and thoracic region without concurrent treatment of a primary visceral tumor. This code might apply to some mantle or mini-mantle fields used in lymphoma treatments or some treatments for lymphatic recurrences following definitive treatment for tumors of the head and neck thoracic regions
04	Breast/Chest wall lymph node regions	Radiation is directed primarily to some combination of axillary, supraclavicular, and/or internal mammary lymph node sites WITHOUT concurrent treatment of the breast or chest wall. If the breast AND lymph nodes are being treated, then code the Primary Treatment Volume to Breast (codes 40 or 41) and Breast/chest wall lymph nodes (code 04) in Radiation to Draining Lymph Nodes
05	Abdominal lymph nodes	Treatment is directed to some combination of the lymph nodes of the abdomen, including retro-crural, peri-gastric, peri-hepatic, portocaval and para-aortic nodes. Possible situations might include seminoma, lymphoma or lymph node recurrence following surgical resection of the prostate, bladder or uterus
06	Pelvic lymph nodes	Treatment is directed to some combination of the lymph nodes of the pelvis, including the common, internal and external iliac, obturator, inguinal and peri-rectal lymph nodes. This might be done for lymphoma or lymph node recurrence following definitive surgery for a pelvic organ

Phase I-II-III Radiation Primary Treatment Volume continued

07	Abdominal and pelvic lymph nodes	Treatment is directed to a combination of lymph nodes in both the abdomen and pelvis. This code includes extended fields (“hockey stick”, “dog-leg”, “inverted Y”, etc.) utilized to treat seminomas and lymphomas or recurrence of a solid tumor
09	Lymph node region NOS	This category should be used to code treatments directed at lymph node regions that are not adequately described by codes 01-07
10	Eye/orbit/optic nerve	Treatment is directed at all or a portion of the eye, orbit and/or optic nerve
11	Pituitary	Treatment is directed at the pituitary gland
12	Brain	Treatment is directed at all the brain and its meninges (“Whole brain”)
13	Brain (limited)	Treatment is directed at one or more sub-sites of the brain but not the whole brain. Chart may describe “SRS”, “Stereotactic Radiosurgery”, “Gamma Knife®”
14	Spinal cord	Treatment is directed at all or a portion of the spinal cord or its meninges
20	Nasopharynx	Treatment is directed at all or a portion of the nasopharynx
21	Oral cavity	Treatment is directed at all or a portion of the oral cavity, including the lips, gingiva, alveolus, buccal mucosa, retromolar trigone, hard palate, floor of mouth and oral tongue
22	Oropharynx	Treatment is directed at all or a portion of the oropharynx, including the soft palate, tonsils, base of tongue and pharyngeal wall
23	Larynx (glottis) or hypopharynx	Treatment is directed at all or a portion of the larynx and/or hypopharynx
24	Sinuses/Nasal tract	Treatment is directed at all or a portion of the sinuses and nasal tract, including the frontal, ethmoid, sphenoid and maxillary sinuses
25	Parotid or other salivary glands	Treatment is directed at the parotid or other salivary glands, including the submandibular, sublingual and minor salivary glands
26	Thyroid	Treatment is directed at all or a portion of the thyroid. Code this volume when the thyroid is treated with I-131 radioisotope
29	Head and neck (NOS)	The treatment volume is directed at a primary tumor of the head and neck, but the primary sub-site is not a head and neck organ identified by codes 20-26 or it is an “unknown primary”
30	Lung or bronchus	Treatment is directed at all or a portion of the lung or bronchus
31	Mesothelium	Treatment is directed to all or a portion of the mesothelium. This code should be used for mesothelioma primaries, even if a portion of the lung is included in the radiation field
32	Thymus	Treatment is directed to all or a portion of the thymus
39	Chest/lung (NOS)	The treatment is directed at a primary tumor of the chest, but the primary sub-site is unknown or not identified in codes 30-32. For example, this code should be used for sarcomas arising from the mediastinum

Phase I-II-III Radiation Primary Treatment Volume continued

40	Breast (whole)	Treatment is directed at all the intact breast. Intact breast includes breast tissue that either was not surgically treated or received a lumpectomy or partial mastectomy
41	Breast (partial)	Treatment is directed at a portion of the intact breast but not the whole breast. The chart may have terms such as “Mammosite”, “interstitial (seed) implant)”, or “(accelerated) partial breast irradiation”. Consider the possibility of partial breast irradiation when “IMRT” is documented in the record
42	Chest wall	Treatment encompasses the chest wall (following mastectomy)
50	Esophagus	Treatment is directed at all or a portion of the esophagus. Include tumors of the gastro-esophageal junction
51	Stomach	Treatment is directed at all or a portion of the stomach
52	Small bowel	Treatment is directed at all or a portion of the small bowel
53	Colon	Treatment is directed at all or a portion of the colon
54	Rectum	Treatment is directed at all or a portion of the rectum
55	Anus	Treatment is directed at all or a portion of the anus
56	Liver	Treatment is directed at all or a portion of the liver
57	Biliary tree or gallbladder	Treatment is directed at all or a portion of the biliary tree or gallbladder
58	Pancreas or hepatopancreatic ampulla	Treatment is directed at all or a portion of the pancreas or the hepatopancreatic ampulla. Hepatopancreatic ampulla tumors are sometimes referred to as periampullary tumors
59	Abdomen (NOS)	The treatment volume is directed at a primary tumor of the abdomen, but the primary sub-site is not an abdominal organ defined by codes 50-58 or it is considered to be an "unknown primary". For example, this code should be used for sarcomas arising from the abdominal retroperitoneum.
60	Bladder (whole)	Treatment is directed at all the bladder
61	Bladder (partial)	Treatment is directed at a portion of the bladder but not the whole bladder
62	Kidney	Treatment is directed at all or a portion of the kidney
63	Ureter	Treatment is directed at all or a portion of the ureter
64	Prostate (whole)	Treatment is directed at all the prostate and/or seminal vesicles. Use this code even if seminal vesicles are not explicitly targeted
65	Prostate (partial)	Treatment is directed at a portion of the prostate but not the whole prostate
66	Urethra	Treatment is directed at all or a portion of the urethra
67	Penis	Treatment is directed at all or a portion of the penis. Treatments of urethral primaries should be coded as ‘urethra’ (code 66)
68	Testicle or scrotum	Treatment is directed at all or a portion of the testicle and/or scrotum
70	Ovaries or fallopian tubes	Treatment is directed at all or a portion of the ovaries or fallopian tubes
71	Uterus or cervix	Treatment is directed at all or a portion of the uterus, endometrium or cervix

Phase I-II-III Radiation Primary Treatment Volume continued

72	Vagina	Treatment is directed at all or a portion of the vagina. Treatments of urethral primaries should be coded as 'urethra' (code 66)
73	Vulva	Treatment is directed at all or a portion of the vulva. Treatments of urethral primaries should be coded as 'urethra' (code 66)
80	Skull	Treatment is directed at all or a portion of the bones of the skull. Any brain irradiation is a secondary consequence
81	Spine/vertebral bodies	Treatment is directed at all or a portion of the bones of the spine/vertebral bodies, including the sacrum. Spinal cord malignancies should be coded using 'spinal cord' (code 14)
82	Shoulder	Treatment is directed to all or a portion of the proximal humerus, scapula, clavicle, or other components of the shoulder complex
83	Ribs	Treatment is directed at all or a portion of one or more ribs
84	Hip	Treatment is directed at all or a portion of the proximal femur or acetabulum
85	Pelvic bones	Treatment is directed at all or a portion of the bones of the pelvis other than the hip or sacrum
86	Pelvis (NOS, non-visceral)	The treatment volume is directed at a primary tumor of the pelvis, but the primary sub-site is not a pelvic organ or is not known or indicated. For example, this code should be used for sarcomas arising from the pelvis
88	Extremity bone, NOS	Treatment is directed at all or a portion of the bones of the arms or legs. This excludes the proximal femur (Hip, code 84). This excludes the proximal humerus (Shoulder, code 82)
90	Skin	Treatment is directed at all or a portion of the skin. The primary malignancy originates in the skin and the skin is the primary target. So-called skin metastases are usually subcutaneous and should be coded as a soft tissue site
91	Soft Tissue	This category should be used to code primary or metastatic soft tissue malignancies not fitting other categories
92	Hemibody	A single treatment volume encompassing either all structures above the diaphragm, or all structures below the diaphragm. This is almost always administered for palliation of widespread bone metastasis in patients with prostate or breast cancer
93	Whole body	Treatment is directed to the entire body included in a single treatment
94	Mantle, mini- mantle (obsolete after 2017)	For conversion of historic data only
95	Lower extended field (obsolete after 2017)	For conversion of historic data only
97	Invalid historical *FORDS* value	Conversion to new *STORE* data item could not take place due to an invalid *FORDS* Volume code
98	Other	Radiation therapy administered; treatment volume other than those previously categorized by codes 01-93

Phase I-II-III Radiation Primary Treatment Volume continued

99	Unknown	This category should be used to code treatments for which there is no information available about the treatment volume, or it is unknown if radiation treatment was administered

Phase I-II-III Radiation to Draining Lymph Nodes

Phase	Data Dictionary Category	PUF Data Item Name	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_RT_TO_LN	1505	2004 +	2	00-08, 88, 99
II	Treatment: Radiation	PHASE_II_RT_TO_LN	1515	2004 +	2	00-08, 88, 99, Blank
III	Treatment: Radiation	PHASE_III_RT_TO_LN	1525	2018 +	2	00-08, 88, 99, Blank

Description:

Identifies the draining lymph nodes treated (if any) during the first phase of radiation therapy delivered to the patient during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

The first phase of radiation treatment commonly targets both the primary tumor (or tumor bed) and draining lymph nodes as a secondary site. This data item should be used to indicate the draining regional lymph nodes, if any, that were irradiated during the first phase of radiation to the primary site.

