

**THE SEER PROGRAM
CODING AND STAGING MANUAL 2004
Fourth Edition**

CANCER STATISTICS BRANCH
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The SEER Coding and Staging Manual 2004

Fourth Edition

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PREFACE TO THE SEER PROGRAM CODING AND STAGING MANUAL 2004

The *Surveillance, Epidemiology and End Results (SEER) Program Coding and Staging Manual 2004* is effective for cases diagnosed January 1, 2004 and forward. Previous editions of this manual are available on the SEER website, CD, or may be ordered through the SEER website. . This is a major rewrite of the manual. The *SEER Program Coding and Staging Manual 2004* includes all errata and revisions that apply to cases diagnosed January 1, 2004 and forward. The 2004 changes and additions include: Replacing EOD with Collaborative Stage, changes in instructions and definitions for the race coding field, and the addition of instructions for collecting and abstracting the benign and borderline primary intracranial and central nervous system tumors (CNS). All of the changes incorporated into the manual were approved by the Uniform Data Standards Committee of the North American Association of Central Cancer Registries.

This manual includes data item descriptions, codes, and coding instructions for all data items required by SEER for cases diagnosed January 1, 2004 and forward.

Data items that are not required for 2004 diagnoses but were collected in years prior to 2004 still must be transmitted to SEER. These data items should be blank for 2004 and forward diagnoses. Descriptions of historic data items, allowable codes, and coding rules can be found in historic manuals, but are not included in this manual.

SEER regions may submit technical questions to SEER using the web-based SING system at <http://seer.cancer.gov/seerinqury/>. The general questions and answers from the SING system will be incorporated into the next edition of the SEER manual.

This manual may be downloaded in electronic format from the SEER website <http://seer.cancer.gov/>.

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INTRODUCTION SEER PROGRAM

Two programs, the End Results Group and the Third National Cancer Survey, were predecessors of the Surveillance, Epidemiology, and End Results (SEER) Program. SEER publishes the *SEER Program Coding and Staging Manual 2004* to provide instructions and descriptions that are detailed enough to promote consistent abstracting and coding.

SEER CODING AND STAGING MANUAL CONTENTS

The *SEER Program Coding and Staging Manual 2004* explains the format and the definitions of the data items required by SEER. For all cases diagnosed on or after January 1, 2004, the instructions and codes in this manual take precedence over all previous instructions and codes. Documentation and codes for historical data items can be found in earlier versions of the SEER Program Code Manual. Earlier versions are available on CD and on the SEER website.

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

REPORTABILITY

DATES OF DIAGNOSIS/RESIDENCY

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

REPORTABLE DIAGNOSES

1. In Situ and Malignant/Invasive Histologies

- a. All histologies with a **behavior code** of /2 or /3 in the *International Classification of Diseases for Oncology*, Third Edition (ICD-O-3).
- b. **Exceptions:** Malignant and invasive histologies **not required** by SEER
 - i. **Skin** primary (C440-C449) with any of the following histologies:
 - Malignant neoplasm (8000-8005)
 - Epithelial carcinoma (8010-8046)
 - Papillary and squamous cell carcinoma (8050-8084)
 - Basal cell carcinoma (8090-8110)

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

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- ii. Carcinoma **in situ** of **cervix** (/2) or cervical intraepithelial neoplasia (CIN III) of the cervix (C530-C539) (Collection **stopped** effective with cases diagnosed 1/1/1996 and later except as required in individual contracts.)
- iii. Prostatic intraepithelial neoplasia (**PIN** III) of the prostate (C619) (Collection **stopped** effective with cases diagnosed 1/1/2001 and later)

2. Benign/Non-Malignant Histologies

- a. **Pilocytic/Juvenile astrocytomas** are reportable; code the histology and behavior code 9421/3.
- b. **Benign** and **borderline** primary **intracranial** and **CNS** tumors with a behavior code of /0 or /1 in ICD-O-3 are collected for the following sites (Effective with cases diagnosed 1/1/2004 and later). See the table below for required sites.

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

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

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

CASES DIAGNOSED CLINICALLY ARE REPORTABLE

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

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

Exception 1: If the physician treats a patient for cancer in spite of the negative biopsy, accession the case.

Exception 2: If enough time has passed that it is reasonable to assume that the physician has seen the negative pathology, but the clinician continues to call this a reportable disease, accession the case. A reasonable amount of time would be equal to or greater than 6 months.

AMBIGUOUS TERMINOLOGY

Ambiguous terminology may originate from any source document, such as pathology report, radiology report, or from a clinical report. The terms listed below are grouped by reportable and not reportable.

Ambiguous terms that are reportable (used to determine reportability)

- Apparent(ly)
- Appears (effective with cases diagnosed 1/1/1998 and later)
- Comparable with (effective with cases diagnosed 1/1/1998 and later)
- Compatible with (effective with cases diagnosed 1/1/1998 and later)
- Consistent with
- Favor(s)
- Malignant appearing (effective with cases diagnosed 1/1/1998 and later)
- Most likely
- Presumed
- Probable
- Suspect(ed)
- Suspicious (for)
- Typical (of)

Ambiguous terms that are NOT reportable (Do not accession cases with a diagnosis based on only these terms)

- Cannot be ruled out
- Equivocal
- Possible
- Potentially malignant
- Questionable
- Rule(d) out
- Suggests
- Worrisome

How To Use Ambiguous Terminology For Case Ascertainment

1. In Situ and Invasive (Behavior codes /2 and /3)

- a. If any of the reportable **ambiguous terms precede** a word that is **synonymous** with an in situ or invasive tumor (e.g.: cancer, carcinoma, malignant neoplasm, etc.), the case is reportable. Accession the case.

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

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

- b. **Discrepancies:** If one section of the medical record(s) uses a reportable term such as “apparently” and another section of the medical record(s) uses a non-reportable term such as “cannot be ruled out”, accept the reportable term and accession the case.

Exception: Do not accession a case based only on suspicious cytology. The case is accessioned if proven by positive cytology or other diagnostic methods including a physician’s clinical diagnosis. See the data item Diagnostic Confirmation for methods of diagnosis.

Note: If the **word or an equivalent term does not appear** on either the reportable or not reportable list or is not a form of a word on the reportable list, the term is not diagnostic of cancer. Do not accession the case. Forms of the word are such as: “Favored” rather than Favor(s); “appeared to be” rather than appears. Do not substitute synonyms such as “supposed” for presumed or “equal” for comparable.

- c. Use these terms when **screening** diagnoses on pathology reports, operative reports, scans, mammograms, and other diagnostic testing other than tumor markers.