The second and third phase of radiation treatment commonly targets both the primary tumor (or tumor bed) and draining lymph nodes as a secondary site. This data item should be used to indicate the draining regional lymph nodes, if any, that were irradiated during the second and third phase of radiation to the primary site.

Registry Coding Instructions:

When the primary volume is lymph nodes, draining lymph nodes are not targeted. Record code 88in the Phase I-II-III Radiation to Draining Lymph Nodes [1505,1515,1525]. Use codes 01 to 09 only when the lymph nodes are the primary target, for example, in lymphomas.

Code 00 if the tumor was diagnosed at autopsy for all Phases Radiation to Draining LymphNodes.

Phase I data item, in conjunction with Phase I Radiation Primary Treatment Volume [1504], replaces the Radiation Treatment Volume [1540] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

Phase II and III radiation treatment includes primary tumor or tumor bed in addition to the draining lymph node regions that are associated with the primary tumor or tumor bed. The primary tumor or tumor bed is recorded in the Phase II-III Radiation Primary Treatment Volume [1514, 1524].

Note: When the Phase II Primary Treatment Volume is lymph nodes, draining lymph nodes are not targeted. Record code 88 in this data item.

Blanks allowed only for Phase II or III if no radiation treatment administered.
Phase II data item may include converted historical values. For conversion of historical values, this data item includes a mapped value of 99 when Rad--Boost RX Modality [3200] was administered. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

Analytic Note: None

Code	Definition
00	No radiation to draining lymph nodes.
01	Neck lymph node regions
02	Thoracic lymph node regions
03	Neck and thoracic lymph node regions
04	Breast/ Chest wall lymph node regions
05	Abdominal lymph nodes
06	Pelvic lymph nodes
07	Abdominal and pelvic lymph nodes
08	Lymph node region, NOS
88	Not applicable; Radiation primary treatment is lymph nodes
99	Unknown if any radiation treatment to draining lymph nodes; Unknown if radiation treatment administered

Phase I-II-III Radiation Treatment Modality

Phase	Data Dictionary Category	PUF Data Item Name	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_RT_MODALITY	1506	2004 +	2	00-16, 98-99
II	Treatment: Radiation	PHASE_II_RT_MODALITY	1516	2004 +	2	00-16, 98-99, Blank
III	Treatment: Radiation	PHASE_III_RT_MODALITY	1526	2018 +	2	00-16, 98-99, Blank

Description:

Identifies the radiation modality administered during the first phase of radiation treatment delivered during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale:

Radiation modality reflects whether a treatment was external beam, brachytherapy, a radioisotope as well as their major subtypes, or a combination of modalities. These data items should be used to indicate the radiation modality administered during phase I-II-III of radiation.

Historically, the previously-named Regional Treatment Modality [1570] utilized codes that were not mutually exclusive. Rather, it included codes describing a mix of modalities, treatment planning techniques, and delivery techniques that are commonly utilized by radiation oncologists. However, every phase of radiation treatment will include a specified modality, planning technique, and delivery technique. The goal of the 2018 implementation of separate phase-specific data items for the recording of radiation modality and external beam radiation treatment planning techniques is to clarify this information and implement mutually exclusive categories. A separate data item for delivery technique has not been implemented because this information is not consistently reported in end of treatment summaries

Registry Coding Instructions:

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

For purposes of this data item, photons, x-rays and gamma-rays are equivalent.

Use code 13 - Radioisotopes, NOS for radioembolization procedures, e.g. intravascular Yttrium-90 for cases diagnosed January 1, 2018 or later. For cases diagnosed prior January 1, 2018, use code 07- Brachytherapy, NOS.

This data item intentionally does not include reference to various MV energies because this is not a clinically important aspect of technique. A change in MV energy (e.g., 6MV to 12MV) is not clinically relevant and does not represent a change in treatment technique. It is rare for change in MV energy to occur during any phase of radiation therapy.

If this data item is coded to any of the External beam codes (01-06 or 12), the planning technique must be recorded in the data item Phase I-II-III External Beam Radiation Planning Technique [1502, 1512, 1522].

If Radiation Treatment Modality is coded to any of the Brachytherapy or Radioisotopes codes (07-16) the code of 88 must be recorded in the data item Phase I-II-III External Beam Radiation Planning Technique [1502, 1512, 1522].

Note: Do not confuse a radioiodine scan with treatment. Only treatment is recorded in this item.

This data item, in conjunction with Phase I-II Radiation External Beam Planning Technique [1502, 1512], replaces the Rad--Regional RX Modality [1570], Rad--Boost RX Modality [3200] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliantsoftware; as of 2018 this data item is required for all cases regardless of diagnosis year.

Phase I must be coded however blanks allowed for Phase II-III if no treatment administered.

Analytic Note: None.

Code	Definition
00	No radiation treatment
01	External beam, NOS
02	External beam, photons
03	External beam, protons
04	External beam, electrons
05	External beam, neutrons
06	External beam, carbon ions
07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, interstitial, LDR
11	Brachytherapy, interstitial, HDR
12	Brachytherapy, electronic
13	Radioisotopes, NOS
14	Radioisotopes, Radium-223
15	Radioisotopes, Strontium-89
16	Radioisotopes, Strontium-90
98	Radiation Rx administered, Rx modality unknown
99	Radiation treatment modality unknown; Unknown if radiation treatment administered

Phase I-II-III External Beam Radiation Planning Technique

Phase	Data Dictionary Category	PUF Data Item Name	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_BEAM_TECH	1502	2004 +	2	00-10, 88, 98, 99
II	Treatment: Radiation	PHASE_II_BEAM_TECH	1512	2004 +	2	00-10, 88, 98, 99, Blank
III	Treatment: Radiation	PHASE_III_BEAM_TECH	1522	2018 +	2	00-10, 88, 98, 99, Blank

Description:

Identifies the external beam radiation planning technique used to administer the first phase of radiation treatment during the first course of treatment. This data item is required for CoC accredited facilities as of 01/01/2018.

Rationale

External beam radiation is the most commonly-used radiation modality in North America. In this data item we specified the planning technique for external beam treatment. Identifying the radiation technique is of interest for patterns of care and comparative effectiveness studies.

Historically, the previously-named Regional Treatment Modality [1570] utilized codes that were not mutually exclusive. Rather, it included codes describing a mix of modalities, treatment planning techniques, and delivery techniques that are commonly utilized by radiation oncologists. However, every phase of radiation treatment will include a specified modality, planning technique, and delivery technique. The goal of the 2018 implementation of separate phase-specific data items for the recording of Phase I Radiation Treatment Modality [1506] and Phase I External Beam Radiation Planning Technique [1502] is to clarify this information and implement mutually exclusive categories. Note that Planning Technique details are not being captured for non-External Beam modalities. A separate data item for delivery technique has not been implemented because this information is not consistently reported in end treatment summaries.

Registry Coding Instructions

A new paradigm of treatment called on-line adaptive (or on-table) adaptive radiation may be the source of confusion when coding External Beam Radiation Planning Technique. New linear accelerators are attached to such high-quality imaging devices that they can function as both simulation scanners for planning and radiation delivery systems. If a new radiation plan is created while the patient is on the radiation delivery table to take into account that day's anatomy, thisis referred to "on-line" (or "on-table") adaptive radiation. If a new radiation plan is created while the patient is not on

the delivery table, then it is referred to as “off-line” (or “off-table”) adaptive therapy. Off-line adaptive therapy treatments are relatively common, but MR-guided and CT-guided online adaptive therapy treatments are just emerging. If treatment is described as both MR-guided (or CT-Guided) on-line adaptive as well as another external beam planning technique (e.g. IMRT, SBRT, etc) code as MR-guided (or CT-Guided) online adaptive therapy. On-line adaptive techniques are the most complex and usually include IMRT and/or SBRT techniques within them, so the on-line adaptive component is most important to capture.

If a treatment is described as off-line adaptive then the on-line adaptive codes should NOT be used to describe the phase planning technique.

Code 00, no radiation treatment, when diagnosed at autopsy.

Code 05 for Intensity Modulated Therapy (IMT) or Intensity Modulated Radiation Therapy (IMRT). Code 04 for Conformal or 3-D Conformal Therapy whenever either is explicitly mentioned.

When code 98 is recorded, document the planning technique in the appropriate text data item.

This data item, in conjunction with Phase I-II Radiation Treatment Modality [1506, 1516], replaces the Rad--Regional RX Modality [1570] and includes converted historical values. Conversion took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

Phase I must be coded however blanks are allowed for Phase II-III.

Analytic Note: None.

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

Phase I-II-III Dose per Fraction

Phase	Data Dictionary Category	PUF Data Item Name:	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_DOSE_FRACT	1501	2004 +	5	00000-99999
II	Treatment: Radiation	PHASE_II_DOSE_FRACT	1511	2004 +	5	00000-99999, Blank
III	Treatment: Radiation	PHASE_III_DOSE_FRACT	1521	2018 +	5	00000-99999, Blank

Description:

Records the dose per fraction (treatment session) delivered to the patient in the first phase of radiation during the first course of treatment. The unit of measure is centi-Gray (cGy). This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale:

Radiation therapy is delivered in one or more phases with identified dose per fraction. It is necessary to capture information describing the dose per fraction to evaluate patterns of radiation oncology care. Outcomes are strongly related to the dose delivered.

Registry Coding Instructions:

In general, (Phase Dose per Fraction x Phase Number of Fractions = Phase Total Dose). But, there may be inconsistencies in rounding of dose or the way the dose is automatically measured in a treatment which will result in slight inconsistencies in the math. That is, in some radiation treatment summaries, Phase Dose per Fraction x Phase Number of Fractions ≈ Phase Total Dose.