Note: If the ambiguous diagnosis is **proven to be not reportable** by biopsy, cytology, or physician’s statement, **do not accession** the case.

Example: Mammogram shows calcifications suspicious for intraductal carcinoma. The biopsy of the area surrounding the calcifications is negative for malignancy. Do not accession the case.

2. Benign and borderline primary intracranial and CNS tumors

- a. Use the “Ambiguous Terms that are Reportable” list to identify benign and borderline primary intracranial and CNS tumors that are reportable.
- b. If any of the reportable **ambiguous terms precede** either the word “**tumor**” or the word “**neoplasm**,” the case is reportable. Accession the case.

Example: The mass on the CT scan is consistent with pituitary tumor. Accession the case.

- c. **Discrepancies:** If one section of the medical record(s) uses a reportable term such as “apparently” and another section of the medical record(s) uses a non-reportable term such as “cannot be ruled out”, accept the reportable term and accession the case.

Exception: Do not accession a case based only on suspicious cytology. The case is accessioned if proven by positive cytology or other diagnostic methods including a physician's clinical diagnosis. See the data item Diagnostic Confirmation for methods of diagnosis.

Note: If the **word or an equivalent term does not appear** on either the reportable or not reportable list or is not a form of a word on the reportable list, the term is not diagnostic of cancer. Do not accession the case. Forms of the word are such as: "Favored" rather than Favor(s); "appeared to be" rather than appears. Do not substitute synonyms such as "supposed" for presumed or "equal" for comparable.

- d. Use these terms when **screening** diagnoses on pathology reports, scans, ultrasounds, and other diagnostic testing other than tumor markers.

Note: If the **ambiguous** diagnosis is proven to be **not reportable** by biopsy, cytology, or physician's statement, **do not accession** the case.

CHANGING INFORMATION ON THE ABSTRACT

There are circumstances under which the information originally collected on the abstract should be changed or modified.

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

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

3. **When better information** is available later

Example 1: Consults from specialty labs, pathology report addendums or comments or other information have been added to the chart. Reports done during the diagnostic workup and placed on the chart after the registrar abstracted the information may contain valuable information. Whenever these late reports give more specific information about the histology, grade of tumor, primary site, etc., change the affected codes to reflect the better information.

Example 2: The primary site was recorded as unknown at the time of diagnosis. At a later date, the physician determines that the cancer is primary to the testis. Change the primary site from unknown to testis.

4. When in retrospect, the **date of diagnosis** is confirmed to be earlier than the original date abstracted.

Example: Patient has surgery for a benign argentaffin carcinoid (8240/1) of the sigmoid colon in May 2002. In January 2003 the patient is admitted with widespread metastasis consistent with malignant argentaffin carcinoid. The registrar accessions the malignant argentaffin carcinoid as a 2003 diagnosis. Two months later, the pathologist reviews the

slides from the May 2002 surgery. The review concludes that the carcinoid diagnosed in 2002 was malignant. Change the date of diagnosis to May 2002 and histology to 8241 and the behavior code to malignant (/3).

DETERMINING MULTIPLE PRIMARIES: SOLID MALIGNANT TUMORS

(See separate sections for hematopoietic primaries and benign and borderline primary intracranial and central nervous system tumors (CNS))

Terms

The words “**tumor**,” “**neoplasm**,” “**mass**,” and “**lesion**” are used interchangeably throughout this manual.

The terms “**original**” and “**initial**” are synonymous.

Definitions:

Focal: Limited to one specific area

Foci/focus: The starting point of a disease process, a single cell.

Laterality describes the right or left side of the body or the right or left of a paired organ such as the right kidney or the left kidney. Unilateral describes a single organ/side. Bilateral describes both organs/sides.

Metachronous tumors are multiple tumors or lesions that occur greater than two months from the original/initial diagnosis.

Multicentric: A primary tumor with satellites in surrounding tissue.

Multifocal: Multiple tumors arising from two or more locations.

Multiple primaries describes two or more independent primary reportable neoplasms.

Non-synchronous (Metachronous) tumors are multiple masses or lesions that occur greater than two months from the original/initial diagnosis.

Paired Organ: Two separate organs, a right and a left. For example right breast and left breast.

Primary site is the anatomical portion of the body where the cancer originated.

Simultaneous tumors are multiple tumors identified at the time of diagnosis.

Synchronous tumors are multiple tumors diagnosed within two months of the original/initial diagnosis.

Single primary describes one distinctive reportable cancer.

Single Tumor is a single lesion. A single tumor may **invade regional** organs by traveling along the mucosa or extending through the organ wall into **regional** tissue or organ. A single tumor may have **multiple or mixed** histologies.

Example 1: Colon primary: a large tumor originating in the ascending colon with intramucosal spread into the transverse colon. Abstract as a single primary and record the primary site as ascending colon.

Example 2: The patient has multiple papillary urothelial bladder tumors with in situ spread into the ureters. Abstract as a single primary and record the primary site as bladder. (Mucosal spread of a urinary tract tumor may be called “field affect” or “regional diathesis”).

HOW TO DETERMINE SAME VS. DIFFERENT PRIMARY SITE (BASED ON ICD-O-3 TOPOGRAPHY CODE)

1. The **third numeric digit** after the ‘C’ describes a subsite of the organ; it is **not used** to define individual (different) sites.

Example: C50_ is the code for breast and the third numeric digit, C505 describes a subsite of the breast, the lower-outer quadrant.

Exceptions: For the following sites, a difference in the third numeric digit designates a different primary site:

Colon (C18_)
Anus and anal canal (C21_)
Bones, joints, and articular cartilage (C40_-C41_)
Melanoma of skin (C44_)
Peripheral nerves and autonomic nervous system (C47_)
Connective, subcutaneous and other soft tissues (C49_)

Example: If the patient has a melanoma on the skin of the scalp (C444) and another melanoma on the calf of the right leg (C447), these are two different primary sites because the third numeric digit of the site code is different.

2. If the **first two numeric digits** after the C are **identical**, it is the **same site**.

Example: If there is a tumor in the lower outer quadrant of the right breast (C505) and a separate tumor in the upper outer quadrant of the right breast, (C504), it is the same site.

Possible exception: Paired organ: There are specific rules for paired organs. See the Multiple Primary Rules.

3. If there is any difference in the first two numeric digits after the C, it is a **different site**.

Example: Stomach, NOS (C169) and small intestine, NOS (C179) are different sites because the second numeric digit is not identical.

Exception: ICD-O-1 and ICD-O-2/ICD-O-3 groupings: The second edition of the *International Classification of Diseases for Oncology* (ICD-O-2) split several site codes into categories having differences in the second numeric digit after the C. The second and third edition ICD-O topography codes are identical. The SEER Program continues to use most of the ICD-O-1 subcategory site groupings to prevent artificial changes in site-specific incidence. When the patient has **multiple independent** tumors, any combination of site codes within the same row in the table are the same primary site. Use this table for in situ and/or invasive tumors. (Do not use this table for a single tumor with extension into another site).

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SEER Site Grouping Table

The purpose of the table in this manual is to group sites that are treated as a single site when abstracting a case.

ICD-O-3 Code	Site Groupings	Code To
C01 C02	Base of tongue Other and unspecified parts of tongue	C029 Tongue, NOS
C05 C06	Palate Other and unspecified parts of mouth	C069 Mouth, NOS
C07 C08	Parotid gland Other and unspecified major salivary glands	C089 Major salivary glands, NOS
C09 C10	Tonsil Oropharynx	C109 Oropharynx, NOS
C12 C13	Pyriiform sinus Hypopharynx	C139 Hypopharynx, NOS
C23 C24	Gallbladder Other and unspecified parts of the biliary tract	C249 Biliary tract, NOS
C30 C31	Nasal cavity and middle ear Accessory sinuses	C319 Accessory sinuses, NOS
C33 C34	Trachea Bronchus and lung	C349 Lung, NOS
C37 C380 C381-3 C388	Thymus Heart Mediastinum Overlapping lesion of heart, mediastinum, and pleura	C383 Mediastinum, NOS
C51 C52 C577 C578-9	Vulva Vagina Other specified female genital organs Unspecified female genital organs	C579 Female genital, NOS
C569 C570 C571 C572 C573 C574	Ovary Fallopian tube Broad ligament Round ligament Parametrium Uterine adnexa	Code C569 (ovary) when ovary is one of the involved sites Code C579 (female genital, NOS) when only non-ovarian sites are involved.
C60 C63	Penis Other and unspecified male genital organs	C639 Male genital, NOS
C64 C65 C66 C68	Kidney Renal pelvis Ureter Other and unspecified urinary organs	Code C649 when one of the involved organs is kidney Code C689 (Urinary system, NOS) when only non-kidney sites are involved
C74 C75	Adrenal gland Other endocrine glands and related structures	C759 Endocrine gland, NOS

Note: This table is **not** identical to the table in ICD-O-3. Two combinations of sites are listed in the ICD-O-3 but not in the SEER table: C19 (rectosigmoid) and C20 (rectum) and C40 (bones of limbs) and C41 (bones of other sites). Multiple tumors in the rectosigmoid and rectum are different sites. Multiple tumors in C40 and C41 are different sites.

HOW TO DETERMINE SAME VS. DIFFERENT HISTOLOGY (BASED ON ICD-O-3 HISTOLOGY CODES)

1. If the **first three digits of the ICD-O-3 histology codes are the same**, it is the same histology.

Exception: The ICD-O-3 histology code for non-small cell carcinoma (8046) is a separate morphology group from the small cell histologies (codes 8040 – 8045). Even though the first three digits are the same, they are different histologies.

MULTIPLE PRIMARY RULES FOR SOLID TUMORS

Definitions

Simultaneous tumors are identified at the time of diagnosis.

Synchronous tumors are diagnosed within two months of the original/initial diagnosis.

The multiple primary rules are presented in two formats, text and table. Note that the rule numbers in both formats are identical.

Use the following rules to determine whether to report a single primary or multiple primaries. Coding rules for the data items mentioned such as primary site, histology, laterality, etc. are not described in detail in this section; refer to the instructions for coding each data item elsewhere in this manual.

Rules for Single Tumor

Rule 1: A single lesion composed of one histologic type is a single primary, even if the lesion crosses site boundaries.

Example 1: A single lesion involving the tongue and floor of mouth is one primary.

Example 2: A single, large mucinous adenocarcinoma involving the sigmoid and descending colon segments is one primary.

Rule 2: A single lesion composed of multiple (different) histologic types is a single primary even if it crosses site boundaries.

The most frequent combinations of histologic types are listed in ICD-O-3. For example, combination terms such as “adenosquamous carcinoma (8560/3)” or “small cell-large cell carcinoma (8045/3)” are included. A single lesion composed of mixed or multiple histologies is a single primary.

Example 1: A single lesion containing both embryonal cell carcinoma and teratoma is a single primary and would be coded to 9081/3, mixed embryonal carcinoma and teratoma.

Example 2: A single lesion of the liver composed of neuroendocrine carcinoma (8246/3) and hepatocellular carcinoma (8170/3) is a single primary and would be coded to the more specific histology, neuroendocrine carcinoma 8246/3.

Rules for Multiple Tumors

Rule 3a: Simultaneous multiple lesions of the same histologic type within the same site (i.e., multifocal tumors in a single organ or site) are a single primary. If one lesion has a behavior code of in situ /2 and the other lesion has a behavior code of malignant /3, this is a single primary whose behavior is malignant /3.

Example 1: At nephrectomy, two separate, distinct foci of renal cell carcinoma are found in the specimen, in addition to the 3.5 cm primary renal cell carcinoma. Abstract as a single primary.

Example 2: At mastectomy for removal of a 2 cm invasive ductal carcinoma, an additional 5 cm area of intraductal carcinoma was noted. Abstract as one invasive primary.

Rule 3b: If a new cancer of the same histology as an earlier one is diagnosed in the same site within two months, this is a single primary cancer.

Example: Adenocarcinoma in adenomatous polyp (8210) in sigmoid colon removed by polypectomy in December 2004. At segmental resection in January 2005, an adenocarcinoma in a tubular adenoma (8210) adjacent to the previous polypectomy site was removed. *Count as one primary.*

Rule 4: If both sides of a paired organ are involved with the same histologic type within two months of the initial diagnosis

- a. It is one primary if the physician states the tumor in one organ is metastatic from the other.
 - i. Code the laterality to the side in which the primary originated
 - ii. Code the laterality as 4 if it is unknown which in which side the primary originated
- b. Code as multiple primaries if the physician states these are independent primaries or when there is no physician statement that one is metastatic from the other.

Exception 1: Simultaneous bilateral involvement of the **ovaries** with the same histology is one primary and laterality is coded '4' when it is unknown which ovary was the primary site.

Exception 2: Bilateral **retinoblastomas** are a single primary with laterality of '4'.

Exception 3: Bilateral **Wilms** tumors are always a single primary with laterality of '4'.