For proton treatment, dosage may occasionally be specified as in CGe units (Cobalt Gray Equivalent) rather than Gy or cGy. 1 CGE = 1 Gy = 100 cGy. For a Phase Total Dose, you would need to multiply dose in CGE by 100 to get dose in cGy.).

Note that dose is still occasionally specified in “rads”. 1 rad = 1cGy.

If dose is documented in the medical record includes a fraction of a cGy (e.g. 180.3), round to the nearest cGy. For example, 180.5 cGy should be rounded up to 181 cGy and 180.4 cGy should be rounded down to 180cGy.

Code 99998 when radioisotopes were administered to the patient (codes 13-16) for Phase I -I-III Radiation Treatment Modality [1506, 1516, 1526].

Code the actual cGy if available when brachytherapy was administered to the patient (codes 07-12 for Phase I-II-III Treatment Modality [1506, 1516, 1526]). If the dose is not available/provided in cGy for a brachytherapy procedure, code 99999.

Record the actual dose delivered (NOT the initially prescribed dose) as documented in the treatment summary.

This data item replaces the Rad--Regional Dose: cGy [1510] and Rad--Boost Dose cGy [3210] and may include mapped historical values. 1-1 mapping took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

Analytic Note: None.

Code	Definition
00000	No radiation treatment
00001-99997	Record the actual Phase I dose delivered in cGy
99998	Not applicable, radioisotopes administered to the patient
99999	Regional radiation therapy was administered but dose is unknown; Unknown whether radiation therapy was administered

Examples

Code	Reason
00200	A patient with Stage III prostate carcinoma received pelvic irradiation to 5,000 cGy over 25 fractions followed by a Phase II (boost) prostate irradiation to 7,000 cGy. Record the Phase I dose per fraction as 00200 (5000/25).
00150	A patient with a left supraclavicular metastasis from a gastric carcinoma received 6,000 cGy to the left supraclavicular region over 40 fractions. The dose is calculated at the prescribed depth of 3cm. A secondary calculation shows a Dmax dose of 6,450 cGy. Record the Phase I dose per fraction as 00150 (6000/40).
00180	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions, but axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record phase I dose per fraction as 00180 (4500/25). See a detailed discussion of this example in the “CTR Guide to Coding Radiation Therapy Treatment in the STORE”.

Phase I-II-III Number of Fractions

Phase	Data Dictionary Category	PUF Data Item Name	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_NUM_FRACT	1503	2004 +	3	000-999
II	Treatment: Radiation	PHASE_II_NUM_FRACT	1513	2004 +	3	000-999, Blank
III	Treatment: Radiation	PHASE_III_NUM_FRACT	1523	2018 +	3	000-999, Blank

Description:

Records the total number of fractions (treatment sessions) delivered to the patient in the first phase of radiation during the first course of treatment. This data item is required for CoC-accredited facilities as of 01/01/2018.

Rationale

Radiation therapy is delivered in one or more phases with each phase spread out over a number of fractions (treatment sessions). It is necessary to capture information describing the number of fraction(s) to evaluate patterns of radiation oncology care.

Registry Coding instructions

Although a fraction or treatment session may include several treatment beam positions delivered within a relatively confined period of time-usually a few minutes to a few hours-it is still considered one session. However, multiple fractions may be delivered in a single day. This may be documented as BID treatment or twice daily treatment. Usually multiple fractions in a single day are separated by at least 4 hours.

Count each separate administration of brachytherapy or implant as a single fraction ortreatment.

Record the actual number of fractions delivered (NOT initially prescribed), as documented in the treatment summary.

Code 999 for Death Certificate Only (DCO) cases.

Phase I data item replaced the Rad--No of Treatment Vol [1520] and includes mapped values for historical cases. Phase II data item includes a mapped value of 999 when Rad--Boost RX Modality [3200] was administered. 1-1 mapping took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year.

Phase I must be coded however blanks allowed for Phase II-III if no radiation treatment administered.

Analytic Note: None.

Code	Definition
000	No radiation treatment
001-998	Number of fractions administered to the patient during the first phase of radiation therapy
999	Phase I Radiation therapy was administered, but the number of fractions is unknown; It is unknown whether radiation therapy was administered

Examples:

Code	Reason
025	A patient with breast carcinoma had treatment sessions in which treatment was delivered to the chest wall and encompassing the ipsilateral supraclavicular region for a total of three fraction portals. Twenty-five treatment sessions were given. Record 25 fractions as 025.
025	A patient with Stage IIIB bronchogenic carcinoma received 25 treatments to the left hilum and mediastinum, given in 25 daily fractions over five weeks.
050	A patient with advanced head and neck cancer was treated using "hyperfractionation." Three fields were delivered in each session; two sessions were given each day, six hours apart, with each session delivering a total dose of 150 cGy. Treatment was given for a total of 25 days. Record 50 fractions as 050.
010	The patient was given Mammosite® brachytherapy, repeated in 10 separate sessions. Record 10 fractions as 010.
001	Prostate cancer patient treated with a single administration of seeds. Record 1 fraction as 001.

Phase I-II-III Total Dose

Phase	Data Dictionary Category	PUF Data Item Name	NAACCR Item #	Diagnosis Years Available	Length	Allowable Values
I	Treatment: Radiation	PHASE_I_TOTAL_DOSE	1507	2004 +	6	000000-999999
II	Treatment: Radiation	PHASE_II_TOTAL_DOSE	1517	2004 +	6	000000-999999, Blank
III	Treatment: Radiation	PHASE_III_TOTAL_DOSE	1527	2018 +	6	000000-999999, Blank

Description:

Identifies the total radiation dose delivered to the patient during phase I-II-III of radiation treatment during the first course of treatment. Each phase is meant to reflect the delivered radiation prescription. The unit of dose is centi-Gray (cGy). This data item is required for CoC-accredited facilities for cases diagnosed as of 01/01/2018.

Rationale

To evaluate the patterns of radiation care, it is necessary to capture information describing the prescribed dose of Phase I-II-III radiation to the patient during the first course of treatment.

Outcomes are strongly related to the total dose delivered.

Registry Coding instructions

Record the actual total dose delivered (NOT initially prescribed), as documented in the radiation treatment summary. The value recorded for this data item should NOT be auto-calculated within the registry abstraction software. In general, (Phase Dose per Fraction x Phase Number of Fractions = Phase Total Dose). But, there may be inconsistencies in rounding of dose or the way the dose is automatically measured in a treatment which will result in slight inconsistencies in the math. That is, in some radiation treatment summaries, Phase Dose per Fraction x Phase Number of Fractions ≈ Phase Total Dose.

For proton treatment, dosage may occasionally be specified as in CGe units (Cobalt Gray Equivalent) rather than Gy or cGy. 1 CGE = 1 Gy = 100 cGy. For a Phase Total Dose, you would need to multiply dose in CGE by 100 to get dose in cGy.).

Note that dose is still occasionally specified in “rads”. 1 rad = 1cGy.

If dose is documented in the medical record includes a fraction of a cGy (e.g. 180.3), round to the nearest cGy. For example, 180.5 cGy should be rounded up to 181 cGy and 180.4 cGy should be rounded down to 180cGy. A dose of Code 99998 when radioisotopes were administered to the patient (codes 13-16 for Phase I-II-III Treatment Modality [1506, 1516, 1526]).

Code 000000, radiation therapy not administered, when diagnosed at autopsy.

Code 999998 when radioisotopes are administered to the patient (codes 13-16 recorded in the Phase I-II-III Treatment Modality [1506, 1516, 1526]).

Code the actual cGy if available when brachytherapy was administered to the patient (codes 07-12 for Phase I-II-III Treatment Modality [1506, 1516, 1526]). If only one fraction of brachytherapy was delivered, then then the Phase I Dose per Fraction and the Phase I Total Dose will be the same.

Code 999999 for Death Certificate Only (DCO) cases.

Phase I data item is an all new data item in 2018 includes mapped values for historical cases. Mapping took place upon upgrade to NAACCR v18-compliant software; as of 2018 this data item is required for all cases regardless of diagnosis year. Phase II data item may include mapped values for historical cases. This data item includes a mapped value of 999999 when Rad--Boost RX Modality [3200] was administered

Phase I must be coded however blanks are allowed for Phase II-III if no radiation treatment was administered.

Analytic Note: None.

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

Examples:

Code	Reason
005000	A patient with Stage III prostate carcinoma received pelvic irradiation of 5,000 cGy during Phase I Radiation Treatment. Record the Phase I Total Dose of 5,000 cGy as 005000.
006000	A patient with a left supraclavicular metastasis from a gastric carcinoma received 6,000 cGy to the left supraclavicular region. Record the Phase I Total Dose of 6,000 cGy as 006000.
004500	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions, but axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record the Phase I Total Dose of 4500 cGy as 004500. See a detailed discussion of this example in the “CTR Guide to Coding Radiation Therapy Treatment in the STORE”.

Number of Phases of Radiation Treatment

Data Dictionary Category: Radiation

PUF Data Item Name: NUMBER_PHASES_RAD_RX

NAACCR Item #: 1532

Diagnosis Years Available: 2018 +

Length: 2

Allowable Values: 00-98, 99

Description:

This is a new item in 2018. It was optional in 2017. A course of radiation is made up of one or more phases and each phase reflects a distinct delivered prescription. The STORE has fields for up to 3 phases of a radiation course to be documented. This field identifies the actual number of distinct radiation phases in a course so that it is clear when only a portion of the course is being captured in the phase summary sections.

Rationale:

The number of phases of radiation treatment is used to flag cases where only a subset of phase data is being captured.

Registry Coding Instructions:

Code	Definition
00	No radiation treatment
01-98	Record the actual number of phases in the radiation course
99	Unknown number of phases; Unknown if radiation therapy administered

Analytic Note: None.

Examples

Code	Reason
00	Radiation therapy was not administered.
01	A patient with advanced head and neck cancer was treated using "hyper-fractionation." Three fields were delivered in each session; two sessions were given each day, six hours apart, with each session delivering a total fractional dose of 150 cGy. Treatment was given for a total of 25 days. The total course dose was 7500cGy. Record the Number of Phases of Radiation Treatment as 01.
03	A patient with breast cancer was treated with whole breast RT, 5040 cGy in 28 fractions, but axillary and supraclavicular (SC) nodes treated concurrently with an anterior field covering both regions and a posterior field (PAB) added to the axilla. The medial portion of the anterior field was blocked for the last three treatments to hold the SC region to a maximum of 4500cGy to minimize the risk of brachial plexus injury. Subsequently, the surgical bed received an electron boost of 1000cGy in 5 fractions using fields shaped to surround surgical bed with 1.5 cm margins. Record 03 as the Number of Phases of Radiation Treatment. See a detailed discussion of this example in the "CTR Guide to Coding Radiation Therapy Treatment in the STORE".

Radiation Treatment Discontinued Early

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: RAD_RX_DISC_EARLY

NAACCR Item #: 1531

Diagnosis Years Available: 2018 +

Length: 2

Allowable Values: 00 - 07, 99

Description:

This is a new item in 2018. It was optional in 2017.

This field is used to identify patients/tumors whose radiation treatment course was discontinued earlier than initially planned. That is, the patients/tumors received fewer treatment fractions (sessions) than originally intended by the treating physician. This data item is required for CoC-accredited facilities for cases diagnosed 01/01/2018 and later.

Rationale:

Currently, the total dose of radiation reflects what was actually delivered rather than what was intended. When a patient doesn't complete a radiation course as initially intended this is typically commented on within the radiation end of treatment summary. By flagging these patients within the cancer registry database, these patients can be excluded from analyses attempting to describe adherence to radiation treatment guidelines or patterns of care analyses.

Registry Coding Instructions:

Use code 01 when there is no indication in the record that radiation therapy was discontinued or completed early.

Use code 02-07 when there is an indication in the record that the radiation therapy discontinued or was completed early.

Use code 99 when radiation therapy was administered, but it is not clear if the treatment course was discontinued early, or if it is unknown whether radiation therapy was administered

Analytic Note: None.

Radiation Treatment Discontinued Early continued

Code	Definition
00	No radiation treatment
01	Radiation treatment completed as prescribed
02	Radiation treatment discontinued early; toxicity
03	Radiation treatment discontinued early; contraindicated to other patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned radiation, etc.
04	Radiation treatment discontinued early; patient decision
05	Radiation treatment discontinued early; family decision
06	Radiation treatment discontinued early; patient expired
07	Radiation treatment discontinued early; reason not documented
99	Unknown if radiation treatment discontinued; Unknown whether radiation therapy administered

Radiation Course Total Dose

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: TOTAL_DOSE

NAACCR Item #: 1533

Diagnosis Years Available: 2018 +

Length: 6

Allowable Values: 000000 - 999999

Description:

This is a new item in 2018. It was optional in 2017.

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

Rationale:

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

Registry Coding Instructions:

If the total dose for the course is not documented, then add the dose from each of the sequential phases (I, II, III, or IV or more) that target the same body site and document the total cumulative dose. Note when calculating the Radiation Course Total Dose, all of the phases should be used, not just the first three.

Doses should ONLY be summed across phases to create a Total Dose when all of the phases were delivered sequentially to the same body site. If phases were delivered to multiple body sites (e.g. simultaneous treatment to multiple metastatic sites), then code the Radiation Course Total Dose as the dose to the body site that received the highest dose. Examples are provided in the “CTR Guideto Coding Radiation Therapy Treatment in the STORE”.

Doses should ONLY be summed across phases to create a Total Dose when all of the phases were delivered using the same modality. If phases were delivered using two or more different modalities (e.g. external beam and brachytherapy to the same body site), then code 999998, Not applicable. Doses can be summed across phases even if the fraction size of phases is different. That is, if phase I to the whole prostate and

seminal vesicles is 180 cGy x 28 =5040 cGy, Phase II to a partial prostate volume is 200 cGy x 15 = 3000cGy, and these phases are delivered sequentially, then record 8040 cGy as the Radiation Course Total Dose.

For proton treatment, dosage may occasionally be specified as in CGe units (Cobalt Gray Equivalent) rather than Gy or cGy. 1 CGE = 1 Gy = 100 cGy. For a Phase Total Dose, you would need to multiply dose in CGE by 100 to get dose in cGy.).

Note that dose is still occasionally specified in “rads”. 1 rad = 1cGy.

If dose is documented in the medical record includes a fraction of a cGy (e.g. 180.3), round to the nearest cGy. For example, 180.5 cGy should be rounded up to 181 cGy and 180.4 cGy should be rounded down to 180cGy. A dose of Code 99998 when radioisotopes were administered to the patient (codes 13-16 for Phase I Treatment Modality [1506]).

Code 999998 when radioisotopes are administered to the patient (codes 13-16 recorded in the Phase I, Phase II, or Phase III Treatment Modality [1506, 1516, 1526] data items).

Code the actual cGy if available when brachytherapy was administered to the patient (codes 07-12 for Phase I Treatment Modality [1506]).

Analytic Note: None.

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

Radiation/Surgery Sequence

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: RX_SUMM_SURGRAD_SEQ

NAACCR Item #: 1380

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0, 2 - 7, 9

Description:

Records the sequencing of radiation and surgical procedures given as part of the first course of treatment.

Rationale:

The sequence of radiation and surgical procedures given as part of the first course of treatment cannot always be determined using the date on which each modality was started or performed. This data item can be used to more precisely evaluate the timing of delivery of treatment to the patient.

Registry Coding Instructions:

For the purpose of coding the data item Radiation Sequence with Surgery, 'Surgery' is defined as a Surgical Procedure of Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 2- 7) or Surgical Procedure of Other Site (codes 1-5).

Surgical procedures include Surgical Procedure of Primary Site [1290]; Scope of Regional Lymph Node Surgery [1292]; Surgical Procedure/Other Site [1294]. If all these procedures are coded 0, or it is not known whether the patient received both surgery and radiation, then this item should be coded 0.

If the patient received both radiation therapy and any one or a combination of the following surgical procedures: Surgical Procedure of Primary Site, Regional Lymph Node Surgery, or Surgical Procedure/Other Site, then code this item 2–9, as appropriate.

If multiple first course treatment episodes were given such that both codes 4 and 7 seem to apply, use the code that defines the first sequence that applies.

Analytic Note:

Beginning with 2010 diagnoses, when it is unknown whether radiation and/or surgery were performed, the code assigned changed from 9 to 0. It is likely a shift in distribution of these two codes may be noticeable around that time.

Code	Definition	Description
0	No radiation therapy and/or surgical procedures	No radiation therapy given or unknown if radiation therapy given; and/or no surgery of the primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node(s) or it is unknown whether any surgery given.
2	Radiation therapy before surgery	Radiation therapy given before surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
3	Radiation therapy after surgery	Radiation therapy given after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
4	Radiation therapy both before and after surgery	At least two courses of radiation therapy are given before and at least two more after surgery to the primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
5	Intraoperative radiation therapy	Intraoperative therapy given during surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
6	Intraoperative radiation therapy with other therapy administered before or after surgery	Intraoperative radiation therapy given during surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s) with other radiation therapy administered before or after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
7	Surgery both before and after radiation	Radiation was administered between two separate surgical procedures to the primary site; regional lymph nodes; surgery to other regional site(s); distant site(s); or distant lymph node(s)
9	Sequence unknown	Administration of radiation therapy and surgery to primary site, scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed and the sequence of the treatment is not stated in the patient record.

Examples

Code	Reason
0	Due to other medical conditions surgery was not performed. The patient received palliative radiation therapy to alleviate pain.
2	A large lung lesion received radiation therapy prior to resection.
3	A patient received a wedge resection of a right breast mass with axillary lymph node dissection followed by radiation to right breast.
4	Preoperative radiation therapy was given to a large, bulky vulvar lesion and was followed by a lymph node dissection. This was then followed by radiation therapy to treat positive lymph nodes
5	A cone biopsy of the cervix was followed by intracavitary implant for IIIB cervical carcinoma
6	Stage IV vaginal carcinoma was treated with 5,000 cGy to the pelvis followed by a lymph node dissection and 2,500 cGy of intracavitary brachytherapy.
9	An unknown primary of the head and neck was treated with surgery and radiation prior to admission, but the sequence is unknown. The patient enters for chemotherapy.

Radiation Ended, Days from Start of Radiation

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: RAD_ELAPSED_RX_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 3

Allowable Values: 0 - 999

Description:

This item is calculated as the number of days between the *Date Radiation Started* (NAACCR Item #1210) and the *Date Radiation Ended* (NAACCR Item #3220). One is added to the number of days elapsed. This means that if radiation starts and ends on the same date, then 1 day has elapsed, if radiation ends the day after it is started, then 2 days have elapsed, and so on.

Registry Coding Instructions: Not applicable.

Analytic Note: Not applicable.

Code	Definition
0	None, radiation not administered
1-998	Number of elapsed days
999	Missing or incomplete dates for radiation start and end, days elapsed missing, or unknown if had radiation

Reason for No Radiation

Data Dictionary Category: Treatment: Radiation

PUF Data Item Name: REASON_FOR_NO_RADIATION

NAACCR Item #: 1430

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 2, 5 - 9

Description:

Records the reason that no regional radiation therapy was administered to the patient.