Rule 5: If a tumor with the same histology is identified in the same site at least two months after the initial/original diagnosis (**metachronous**), this is a **separate primary**.

Exception 1: This is a single primary only when the physician documents that the initial/original tumor gave rise to the later tumor.

Example 1: Infiltrating duct carcinoma of the upper outer quadrant of the right breast diagnosed March 2004 and treated with lumpectomy. Previously unidentified mass in left inner quadrant right breast noted in July 2004 mammogram. This was removed and found to be infiltrating duct carcinoma. Abstract the case as two primaries.

Example 2: During the workup for a squamous cell carcinoma of the vocal cord, a second squamous cell carcinoma is discovered in the tonsillar fossa. Abstract as two primaries.

Exception 2: Effective with cases diagnosed January 1995 and later, if an in situ tumor is followed by an invasive cancer in the same site more than two months apart, report as two primaries even if stated to be a recurrence. The invasive primary should be reported with the date of the *invasive* diagnosis. (**Note:** The purpose of this guideline is to ensure that the case is counted as an incident case (i.e., invasive) when incidence data are analyzed.)

SEER registries must use the COC data item Type of First Recurrence to determine multiple primaries when the first primary is in situ followed by an invasive 'recurrence' (according to COC) that has to be reported to SEER as a new invasive primary. The principal codes that must be reviewed are shown below.

COC Data Item - Type of First Recurrence

If the tumor was originally diagnosed as in situ and the recurrence code is 16, 17, 26, 27, 36, or 46 then the 'recurrence' must be reported as a new case.

- | | |
|----|---|
| 16 | Local recurrence of an in situ tumor, NOS |
| 17 | Both local and trocar recurrence of an in situ tumor. |
| 26 | Regional recurrence of an in situ tumor, NOS. |
| 27 | Recurrence of an in situ tumor in adjacent tissue or organ(s) and in regional lymph nodes at the same time. |
| 36 | Both regional recurrence of an in situ tumor in adjacent tissue or organ(s) and/or regional lymph nodes (26 or 27) and local and/or trocar recurrence (16 or 17). |
| 46 | Distant recurrence of an in situ tumor. |

Exception 3: Report as a single primary and prepare a single abstract for the first invasive lesion:

- Multiple invasive adenocarcinomas of the prostate (C619)
- Multiple invasive bladder cancers (C670 - C679) with histology codes 8120-8130

Example 1: Urothelial bladder tumor removed by transurethral resection of the bladder (TURB). At three month check-up, a new urothelial tumor is removed. Abstract as one primary of the bladder.

Example 2: Patient has elevated PSA and a needle biopsy that shows adenocarcinoma in the right lobe of the prostate. Patient and clinician opt for "watchful waiting." Four months later, PSA is higher and patient has a second biopsy, which shows adenocarcinoma in the left lobe. Abstract as one primary of the prostate.

Exception 4: Kaposi sarcoma (9140) is reported only once and is coded to the site in which it arises. Code the primary site to skin (C44_) when Kaposi sarcoma arises in skin and another site simultaneously. If no primary site is stated, code the primary site to skin, NOS (C449).

Rule 6: Multiple synchronous lesions of different histologic types within a single paired or unpaired organ are separate primaries.

Example 1: A patient undergoes a partial gastrectomy for adenocarcinoma of the body of the stomach. In the resected specimen, the pathologist finds both adenocarcinoma and nodular non-Hodgkin lymphoma. Abstract two primaries.

Exception 1: Multiple lesions in a single site occurring within two months: if one lesion is carcinoma, NOS, adenocarcinoma, NOS, sarcoma, NOS, or melanoma, NOS and the second lesion is more specific, such as large cell carcinoma, mucinous adenocarcinoma, spindle cell sarcoma, or superficial spreading melanoma, abstract as a single primary and code the histology to the more specific term.

Exception 2: For colon and rectum tumors:

- a. When an adenocarcinoma (8140/_; in situ or invasive) arises in the same segment of the colon or rectum as an adenocarcinoma in a polyp (8210/_, 8261/_, 8263/_), abstract a single primary and code the histology as adenocarcinoma (8140/_).
- b. Familial adenomatous polyposis (FAP) (8220) with malignancies arising in polyps in the same or multiple segments of the colon or rectum, abstract as a single primary.

Exception 3: There are certain sites in which multiple foci of tumor and multiple histologic types are commonly found together. These multifocal, multi-histologic tumors occur most frequently in the thyroid (papillary and follicular), bladder (papillary and transitional cell) and breast (combinations of ductal and lobular, and combinations of Paget disease and ductal/intraductal). They are abstracted as a single primary with a mixed histology. In such cases, consult ICD-O-3 for a list of the most frequent histologic combinations.

Example 1: A thyroid specimen contains two separate carcinomas— one papillary and the other follicular. Abstract one primary when the histology is papillary and follicular (8340).

Example 2: Abstract one primary when **multiple bladder** tumors are **papillary urothelial** (8130) and/or **transitional cell** (8120).

Example 3: A left mastectomy specimen yields lobular carcinoma in the upper inner quadrant and intraductal carcinoma in the lower inner quadrant. Code one primary.

Example 4: A right mastectomy specimen yields Paget in the nipple and a separate underlying ductal carcinoma. Code one primary. Assign the combination code 8543 (Ductal and Paget disease).

Rule 7: Multiple synchronous lesions of different histologic types in paired organs are multiple primaries. If one histologic type is reported in one side of a paired organ and a different histologic type is reported in the other paired organ, these are two primaries unless there is a statement to the contrary.

Example 1: If a ductal tumor occurs in one breast and a lobular tumor occurs in the opposite breast, these are two separate primaries.

Rule 8: Multiple metachronous lesions of different histologic types within a single site are separate primaries.

Rule 9: Multiple lesions of different histologic types occurring in different sites are separate primaries whether occurring simultaneously or at different times.

Example 1: In 1999, the patient had a mucin-producing carcinoma of the transverse colon. In 2002, the patient was diagnosed with an astrocytoma of the frontal lobe of the brain. Abstract as separate primaries.

Example 2: During the workup for a transitional cell carcinoma of the bladder, the patient has a TURP that shows adenocarcinoma of the prostate. Abstract as separate primaries.

Rule 10: Multiple lesions of the same histologic type occurring in different sites are separate primaries unless stated to be metastatic.