Rationale:

When evaluating the quality of care, it is useful to know the reason that various methods of therapy were not used, and whether the failure to provide a given type of therapy was due to the physician's failure to recommend that treatment, or due to the refusal of the patient, a family member, or the patient's guardian.

Registry Coding Instructions:

If Number of Phases of Radiation Treatment to this Volume [1532] is coded 00, Phase I Radiation Primary Treatment Volume [1504] is coded 00, Radiation Treatment Discontinued Early [1531] is coded 00, and Total Dose [1533] is coded 000000, then record the reason based on documentation in patient record.

Code 1 if the treatment plan offered multiple alternative treatment options and the patient selected treatment that did not include radiation therapy.

Code 7 if the patient refused recommended radiation therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 8 if it is known that a physician recommended radiation treatment, but no further documentation is available yet to confirm its administration.

Code 8 to indicate referral to a radiation oncologist was made and the registry should follow to determine whether radiation was administered. If follow-up to the specialist or facility determines the patient was never there and no other documentation can be found, code 1.

Cases coded 8 should be followed and updated to a more definitive code as appropriate.

Code 9 if the treatment plan offered multiple alternative treatment options, but it is unknown which treatment, if any, was provided.

Analytic Note: None.

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

Examples

Code	Reason
1	A patient with Stage I prostate cancer is offered either surgery or brachytherapy to treat his disease. The patient elects to be surgically treated.

Treatment: Systemic

Systemic, Days from Dx

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: DX_SYSTEMIC_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date Systemic Therapy Started* [chemotherapy, hormone therapy, immunotherapy, or hematologic transplant and endocrine procedures] (NAACCR Item #3230).

Registry Coding Instructions: Not applicable

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Systemic treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the first administration of systemic treatment for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	Systemic therapy not administered, therapy unknown, cannot compute days elapsed, or not available for these diagnosis years

Chemotherapy

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_SUMM_CHEMO

NAACCR Item #: 1390

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 - 03, 82, 85 - 88, 99

Description:

Records the type of chemotherapy administered as first course treatment at any facility. If chemotherapy was not administered, then this item records the reason it was not administered to the patient. Chemotherapy consists of a group of anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis.

Rationale:

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of chemotherapeutic agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if chemotherapy was not administered.

Registry Coding Instructions:

Code 00 if chemotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include chemotherapy.

If it is known that chemotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused recommended chemotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether chemotherapy is usually administered for this type and stage of cancer and there is no mention in the patient record whether it was recommended or administered.

If the managing physician changes one of the agents in a combination regimen, and the replacement agent belongs to a different group (chemotherapeutic agents are grouped as alkylating agents, antimetabolites, natural products, or other miscellaneous) than the original agent, the new regimen represents the start of subsequent therapy, and only the original agent or regimen is recorded as first course therapy.

Refer to SEER*Rx (https://seer.cancer.gov/tools/seerrx/ for coding of chemotherapeutic, hormonal and immunotherapies.

If chemotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the chemotherapy administered in the item *Palliative Care* (NAACCR Item #3270).

Update as of 2013 PUF: Six drugs previously classified as Chemotherapy were reclassified as BRM/Immunotherapy. This change in classification is effective only for cases diagnosed in January 1st, 2013 and forward. While the NCDB does not provide drug-specific data, changes in case counts may be observed for the *Chemotherapy* (NAACCR Item #1390) and *Immunotherapy* (NAACCR Item #1410) variables for cases diagnosed in 2013 due to the change in classification. The drugs are: Alemtuzumab/Campath, Bvacizumab/Avastin, Rituximab, Trastuzumab/Herceptin, Pertuzumab/Perjeta, and Cetuxumab/Erbitux.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. This item identifies chemotherapy given at the reporting facility. The item *Chemotherapy* (NAACCR Item #1390) identifies chemotherapy given by any facility.

Chemotherapy continued

Code	Definition
00	None, chemotherapy was not part of the planned first course of therapy
01	Chemotherapy administered as first course therapy, but the type and number of agents is not documented in patient record
02	Single-agent chemotherapy administered as first course therapy
03	Multiagent chemotherapy administered as first course therapy
82	Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to administration, etc.)
85	Chemotherapy was not administered because the patient died prior to planned or recommended therapy
86	Chemotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Chemotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Chemotherapy was recommended, but it is unknown if it was administered
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record.

Chemotherapy at this Facility

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_HOSP_CHEMO

NAACCR Item #: 700

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00 - 03, 99

Description:

Records the type of chemotherapy administered as first course treatment by the facility that submitted this record. If chemotherapy was not administered, then this item records the reason it was not administered to the patient.

Registry Coding Instructions:

Code 00 if chemotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include chemotherapy.

Codes 82-88 are only included in the *Chemotherapy* (NAACCR Item #1390) variable.

If it is known that chemotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused recommended chemotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether chemotherapy is usually administered for this type and stage of cancer and there is no mention in the patient record whether it was recommended or administered.

If the managing physician changes one of the agents in a combination regimen, and the replacement agent belongs to a different group (chemotherapeutic agents are grouped as alkylating agents, antimetabolites, natural products, or other miscellaneous) than the original agent, the new regimen represents the start of subsequent therapy, and only the original agent or regimen is recorded as first course therapy. Refer to SEER*Rx https://seer.cancer.gov/tools/seerrx/ for coding of chemotherapeutic, hormonal and immunotherapies.

Update: As of the 2013 PUF, six drugs previously classified as Chemotherapy were reclassified as BRM/Immunotherapy. This change in classification is effective only for cases diagnosed in January 1st, 2013 and forward. While the NCDB does not provide drug-specific data, changes in case counts may be observed for the *Chemotherapy* (NAACCR Item #1390) and *Immunotherapy* (NAACCR Item #1410) variables for cases diagnosed in 2013 due to the change in classification. The drugs are: Alemtuzumab/Campath, Bvacizumab/Avastin, Rituximab, Trastuzumab/Herceptin, Pertuzumab/Perjeta, and Cetuxumab/Erbitux.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. This item identifies chemotherapy given at the reporting facility. The item Chemotherapy identifies chemotherapy given by any facility.

Code	Definition
00	None, chemotherapy was not part of the planned first course of therapy
01	Chemotherapy administered as first course therapy, but the type and number of agents is not documented in patient record
02	Single-agent chemotherapy administered as first course therapy
03	Multiagent chemotherapy administered as first course therapy
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record

Chemotherapy, Days from Dx

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: DX_CHEMO_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date Chemotherapy Started* (NAACCR Item #1220).

Registry Coding Instructions: Not applicable

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Chemotherapy treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the first administration of chemotherapy for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	Chemotherapy not administered, chemotherapy unknown, or days elapsed cannot be computed due to missing or incomplete dates

Hormone Therapy

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_SUMM_HORMONE

NAACCR Item #: 1400

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 01, 82, 85 - 88, 99

Description:

Records the type of hormone therapy administered as first course treatment at any facility. If hormone therapy was not administered, then this item records the reason it was not administered to the patient. Hormone therapy consists of a group of drugs that may affect the long-term control of a cancer's growth.

Rationale:

Systemic therapy may involve the administration of one or a combination of agents. This data item allows for the evaluation of the administration of hormonal agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason if hormone therapy was not administered.

Registry Coding Instructions:

Record prednisone as hormonal therapy when administered in combination with chemotherapy, such as MOPP (mechlorethamine, vincristine, procarbazine, prednisone) or COPP (cyclophosphamide, vincristine, procarbazine, prednisone).

Do not code prednisone as hormone therapy when it is administered for reasons other than chemotherapeutic treatment.

Tumor involvement or treatment may destroy hormone-producing tissue. Hormone replacement therapy will be given if the hormone is necessary to maintain normal metabolism and body function. Do not code hormone replacement therapy as part of first course therapy.

Code 00 if hormone therapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include hormone therapy.

Code 01 for thyroid replacement therapy which inhibits TSH (thyroid- stimulating hormone). TSH is a product of the pituitary gland that can stimulate tumor growth.

If it is known that hormone therapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused recommended hormone therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether hormone therapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.

Refer to SEER*Rx https://seer.cancer.gov/tools/seerrx/ for instructions for coding hormonal, chemotherapeutic and immunotherapy agents.

If hormone therapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hormone therapy administered in the item *Palliative Care* (NAACCR Item #3270).

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Hormone treatment may have been given by any facility, or at multiple facilities, not limited to the one whose report is included in this file.

Code	Definition
00	None, hormone therapy was not part of the planned first course of therapy
01	Hormone therapy administered as first course therapy
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to administration)
85	Hormone therapy was not administered because the patient died prior to planned or recommended therapy
86	Hormone therapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Hormone therapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Hormone therapy was recommended, but it is unknown if it was administered
99	It is unknown whether a hormonal agent(s) was recommended or administered because it is not stated in patient record.

Hormone Therapy at This Facility

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_HOSP_HORMONE

NAACCR Item #: 710

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 01, 99

Description:

This item records the type of hormone therapy administered as first course treatment by the facility that submitted this record. If hormone therapy was not administered, then this item records the reason it was not administered to the patient. Hormone therapy consists of a group of drugs that may affect the long- term control of a cancer's growth.

Registry Coding Instructions:

Record prednisone as hormonal therapy when administered in combination with chemotherapy, such as MOPP (mechlorethamine, vincristine, procarbazine, prednisone) or COPP (cyclophosphamide, vincristine, procarbazine, prednisone).

Do not code prednisone as hormone therapy when it is administered for reasons other than chemotherapeutic treatment.

Tumor involvement or treatment may destroy hormone-producing tissue. Hormone replacement therapy will be given if the hormone is necessary to maintain normal metabolism and body function. Do not code hormone replacement therapy as part of first course therapy.