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Table of Rules to Determine Multiple Primaries for Solid Tumors

Rule	Tumors	Site(s)	Histology	Variables	Timing	Single vs. multiple primary	
1	Single	NA	NA		NA	Single	
2	Single	NA	Different		NA	Single	
	3a	Multiple	Same	Same	Non-paired or only one side of paired organ	Simultaneous or synchronous	Single
	3b	Multiple	Same	Same	Non-paired or only one side of paired organ	Simultaneous or synchronous	Single
4	Multiple	Same (bilateral)	Same	Both sides of paired organ involved	Simultaneous or synchronous	Multiple unless physician states one is metastatic. <i>Exceptions:</i> Bilateral tumors: Ovary (same histology), retinoblastoma, or Wilms tumor are a single primary	
5	Multiple	Same	Same		Synchronous	Multiple unless physician states recurrent or metastatic <i>Exceptions:</i> 1. Report as a single primary: a. Invasive prostate with histology (8140) b. Invasive bladder with histologies (8120-8130) c. Kaposi sarcoma (9140) 2. For all sites: Report as multiple primaries: In situ followed by invasive even if stated to be recurrence.	

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Rule	Tumors	Site(s)	Histology	Variables	Timing	Single vs. multiple primary
6	Multiple	Same	Different	Single paired or unpaired organ	Simultaneous or synchronous	Multiple Exceptions: The following are single primaries: 1. One histology is a more specific histology than the other (NOS and specific). 2. Colon: a. (Adeno) carcinoma and (adeno) carcinoma arising in a polyp. b. Familial adenomatous polyposis (FAP) with malignancies arising in polyps. 3. Histology combinations commonly found together a. Thyroid (follicular and papillary) b. Bladder (transitional and papillary) 4. Breast: if two lesions in one breast are: a. Lobular and ductal b. Paget disease and ductal or intraductal
7	Multiple	Same	Different	Both sides of paired organ	Simultaneous or synchronous	Multiple Exceptions: Report as single: 1. If stated to be metastatic
8	Multiple	Same	Different		More than 2 months after original/initial tumor	Multiple
9	Multiple	Different	Different		NA	Multiple
10	Multiple	Different	Same		NA	Multiple unless stated to be metastatic Exception: Wilms tumor

Multiple Primary Rules for Solid Tumors - Rule Number Conversion Table

This table displays the current Multiple Primary Rules for Solid Tumors by rule number compared to the SEER Program Code Manual 3rd edition rule(s).

Current Rule Number	SPCM 3rd edition Rule Number	Comment
1	1	
2	2	
3a	4a	
3b	3	Former Rule 3 is now two rules: Rule 3b and Rule 5
4a	6a, ii	
4b	6a, i	
4b, exception 1	6a, exception 1	
4b, exception 2	6a, exception 2	Former Rule 6a, exception 2 is now two exceptions: Rule 4b, exception 2 and Rule 4b, exception 3
4b, exception 3	6a, exception 2	Former Rule 6a, exception 2 is now two exceptions: Rule 4b, exception 2 and Rule 4b, exception 3
5	3	Former Rule 3 is now two rules: Rule 3b and Rule 5
5, exception 1	3	
5, exception 2	3, exception 2	
5, exception 3	3, exception 1	
5, exception 4	3, exception 3	
6	5a	
6, exception 1	5, exception 1	
6, exception 2, a	5, exception 1, i and ii	
6, exception 2, b		
7	6b	
8	5a	
9	5b	
10	4b	

**DETERMINING MULTIPLE PRIMARIES: HEMATOPOIETIC PRIMARIES
(Lymphoma and Leukemia)**

If the physician clearly states that a hematopoietic diagnosis is a new primary, use that information. If there is no clear information from the physician, use the SEER table “Definitions of Single and Subsequent Primaries for Hematologic Malignancies” to determine multiple primaries. Go to <http://seer.cancer.gov/icd-o-3/> to download the SEER table in PDF format.

**DETERMINING MULTIPLE PRIMARIES:
BENIGN AND BORDERLINE PRIMARY INTRACRANIAL AND CNS TUMORS
(C70.0-C72.9, C75.1-C75.3)**

Definitions

Same site: The first two numeric digits of the ICD-O-3 topography code are identical.

Different site: The first two numeric digits of the ICD-O-3 topography code are different.

Timing: The amount of time between the original and subsequent tumors is not used to determine multiple primaries because the natural biology of non-malignant tumors is that of expansive, localized growth.

**HOW TO DETERMINE SAME VS DIFFERENT HISTOLOGIES
(BASED ON HISTOLOGIC GROUPINGS)**

When there are **multiple tumors**, use the following table to determine if the tumors are the same histology or different histologies.

Histologic groupings to determine same histology for non-malignant brain tumors

Histologic Group	ICD-O-3 Code
Choroid plexus neoplasms	9390/0, 9390/1
Ependymomas	9383, 9394, 9444
Neuronal and neuronal-glial neoplasms	9384, 9412, 9413, 9442, 9505/1, 9506
Neurofibromas	9540/0, 9540/1, 9541, 9550, 9560/0
Neurinomatosis	9560/1
Neurothekeoma	9562
Neuroma	9570
Perineurioma, NOS	9571/0

Instructions for Using Histologic Group Table

1. **Both** histologies are listed in the **table**
 - a. Histologies that are in the same **grouping** or row in the table are the **same histology**.
 - b. **Note:** Histologies that are in the same grouping are a progression, differentiation or subtype of a single histologic category.
 - c. Histologies listed in **different groupings** in the table are **different histologies**.

2. One or both of the **histologies** is **not** listed in the **table**

- a. If the **ICD-O-3 codes** for both histologies have the **identical** first three digits, the histologies are the **same**.
- b. If the first three digits of the **ICD-O-3** histology code are **different**, the histology types are different.

MULTIPLE PRIMARY RULES FOR BENIGN AND BORDERLINE PRIMARY INTRACRANIAL AND CNS TUMORS

The multiple primary rules are presented in two formats, text and table. Note that the rule numbers in both formats are identical.

Use the following rules to determine whether to report a single primary or multiple primaries. Coding rules for the data items mentioned such as primary site, histology, laterality, etc. are not described in detail here; refer to the instructions for coding each data item.

Note: If there is a **single tumor**, it is always a **single** primary

Rule 1: Multiple non-malignant tumors of the **same histology** that recur in the **same site** and **same side** (laterality) as the original tumor are recurrences (single primary) even after 20 years.

Rule 2: Multiple non-malignant tumors of the **same histology** that recur in the **same site** and it is unknown if it is the same side (laterality) as the original tumor are recurrences (single primary) even after 20 years.

Rule 3: Multiple non-malignant tumors of the same histology in **different sites** of the CNS are separate (multiple) primaries.

Rule 4: Multiple non-malignant tumors of the same histology in **different sides** (laterality) of the CNS are separate (multiple) primaries.

Rule 5: Multiple non-malignant tumors of different histologies are separate (multiple) primaries)

Table of Rules to Determine Multiple Primaries for Benign and Borderline Primary Intracranial and CNS Tumors

Rule #	Site	Laterality	Histology	Primary(ies)
1	Same	Same	Same	Single
2	Same	Unknown	Same	Single
3	Different	Any	Same	Multiple
4	Same	Different sides of the same site in the CNS	Same	Multiple
5	Any	Any	Different	Multiple

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SECTION I
BASIC RECORD IDENTIFICATION

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

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

The combination of the SEER Participant Number, Patient ID Number, and Record Number identifies a unique patient record or tumor.

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SEER PARTICIPANT

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

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

Code	Participant	Area Covered	Year SEER Reporting Started	Name
0000001501	Northern California Cancer Center	5 counties	1973	San Francisco Oakland SMSA
0000001502	Connecticut Department of Public Health	Entire state	1973	Connecticut
0000001520	Karmanos Cancer Institute	3 counties	1973	Metropolitan Detroit
0000001521	Research Corporation of Hawaii	Entire state	1973	Hawaii
0000001522	University of Iowa	Entire state	1973	Iowa
0000001523	University of New Mexico	Entire state	1973	New Mexico
0000001525	Fred Hutchinson Cancer Research Center	13 counties	1974	Seattle-Puget Sound
0000001526	University of Utah	Entire state	1973	Utah
0000001527	Emory University	5 counties	1975	Metropolitan Atlanta
0000001529	Alaska Native	Native American population of Alaska	1984	Alaska Native
0000001531	Northern California Cancer Center	4 counties	1992	San Jose- Monterey
0000001533	University of New Mexico	Native American population of Arizona	1973	Arizona Indians
0000001535	University of Southern California	1 county	1992	Los Angeles
0000001537	Emory University	10 Counties	1978	Rural Georgia
0000001541	Public Health Institute, California	California except Los Angeles, San Francisco-Oakland, and San-Jose/Monterey	2000	Greater California
0000001542	University of Kentucky Research Foundation	Entire state	2000	Kentucky

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Code	Participant	Area Covered	Year SEER Reporting Started	Name
0000001543	Louisiana State University HSC	Entire state	2000	Louisiana
0000001544	New Jersey Department of Health and Senior Services	Entire state	2000	New Jersey
0000001551	Cherokee Nation – Oklahoma	Native American population	1997	Cherokee Nation

PATIENT ID NUMBER

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

The participating SEER registry generates a unique number and assigns that number to one patient.

The SEER registry will assign this same number to all of the patient's subsequent tumors (records).

Enter preceding zeros if the number is less than 8 digits.

Example: Patient # 7034 would be entered as 00007034.

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

RECORD TYPE

Item Length: 1
NAACCR Item #: 10
NAACCR Name: RECORD TYPE

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

Codes

- I Incidence-only record type (nonconfidential coded data)
Length = 1946
- C Confidential record type (incidence record plus confidential data)
Length = 2644
- A Full case Abstract record type (incidence and confidential data plus text summaries; used for reporting to central registries)
Length = 6694
- U Correction/Update record type (short format record used to submit corrections to data already submitted)
Length = 850
- R Analysis/Research record type (incidence record plus appended error flags and recoded values)
Length = 2215
- M Record Modified since previous submission to central registry (identical in format to the "A" record type)
Length = 6694
- L Pathology Laboratory

RECORD NUMBER

Item Length: 2

NAACCR Item #: 2190

NAACCR Name: SEER Record Number

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

The record number is generated by the computer system for each SEER submission. The record numbers are sequential starting with the number 01. The highest number assigned represents the total number of records submitted to SEER for that particular patient.

Codes

- 01 One or first of more than one record for person
- 02 Second record for the person
- ..
- ..
- nn Last of nn records for person

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**SECTION II
INFORMATION SOURCE**

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TYPE OF REPORTING SOURCE

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

The Type of Reporting Source identifies the source documents used to abstract the case. This is not necessarily the original document that identified the case; rather, it is the source that provided the best information.

Codes

- 1 Hospital Inpatient/Outpatient or Clinic
- 3 Laboratory Only (Hospital or Private)
- 4 Physician's Office/Private Medical Practitioner (LMD)
- 5 Nursing/Convalescent Home/Hospice
- 6 Autopsy Only
- 7 Death Certificate Only

Code Definitions

Code	Label	Definition
1	Hospital Inpatient/Outpatient or Clinic	One of the source documents used to abstract the case was from a hospital admission as an inpatient or an outpatient. Includes outpatient services of HMOs and large multi-specialty physician group practices, such as Oncology or Radiation Therapy, if the reports from multiple physicians and laboratories are stored in a single unit record.
3	Laboratory Only (Hospital or Private)	Source documents from a laboratory were used to abstract the case. There were no source documents from codes 1, 4, or 5.
4	Physician's Office/Private Medical Practitioner (LMD)	Source documents are from a physician's office that is NOT an HMO or large multi-specialty physician group practice. There were no source documents from code 1.
5	Nursing/Convalescent Home/Hospice	The source documents are from a nursing or convalescent home or a hospice. There were no source documents from codes 1 or 4.
6	Autopsy Only	The cancer was first diagnosed on autopsy. There are no source documents from codes 1-5.
7	Death Certificate Only	Death certificate is the only source of information; follow-back activities did not identify source documents from codes 1-6. If another source document is subsequently identified, the Type of Reporting Source code must be changed to the appropriate code in the range of 1-6.

Priority Order for Assigning Type of Reporting Source

When multiple source documents are used to abstract a case, use the following priority order to assign a code for Type of Reporting Source:

Priority order of codes

- 1 Hospital/Clinic
- 4 Physician office
- 5 Nursing home
- 3 Laboratory
- 6 Autopsy only
- 7 Death certificate only

**SECTION III
DEMOGRAPHIC INFORMATION**

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PLACE OF RESIDENCE AT DIAGNOSIS

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

Coding Priorities/Sources

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

Persons with More than One Residence

Examples: Snowbirds who live in the south for the winter months, sunbirds who live in the north during the summer months, people with vacation residences that they occupy for a portion of the year.