Code 00 if hormone therapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include hormone therapy.

Code 01 for thyroid replacement therapy which inhibits TSH (thyroid- stimulating hormone). TSH is a product of the pituitary gland that can stimulate tumor growth.

Codes 82-88 are only coded in the *Hormone Therapy* (NAACCR Item #1400) variable.

If it is known that hormone therapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused recommended hormone therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether hormone therapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.

Refer to SEER*Rx (https://seer.cancer.gov/tools/seerrx/) for instructions for coding hormonal, chemotherapeutic and immunotherapy agents.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. This item identifies hormone therapy given at this facility. The item Hormone Therapy records first course hormone therapy from any facility.

Code	Definition
00	None, hormone therapy was not part of the planned first course of therapy
01	Hormone therapy administered as first course therapy
99	It is unknown whether a hormonal agent(s) was recommended or administered because it is not stated in patient record.

Hormone Therapy, Days from Dx

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: DX_HORMONE_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date Hormone Therapy Started* (NAACCR Item #1230).

Registry Coding Instructions: Not applicable

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Hormone treatment may have been provided by any facility, or multiple facilities, not limited to the one whose report is included in this file. This refers to the first administration of hormone treatment for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	Hormone therapy not administered, hormone therapy unknown, or cannot compute elapsed days due to missing or incomplete dates

Immunotherapy

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_SUMM_IMMUNOTHERAPY

NAACCR Item #: 1410

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 01, 82, 85 - 88, 99

Description:

Records the type of immunotherapy administered as first course treatment at this and all other facilities. If immunotherapy was not administered, then this item records the reason it was not administered to the patient. Immunotherapy consists of biological or chemical agents that alter the immune system or change the host's response to tumor cells.

Registry Coding Instructions:

Code 00 if immunotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include immunotherapy.

If it is known that immunotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused recommended immunotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether immunotherapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.

Refer to SEER*Rx https://seer.cancer.gov/tools/seerrx/ instructions for coding immunotherapy, chemotherapeutic and hormonal agents.

If immunotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the immunotherapy administered in the item *Palliative Care* (NAACCR Item #3270).

Update for 2013 PUF: Six drugs previously classified as Chemotherapy were reclassified as BRM/Immunotherapy. This change in classification is effective only for cases diagnosed in January 1st, 2013 and forward. While the NCDB does not provide drug specific data, changes in case counts may be observed for the *Chemotherapy* (NAACCR Item #1390) and *Immunotherapy* (NAACCR Item #1410) variables for cases diagnosed in 2013 due to the change in classification. The drugs are: Alemtuzumab/Campath, Bvacizumab/Avastin, Rituximab, Trastuzumab/Herceptin, Pertuzumab/Perjeta, and Cetuxumab/Erbitux.

Analytic Note:

Immunotherapy is sometimes called biologic response modifier (BRM). CoC cancer programs are required to identify treatment their patients received from all sources. Immunotherapy may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file.

Code	Definition
00	None, immunotherapy was not part of the planned first course of therapy
01	Immunotherapy administered as first course therapy
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (i.e, comorbid conditions, advanced age, progression of tumor prior to administration)
85	Immunotherapy was not administered because the patient died prior to planned or recommended therapy
86	Immunotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Immunotherapy was recommended, but it is unknown if it was administered
99	It is unknown whether an immunotherapeutic agent(s) was recommended or administered because it is not stated in patient record.

Immunotherapy at this Facility

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_HOSP_IMMUNOTHERAPY

NAACCR Item #: 720

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 01, 99

Description:

Records the type of immunotherapy administered as first course treatment at the facility that submitted the record. If immunotherapy was not administered, then this item records the reason it was not administered to the patient.

Registry Coding Instructions:

Code 00 if immunotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include immunotherapy.

Codes 82-88 are included in the *Immunotherapy* (NAACCR Item #1410) variable.

If it is known that immunotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused recommended immunotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether immunotherapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.

Refer to SEER*Rx https://seer.cancer.gov/tools/seerrx/ for instructions for coding immunotherapy, chemotherapeutic and hormonal agents.

Update for 2013 PUF: Six drugs previously classified as Chemotherapy were reclassified as BRM/Immunotherapy. This change in classification is effective only for cases diagnosed in January 1st, 2013 and forward. While the NCDB does not provide drug specific data, changes in case counts may be observed for the *Chemotherapy* (NAACCR Item #1390) and *Immunotherapy* (NAACCR Item #1410) variables for cases diagnosed in 2013 due to the change in classification. The drugs are: Alemtuzumab/Campath, Bvacizumab/Avastin, Rituximab, Trastuzumab/Herceptin, Pertuzumab/Perjeta, and Cetuxumab/Erbitux.

Analytic Note:

Immunotherapy is sometimes called biologic response modifier (BRM). CoC cancer programs are required to identify treatment their patients received from all sources. Immunotherapy may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file.

Code	Definition
00	None, immunotherapy was not part of the planned first course of therapy
01	Immunotherapy administered as first course therapy
99	It is unknown whether an immunotherapeutic agent was recommended or administered because it is not stated in the patient record

Immunotherapy, Days from Dx

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: DX_IMMUNO_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date Immunotherapy Started* (NAACCR Item #1240).

Registry Coding Instructions: Not applicable.

Analytic Note:

Agents included for immunotherapy are also known as biologic response modifiers.

CoC cancer programs are required to identify treatment their patients received from all sources. Immunotherapy may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file. This refers to the first administration of immunotherapy for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	Immunotherapy not administered, immunotherapy unknown, or cannot compute days elapsed due to missing or incomplete dates

Hematologic Transplant and Endocrine Procedures

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_SUMM_TRNSPLNT_ENDO

NAACCR Item #: 3250

Diagnosis Years Available: 2004 +

Length: 2

Allowable Values: 00, 10 - 12, 20, 30, 40, 82, 85 - 88, 99

Description:

Identifies systemic therapeutic procedures performed as part of the first course of treatment at this and all other facilities. If none of these procedures was performed, then this item records the reason why not. These procedures include bone marrow transplants, stem cell harvests, and surgical and/or radiation endocrine therapy.

Registry Coding Instructions:

Bone marrow transplants should be coded as either autologous (bone marrow originally taken from the patient) or allogeneic (bone marrow donated by a person other than the patient). For cases in which the bone marrow transplant was syngeneic (transplanted marrow from an identical twin), the item is coded as allogeneic.
Stem cell harvests involve the collection of immature blood cells from the patient and the reintroduction by transfusion of the harvested cells following chemotherapy or radiation therapy.

Endocrine irradiation and/or endocrine surgery are procedures which suppress the naturally occurring hormonal activity of the patient and thus alter or effect the long-term control of the cancer's growth. These procedures must be bilateral to qualify as endocrine surgery or endocrine radiation. If only one gland is intact at the start of treatment, surgery and/or radiation to that remaining gland is coded as endocrine surgery or endocrine radiation.

Code 00 if a transplant or endocrine procedure was not administered to the patient, and it is known that these procedures are not usually administered for this type and stage of cancer.

Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include a transplant or endocrine procedure.

If it is known that a transplant or endocrine procedure is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

Code 87 if the patient refused a recommended transplant or endocrine procedure, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.

Code 99 if it is not known whether a transplant or endocrine procedure is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.

If hematologic transplant or endocrine procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hematologic transplant or endocrine procedure provided in the item *Palliative Care* (NAACCR Item #3270) and/or *Palliative Care at this Facility* (NAACCR Item #3280), as appropriate.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Procedures may have occurred at any facility, not limited to the one whose report is included in this file.

Code	Definition
00	No transplant procedure or endocrine therapy was administered as part of first course therapy
10	A bone marrow transplant procedure was administered, but the type was not specified
11	Bone marrow transplant - autologous
12	Bone marrow transplant - allogeneic
20	Stem cell harvest and infusion. Umbilical cord stem cell transplant, with blood from one or multiple umbilical cords.
30	Endocrine surgery and/or endocrine radiation therapy
40	Combination of endocrine surgery and/or radiation with a transplant procedure. (Combination of codes 30 and 10, 11, 12, or 20).
82	Hematologic transplant and/or endocrine surgery/radiation was not recommended/administered because it was contraindicated due to patient risk factors (i.e, comorbid conditions, advanced age, progression of disease prior to administration, etc.)
85	Hematologic transplant and/or endocrine surgery/radiation was not administered because the patient died prior to planned or recommended therapy.
86	Hematologic transplant and/or endocrine surgery/radiation was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Hematologic transplant and/or endocrine surgery/radiation was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Hematologic transplant and/or endocrine surgery/radiation was recommended, but it is unknown if it was administered
99	It is unknown whether hematologic transplant and/or endocrine surgery/radiation was recommended or administered because it is not stated in patient record.

Systemic/Surgery Sequence

Data Dictionary Category: Treatment: Systemic

PUF Data Item Name: RX_SUMM_SYSTEMIC_SUR_SEQ

NAACCR Item #: 1639

Diagnosis Years Available: 2006 +

Length: 1

Allowable Values: 0, 2 - 7, 9, blank

Description:

Records the sequencing of systemic treatment and surgical procedures given as part of the first course of treatment.

Rationale:

The sequence of systemic therapy and surgical procedures given as part of the first course of treatment cannot always be determined using the date on which each modality was started or performed. This data item can be used to more precisely evaluate the timing of delivery of treatment to the patient.

Registry Coding Instructions:

For the purpose of coding the data item Systemic Sequence with Surgery, 'Surgery' is defined as a Surgical Procedure of Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 2-7) or Surgical Procedure of Other Site (codes 1-5).

• Systemic/Surgery Sequence is to be used for patients diagnosed on or after January 1, 2006.

• Code the administration of systemic therapy in sequence with the first surgery performed, described in the item Date of First Surgical Procedure [1200].