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

Persons with No Usual Residence

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

Temporary Residents of SEER Area

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

Migrant workers

Educators temporarily assigned to a university in the SEER area

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

Military personnel on **temporary** duty assignments (TDY)

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

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

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

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

Persons who are incarcerated

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

Residents of nursing, convalescent, and rest homes

Long-term residents of other hospitals such as Veteran's Administration (VA) hospitals

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

Armed Forces

</prod/www/titles.html>. For military personnel and their family members, code the address of the military installation or surrounding community as stated by the patient.

Personnel Assigned to Navy, Coast Guard, and Maritime Ships

The US Census Bureau has detailed rules for determining residency for personnel assigned to these ships. The rules refer to the ship's deployment, port of departure, destination, and its homeport. Refer to US Census Bureau Publications for detailed rules <http://www.census.gov>

COUNTY

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

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

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

CENSUS TRACT 2000

Item Length: 6
NAACCR Item #: 130
NAACCR Name: Census Tract 2000

Census Tract 2000 records the census tract of a patient's residence at the time of diagnosis. The codes are the same codes used by the US Census Bureau for the Year 2000 census. This item is coded for cases diagnosed January 1, 1996 and forward. This field allows a central registry to add year 2000 Census tracts to cases diagnosed in previous years without losing the codes in the field Census Tract 1970/80/90 which is only collected historically.

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

Codes

Census tract codes 000100-999998

Special Codes

000000	Area not census tracted
999999	Area census-tracted, but census tract is not available
Blank	Census Tract 2000 not coded

Coding Instructions

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

Example 1: Code Census tract 516 and suffix 21 to 051621

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

5. Census tract codes should be assigned based on a computer match (geocoding software).

CENSUS TRACT CERTAINTY 2000

Item Length: 1
NAACCR Item #: 365
NAACCR Name: Census Tr Certainty 2000

Census tract certainty records the basis on which the 2000 census tract was assigned for an individual record. Most of the time, this information is provided by a geocoding vendor service. Central registry staff should code this field manually when geocoding is not available through a vendor service. This item is coded for cases diagnosed January 1, 1996 and forward.

Codes

- 1 Census tract based on complete and valid street address of residence
- 2 Census tract based on residence ZIP + 4
- 3 Census tract based on residence ZIP + 2
- 4 Census tract based on residence ZIP code only
- 5 Census tract based on ZIP code of post office box
- 9 Unable to assign census tract based on available information
- Blank Not applicable (e.g., census tracting not attempted); Census tract Certainty information for 2000 not coded

Coding Priority

The codes are hierarchical with the numerically lower codes having priority.

- 1. Code 1 has priority over codes 2-5 and 9
- 2. Code 2 has priority over codes 3-5 and 9
- 3. Code 3 has priority over codes 4, 5, and 9
- 4. Code 4 has priority over codes 5 and 9
- 5. Code 5 has priority over code 9

Coding Instructions

- 1. Code 1
 - a. Used when the census tract is assigned with certainty based on street address
 - b. May be assigned based on a computer match (geocoding software)
 - c. May be assigned based on a central registry's manual coding system

Example 1: The registry used a complete and valid street address to assign the census tract.

Example 2: The registry used a rural route number to assign the census tract, and has confirmed that the rural route lies completely within a single census tract.

Example 3: The registry used an incomplete street address to assign the census tract, and has confirmed that the entire street lies within a single census tract.

2. Codes 2-5
 - a. Assign when there is some uncertainty about the census tract assignment
 - b. May be assigned based on a computer match (geocoding software)
 - c. May be assigned based on a central registry manually appointed code
 - d. Assign code 4 when
 1. Street address is incomplete or invalid, but ZIP code is known
 2. Only rural route number is available, but ZIP code is known
 - e. Assign code 5 when the registry used a post office box and ZIP code to code the census tract
3. Code 9
 - a. ZIP code is missing OR
 - b. The complete address of the patient is unknown or cannot be determined OR
 - c. There is insufficient information to assign a census code .

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

PLACE OF BIRTH

Item Length: 3
NAACCR Item #: 250
NAACCR Name: Birthplace

The numeric and alphabetic lists of birthplaces and corresponding geocodes are provided in Appendix B of this manual.

SEER Geocodes were originally assigned during the 1970's. Since that time, many countries and islands have been given their independence or control has been turned over to another country. To maintain consistency over time, SEER has maintained the original code for these countries and islands. The names have been annotated to display the current political designation.

Special Codes

000 United States, NOS
998 Non-United States, NOS
999 Unknown

Coding Instructions

Assign the most specific code possible from Appendix B.

DATE OF BIRTH

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

Date of Birth identifies the month, day and year of the patient's birth. Date fields are recorded in the month, day, century, year format (MMDDCCYY) with 99 for unknown day or month and 9999 for unknown year.

Most SEER registries collect the month, day, and year of birth. The third and fourth digits (day) are recoded to 99 when the data are transmitted to SEER.

Codes for Month

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

Codes for Day

01	
02	
03	
..	
..	
31	
99	Unknown day

Codes for Year

Code the four-digit year of birth
Record 9999 for unknown year

Special Codes

99999999	Unknown date
----------	--------------

Coding Instructions

1. Code the Date of Birth
2. If the Date of **Birth** is **unknown**, but the **Age** at Diagnosis and Date of **Diagnosis** are **known**:
 1. Record the month as 99 (unknown) and day as 99 (unknown).
 2. Calculate the year of birth by subtracting the patient's age at diagnosis from the year of diagnosis.

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

AGE AT DIAGNOSIS

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

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

Codes

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

Coding Instructions

1. **Measure** the patient's age in **completed years** of life, i.e., age at the patient's **last** birthday.
2. Generally, the registry software program calculates the Age at Diagnosis using the Date of Birth and Date of Diagnosis.
3. Age at Diagnosis can be manually calculated using the date of birth and the date of diagnosis.

RACE 1

Item Length: 2
NAACCR Item #: 160
NAACCR Name: Race 1

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

All resources in the facility, including the medical record, face sheet, physician and nursing notes, photographs, and any other sources, must be used to determine race. If a facility does not print race in the medical record but does maintain it in electronic form, the electronic data must also be reviewed. Recommendation: document how the race code was determined in a text field.

The data item Race 1 identifies the primary race of the patient.