• If none of the following surgical procedures were performed: Surgical Procedure of Primary Site [1290], Scope of Regional Lymph Node Surgery [1292] (excluding code 1) , Surgical Procedure/Other Site [1294], then this item should be coded 0.

• If the patient received both systemic therapy and any one or a combination of the following surgical procedures: Surgical Procedure of the Primary Site [1290], Scope of Regional Lymph Node Surgery [1292] (excluding code 1) , or Surgical Procedure/Other Site [1294], then code this item 2-9, as appropriate.

• If multiple first course treatment episodes were given such that both codes 4 and 7 seem to apply, use the code that defines the first sequence that applies. For example: the sequence,

chemo then surgery then hormone therapy then surgery is coded 4 for “chemo then surgery thenhormone”.

Analytic Note:

This item was added to *FORDS* for use with cases diagnosed in 2006 or later.

CoC cancer programs are required to identify treatment their patients received from all sources. Treatment may have occurred at any facility, or at multiple facilities, not limited to the one whose report is included in this file.

Code	Label	Definition
0	No systemic therapy and/or surgical procedures	No systemic therapy was given; and/or no surgical procedure of primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node(s); or no reconstructive surgery was performed. Or: It is unknown whether both surgery and systemic treatment were provided
2	Systemic therapy before surgery	Systemic therapy was given *before* surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed
3	Systemic therapy after surgery	Systemic therapy was given *after* surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed
4	Systemic therapy both before and after surgery	At least one course of systemic therapy was given before and at least one more after a surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed
5	Intraoperative systemic therapy	Intraoperative systemic therapy was given during surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s)
6	Intraoperative systemic therapy with other systemic therapy administered before or after surgery	Intraoperative systemic therapy was given during surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) with other systemic therapy administered before or after surgical procedure of primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) was performed
7	Surgery both before and after systemic therapy	Systemic therapy was administered between two separate surgical procedures to the primary site; regional lymph nodes; surgery to other regional site(s), distant site(s), or distant lymph node(s).
9	Sequence unknown	Both surgery and systemic therapy were provided, but the sequence is unknown
blank		Not available

Treatment: Other Treatment

Other Treatment

Data Dictionary Category: Treatment: Other Treatment

PUF Data Item Name: RX_SUMM_OTHER

NAACCR Item #: 1420

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 3, 6 - 9

Description:

Identifies other treatment that cannot be defined as surgery, radiation, or systemic therapy according to the defined data items in this manual.

Rationale:

Information on other therapy is used to describe and evaluate the quality of care and treatment practices.

Registry Coding Instructions:

The principal treatment for certain reportable hematopoietic diseases could be supportive care that does not meet the usual definition of treatment that "modifies, controls, removes, or destroys" proliferating cancer tissue.

Supportive care may include phlebotomy, transfusion, or aspirin. In order to report the hematopoietic cases in which the patient received supportive care, SEER and the Commission on Cancer have agreed to record treatments such as phlebotomy, transfusion, or aspirin as "Other Treatment" (Code 1) for certain hematopoietic diseases ONLY. Consult the most recent version of the Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual for instructions for coding care of specific hematopoietic neoplasms in this item.

Code 1 for embolization using alcohol as an embolizing agent.

Code 1 for embolization to a site other than the liver where the embolizing agent is unknown.

Code 1 for PUVA (psoralen and long-wave ultraviolet radiation)

Do not code presurgical embolization that given for a purpose to shrink the tumor.

A complete description of the treatment plan should be recorded in the text field for "Other Treatment" on the abstract.

If other treatment was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the other treatment administered in the item Palliative Care [3270].

Code 8 if it is known that a physician recommended treatment coded as Other Treatment, and no further documentation is available yet to confirm its administration.

Code 8 to indicate referral to a specialist for Other Treatment and the registry should follow. If follow-up with the specialist or facility determines the patient was never there, code 0.

Code 0 when diagnosed at autopsy.

Code 9 for Death Certificate Only (DCO) cases.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Other treatment may have been given by any facility, or multiple facilities, not limited to the one whose report is included in this file. This refers to the first use of other treatment for the cancer by any facility.

Other Treatment continued

Code	Definition	Description
0	None	All cancer treatment was coded in other treatment fields (surgery, radiation, systemic therapy). Patient received no cancer treatment
1	Other	Cancer treatment that cannot be appropriately assigned to specified treatment data items (surgery, radiation, systemic). Use this code for treatment unique to hematopoietic diseases
2	Other-Experimental	This code is not defined. It may be used to record participation in institution-based clinical trials
3	Other-Double Blind	A patient is involved in a double-blind clinical trial. Code the treatment actually administered when the double-blind trial code is broken
6	Other-Unproven	Cancer treatments administered by nonmedical personnel
7	Refusal	Other treatment was not administered. It was recommended by the patient's physician, but this treatment (which would have been coded 1, 2, or 3) was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record
8	Recommended; unknown if administered	Other treatment was recommended, but it is unknown whether it was administered
9	Unknown	It is unknown whether other treatment was recommended or administered, and there is no information in the medical record to confirm the recommendation or administration of other treatment.

Other Treatment at this Facility

Data Dictionary Category: Treatment: Other Treatment

PUF Data Item Name: RX_HOSP_OTHER

NAACCR Item #: 730

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 3, 6 - 9

Description:

Identifies other treatment given at the reporting facility that cannot be defined as surgery, radiation, or systemic therapy.

Registry Coding Instructions:

In order to report the hematopoietic cases in which the patient received supportive care, SSER and the Commission on Cancer have agreed to record treatments such as phlebotomy, transfusion, or aspirin as *Other Treatment* (NAACCR Item #1420) Code 1 for certain hematopoietic diseases ONLY. Consult https://seer.cancer.gov/tools/seerrx/ for instructions for coding care of specific hematopoietic neoplasms in this item.

Code 1 for embolization using alcohol as an embolizing agent.

Code 1 for embolization to a site other than the liver where the embolizing agent is unknown.

Code 1 for PUFA (psoralen and long-wave ultraviolet radiation). Do not code pre-surgical embolization given to shrink the tumor.

Code 8 if it is known that a physician recommended treatment coded as Other Treatment, and no further documentation is available yet to confirm its administration.

Code 8 to indicate referral to a specialist for Other Treatment; the registry should follow. If follow-up with the specialist or facility determines the patient was never there, code 0.

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. Other treatment may have been given by any facility, or multiple facilities, not limited to the one whose report is included in this file. This refers to the first use of other treatment for the cancer by the reporting facility.

Code	Definition	Description
0	None	All cancer treatment was coded in other treatment fields (surgery, radiation, systemic therapy). Patient received no cancer treatment
1	Other	Cancer treatment that cannot be appropriately assigned to specified treatment data items (surgery, radiation, systemic). Use this code for treatment unique to hematopoietic diseases
2	Other-Experimental	This code is not defined. It may be used to record participation in institution-based clinical trials
3	Other-Double Blind	A patient is involved in a double-blind clinical trial. Code the treatment actually administered when the double-blind trial code is broken
6	Other-Unproven	Cancer treatments administered by nonmedical personnel
7	Refusal	Other treatment was not administered. It was recommended by the patient's physician, but this treatment (which would have been coded 1, 2, or 3) was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record
8	Recommended; unknown if administered	Other treatment was recommended, but it is unknown whether it was administered
9	Unknown	It is unknown whether other treatment was recommended or administered, and there is no information in the medical record to confirm the recommendation or administration of other treatment.

Other Treatment, Days from Dx

Data Dictionary Category: Treatment: Other Treatment

PUF Data Item Name: DX_OTHER_STARTED_DAYS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 +

Length: 8

Allowable Values: -9999999 – 99999999 (negative and positive), blank

Description:

The number of days between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date Other Treatment Started* (NAACCR Item #1250).

Registry Coding Instructions: Not applicable

Analytic Note:

CoC cancer programs are required to identify treatment their patients received from all sources. This treatment may have been given by any facility, or multiple facilities, not limited to the one whose report is included in this file. This refers to the first given for the cancer by any facility.

Code	Definition
0000 - 9999	Number of elapsed days
blank	Other therapy not administered, other therapy unknown, or cannot compute elapsed days due to missing or incomplete dates

Palliative Care

Data Dictionary Category: Treatment: Other Treatment

PUF Data Item Name: PALLIATIVE_CARE

NAACCR Item #: 3270

Diagnosis Years Available: 2004 +

Length: 1

Allowable Values: 0 - 7, 9

Description:

Identifies any care provided in an effort to palliate or alleviate symptoms. Palliative care is performed to relieve symptoms and may include surgery, radiation therapy, systemic therapy (chemotherapy, hormone therapy, or other systemic drugs), and/or other pain management therapy.

Rationale:

This data item allows reporting facilities to track care that is considered palliative rather than diagnostic or curative in intent

Registry Coding Instructions:

Surgical procedures, radiation therapy, or systemic therapy provided to prolong the patient's life by controlling symptoms, to alleviate pain, or to make the patient comfortable should be coded palliative care and as first course therapy if that procedure removes or modifies either primary or metastatic malignant tissue.

Palliative care is not used to diagnose or stage the primary tumor.

Do not code routine pain management following surgery or other treatment; do code first course pain management for persistent pain.

Analytic Note:

This data item can be used to distinguish a treatment modality given for curative treatment from the same modality being used strictly for palliation.

If patients are admitted to a hospital for palliative care other than surgery, radiation or systemic treatment, the record often does not indicate the underlying reason for the procedure (for example, other forms of pain care). Therefore, when the initial care was elsewhere and the care was not one of these three modalities, it is unlikely the care will be reported in this data item.

Code	Definition
0	No palliative care provided
1	Surgery (which may involve a bypass procedure) to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made
2	Radiation therapy to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made
3	Chemotherapy, hormone therapy, or other systemic drugs to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made
4	Patient received or was referred for pain management therapy with no other palliative care
5	Any combination of codes 1, 2, and/or 3 without code 4
6	Any combination of codes 1, 2, and/or 3 with code 4
7	Palliative care was performed or referred, but no information on the type of procedure is available in the patient record. Palliative care was provided that does not fit the descriptions for codes 1-6
9	It is unknown if palliative care was performed or referred; not stated in patient record

Palliative Care at this Facility

Data Dictionary Category: Treatment: Other Treatment

PUF Data Item Name: PALLIATIVE_CARE_HOSP

NAACCR Item #: 3280

Diagnosis Years Available: 2004 - 2010

Length: 1

Allowable Values: 0 - 7, 9

Description:

Identifies any care provided in an effort to palliate or alleviate symptoms at the reporting facility. Palliative care is performed to relieve symptoms and may include surgery, radiation therapy, systemic therapy (chemotherapy, hormone therapy, or other systemic drugs), and/or other pain management therapy. This data item was added to the 2015 PUF (data released in Fall 2017) and does not appear in prior versions of the PUF data.

Registry Coding Instructions:

Surgical procedures, radiation therapy, or systemic therapy provided to prolong the patient's life by controlling symptoms, to alleviate pain, or to make the patient comfortable should be coded palliative care and as first course therapy if that procedure removes or modifies either primary or metastatic malignant tissue. Palliative care is not used to diagnose or stage the primary tumor.

Do not code routine pain management following surgery or other treatment; do code first course pain management for persistent pain.

Analytic Note:

This data item can be used to distinguish a treatment modality given for curative treatment from the same modality being used strictly for palliation.

If patients are admitted to a hospital for palliative care other than surgery, radiation or systemic treatment, the record often does not indicate the underlying reason for the procedure (for example, other forms of pain care). Therefore, when the initial care was elsewhere and the care was not one of these three modalities, it is unlikely the care will be reported in this data item. This item identifies palliative care at the reporting facility.

Code	Definition
0	No palliative care provided
1	Surgery (which may involve a bypass procedure) to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made
2	Radiation therapy to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made
3	Chemotherapy, hormone therapy, or other systemic drugs to alleviate symptoms, but no attempt to diagnose, stage, or treat the primary tumor is made
4	Patient received or was referred for pain management therapy with no other palliative care
5	Any combination of codes 1, 2, and/or 3 without code 4
6	Any combination of codes 1, 2, and/or 3 with code 4
7	Palliative care was performed or referred, but no information on the type of procedure is available in the patient record. Palliative care was provided that does not fit the descriptions for codes 1-6
9	It is unknown if palliative care was performed or referred; not stated in patient record

Outcomes

Thirty Day Mortality

Data Dictionary Category: Outcomes

PUF Data Item Name: PUF_30_DAY_MORT_CD

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 - 2023

Length: 1

Allowable Values: 0, 1, 9, blank

Description:

This item indicates mortality within 30 days of the most definitive primary site surgery.

Registry Coding Instructions: Not applicable.

Analytic Note:

The computation was based on the *Date of Most Definitive Surgical Resection of the Primary Site* (NAACCR Item #3170) if that is known. Otherwise, it was based on the *Date of the First Surgical Procedure* (NAACCR Item #1200). In either case, the *Date of Last Contact or Death* (NAACCR Item #1750) was subtracted from the surgery date and patient *Vital Status* (NAACCR Item #1760) indicated whether thelatter date referred to contact or death. Eligible cases are limited to *Surgical Procedure of Primary Site* codes 20-90 (NAACCR Item #1290). *Thirty Day Mortality* is blank for patients diagnosed in 2024. Investigators analyzing surgical mortality at the facility level must use the *Surgical Procedure of Primary Site at this Facility* (NAACCR Item #670) variable to determine if the surgery was performed at the facility included in the PUF data. See the *Getting Started* document for more information.

Code	Definition
0	Patient alive, or died more than 30 days after surgery performed
1	Patient died <= 30 days from surgery date
9	Patient alive with fewer than 30 days of follow-up, surgery date missing, or last contact date missing
blank	Not eligible; surgical resection unknown or not performed, or diagnosed in 2024

Ninety Day Mortality

Data Dictionary Category: Outcomes

PUF Data Item Name: PUF_90_DAY_MORT_CD

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 - 2023

Length: 1

Allowable values: 0, 1, 9, blank

Description:

This item indicates mortality within 90 days after the most definitive primary site surgery.

Registry Coding Instructions: Not applicable.

Analytic Note:

The computation was based on the *Date of Most Definitive Surgical Resection of the Primary Site* (NAACCR #3170) if that was known. Otherwise, it was based on the *Date of First Surgical Procedure* (NAACCR Item #1200). In either case, the *Date of Last Contact or Death* (NAACCR Item #1750) was subtracted from the surgery date and patient *Vital Status* (NAACCR Item #1760) indicated whether the latter date referred to contact or death. Eligible cases are limited to *Surgical Procedure of Primary Site* codes 20-90 (NAACCR Item #1290). *Ninety Day Mortality* is blank for patients diagnosed in 2024.

Investigators analyzing surgical mortality at the facility level must use the *Surgical Procedure of Primary Site at this Facility* (NAACCR Item #670) variable to determine if the surgery was performed at the facility included in the PUF data. See the *Getting Started* document for more information.

Code	Definition
0	Patient alive, or died more than 90 days after surgery performed
1	Patient died <= 90 days from the surgery date
9	Patient alive with fewer than 90 days of follow-up, surgery date missing, or last contact date missing
blank	Not eligible; surgical resection unknown or not performed, or diagnosed in 2024

Last Contact or Death, Months from Dx

Data Dictionary Category: Outcomes

PUF Data Item Name: DX_LASTCONTACT_DEATH_MONTHS

NAACCR Item #: Not applicable

Diagnosis Years Available: 2004 - 2023

Length: 8

Allowable Values: 0000.0 - 8887.9, 9999.0, blank

Description:

The number of months between the *Date of Initial Diagnosis* (NAACCR Item #390) and the *Date of Last Contact or Death* (NAACCR Item #1750).

Registry Coding Instructions: Not applicable.

Analytic Note:

Months Elapsed is blank for patients diagnosed in 2024.

Beginning with the 2020 Call for Data, registries will submit annual follow-up for cases diagnosed within the past 15 years or as of first accredited date, whichever is shorter.

Code	Definition
0000.0 - 8887.9	Number of elapsed months
9999.0	Unknown, number of elapsed months cannot be computed
blank	Not available

Vital Status

Data Dictionary Category: Outcomes

PUF Data Item Name: PUF_VITAL_STATUS

NAACCR Item #: 1760

Diagnosis Years Available: 2004 - 2023

Length: 1

Allowable Values: 0, 1, blank

Description:

Records the vital status of the patient as of the date entered in *Date of Last Contact or Death* (NAACCR Item #1750), which is the status of the patient at the end of Elapsed Months - *Date of Initial Diagnosis* (NAACCR Item #390) to *Date of Last Contact or Death* (NAACCR Item #1750) in the PUF.

Registry Coding Instructions: None.

Analytic Note:

Vital Status (NAACCR Item #1760) is blank for cases diagnosed in 2024. See the Getting Started Guide to Using the Data page 11 for more information on follow-up capture and approach to survival analysis.

Vital Status (NAACCR Item #1760) is the only item for which SEER and CoC agreed to retain different codes to mean the same thing. For historic reasons, SEER uses code 4 for deceased patients while CoC uses 0. All 4s in the CoC database were converted to 0 for the PUF file. There is no *Vital Status* (NAACCR Item #1760) code for "unknown".

Therefore, cases for which the code was not valid are transmitted as blank. They may have been submitted as blanks, 9s, or any other non-defined value. They can be analyzed as "unknown" or omitted from analysis, depending on the needs of the study.

Code	Definition
0	Dead
1	Alive
blank	Not available

Appendix A: Site-Specific Surgery Codes

Note: The histologies listed in this section apply only to cases diagnosed in 2010 or later. Please consult *FORDS*: Revised for 2009 for applicable histologies for cases diagnosed prior to that date at: https://www.facs.org/quality-programs/cancer/ncdb/call-for-data/fordsolder.

Site-specific surgery codes are updated based on the NCDB manual updates (located on the **NCDB Data Submission** website). Updates can occur yearly or infrequently thus it is recommended to verify all applicable manuals. The NCDB manual versions and applicable diagnosis year(s) are represented in the table below.

For diagnosis years 2004–2022, please use Surgical Procedure of Primary Site at this Facility [NAACCR item #670] and Surgical Procedure of Primary Site [NAACCR item #1290]. Beginning with diagnosis year 2023, these are replaced by Rx Hosp--Surg 2023 [NAACCR item #671] and Rx Sum--Surg 2023 [NAACCR item #1291].

	Diagnosis Year	Manual	Manual Version	Page
RX_HOSP_SURG_PRIM_SITE RX_SUMM_SURG_PRIM_SITE	2004 - 2006	FORDS	2004	249
	2007 - 2008	FORDS	2007	249
	2009	FORDS	2009	249
	2010	FORDS	2010	249
	2011	FORDS	2011	249
	2012	FORDS	2012	345
	2013 - 2014	FORDS	2013	358
	2015	FORDS	2015	361
	2016 - 2017	FORDS	2016	383
	2018 - 2020	STORE	v2018	440
	2021	STORE	v2021	352
	2022	STORE	v2022	355
RX_HOSP_SURG_PRIM_SITE_2023 RX_SUMM_SURG_PRIM_SITE_2023	2023	STORE	v2023	346
	2024	STORE	v2024	326