Codes

- 01 White
- 02 Black
- 03 American Indian, Aleutian, Alaskan Native or Eskimo (includes all indigenous populations of the Western hemisphere)
- 04 Chinese
- 05 Japanese
- 06 Filipino
- 07 Hawaiian
- 08 Korean (Effective with 1/1/1988 dx)
- 09 Asian Indian, Pakistani (Effective with 1/1/1988 dx)
- 10 Vietnamese (Effective with 1/1/1988 dx)
- 11 Laotian (Effective with 1/1/1988 dx)
- 12 Hmong (Effective with 1/1/1988 dx)
- 13 Kampuchean (including Khmer and Cambodian) (Effective with 1/1/1988 dx)
- 14 Thai (Effective with 1/1/1994 dx)
- 20 Micronesian, NOS (Effective with 1/1/1991)
- 21 Chamorran (Effective with 1/1/1991 dx)
- 22 Guamanian, NOS (Effective with 1/1/1991 dx)
- 25 Polynesian, NOS (Effective with 1/1/1991 dx)
- 26 Tahitian (Effective with 1/1/1991 dx)
- 27 Samoan (Effective with 1/1/1991 dx)
- 28 Tongan (Effective with 1/1/1991 dx)
- 30 Melanesian, NOS (Effective with 1/1/1991 dx)
- 31 Fiji Islander (Effective with 1/1/1991 dx)
- 32 New Guinean (Effective with 1/1/1991 dx)
- 96 Other Asian, including Asian, NOS and Oriental, NOS (Effective with 1/1/1991 dx)

- 97 Pacific Islander, NOS (Effective with 1/1/1991 dx)
- 98 Other
- 99 Unknown

SEER Participants San Francisco, San Jose-Monterey, and Los Angeles are permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1987. Greater California is permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1988. Other SEER participants may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 Other Asian; 97 Pacific Islander, NOS; 98 Other; and 99 unknown.

Coding Instructions

1. Code the primary race(s) of the patient in fields Race 1, Race 2, Race 3, Race 4, and Race 5. The five race fields allow for the coding of multiple races consistent with the Census 2000. Rules 2 - 8 further specify how to code Race 1, Race 2, Race 3, Race 4 and Race 5. See Editing Guidelines below for further instructions.
2. If a person's race is a combination of white and any other race(s), code the appropriate other race(s) first and code white in the next race field.
3. If a person's race is a combination of Hawaiian and any other race(s), code Race 1 as 07 Hawaiian and code the other races in Race 2, Race 3, Race 4, and Race 5 as appropriate.

Example: Patient is described as Japanese and Hawaiian. Code Race 1 as 07 Hawaiian, Race 2 as 05 Japanese, and Race 3 through Race 5 as 88.

4. If the person is not Hawaiian, code Race 1 to the first stated non-white race (02-98).

Example: Patient is stated to be Vietnamese and Black. Code Race 1 as 10 Vietnamese, Race 2 as 02 Black, and Race 3 through Race 5 as 88.

Note: in the following scenarios, only the race code referred to in the example is coded. For cases diagnosed after January 1, 2000, all race fields must be coded.

5. The fields Place of Birth, Race, Marital Status, Name, Maiden Name, and Hispanic Origin are inter-related. Use the following guidelines in priority order:
 - a. Code the patient's stated race, if possible. Refer to Appendix "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" for guidance.

Example 1: Patient is stated to be Japanese. Code as 05 Japanese.

Example 2: Patient is stated to be German-Irish. Code as 01 White.

Example 3: Patient is described as Arabian. Code as 01 White.

Exception: When the race is recorded as Oriental, Mongolian, or Asian (coded to 96 Other Asian) and the place of birth is recorded as China, Japan, the Philippines, or another Asian nation, code the race based on birthplace information.

Example 4: The person's race is recorded as Asian and the place of birth is recorded as Japan. Code race as 05 Japanese because it is more specific than 96 Asian, NOS.

Example 5: The person describes himself as an Asian-American born in Laos. Code race as 11 Laotian because it is more specific than 96 Asian, NOS.

6. If the patient's race is determined on the basis of the races of relatives, there is no priority to coding race, other than to list the non-white race(s) first.

Example: The patient is described as Asian-American with Korean parents. Code race as 08 Korean because it is more specific than 96 Asian [-American].

7. If no race is stated in the medical record, or if the stated race cannot be coded, review the documentation for a statement of a race category.

Example 1: Patient described as a black female. Code as 02 Black.

Example 2: Patient describes herself as multi-racial (nothing more specific) and nursing notes say "African-American." Code as 02 Black.

Example 3: Patient states she has a Polynesian mother and Tahitian father. Code Race 1 as 25 Polynesian, Race 2 as 26 Tahitian and Race 3 through Race 5 as 88.

8. If race is unknown or not stated in the medical record and birth place is recorded, in some cases race may be inferred from the nationality. Refer to the Appendix entitled "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" to identify nationalities from which race codes may be inferred.

Example 1: Record states: "this native of Portugal..." Code race as 01 White per the Appendix.

Example 2: Record states: "this patient was Nigerian..." Code race as 02 Black per the Appendix.

Exception: If the patient's name is incongruous with the race inferred on the basis of nationality, code Race 1 through Race 5 as 99, Unknown.

Example 1: Patient's name is Siddhartha Rao and birthplace is listed as England. Code Race 1 through Race 5 as 99 Unknown.

Example 2: Patient's name is Ping Chen and birthplace is Ethiopia. Code Race 1 through Race 5 as 99 Unknown.

9. Use of patient name in determining race:
 - a. Do not code race from name alone, especially for females with no maiden name given.
 - b. In general, a name may be an indicator of a racial group, but should not be taken as the only indicator of race.
 - c. A patient name may be used to identify a more specific race code.

Example 1: Race reported as Asian, name is Hatsu Mashimoto. Code race as 05 Japanese.

Example 2: Birthplace is reported as Guatemala and name is Jose Chuicol [name is identified as Mayan]. Code race as 03 Native American

- d. A patient name may be used to infer Spanish ethnicity or place of birth, but a Spanish name alone (without a statement about race or place of birth) cannot be used to determine the race code. Refer to ethnicity guidelines for further information.

Example: Alice Gomez is a native of Indiana (implied birthplace: United States). Code Race 1 through Race 5 as 99 Unknown, because nothing is known about her race..

10. Persons of Spanish or Hispanic origin may be of any race, although persons of Mexican, Central American, South American, Puerto Rican, or Cuban origin are usually white. Do NOT code a patient stated to be Hispanic or Latino as 98 Other Race in Race 1 and 88 in Race 2 through Race 5.

Example: Sabrina Fitzsimmons is a native of Brazil. Code race as 01 White per Appendix.

11. When the race is recorded as Negro or African-American, code race as 02 Black.
12. Code 03 should be used for any person stated to be Native American or [western hemisphere] Indian, whether from North, Central, South, or Latin America. For Central, South, or Latin American Indians, see additional ethnicity coding guidelines under Spanish Surname or Origin.
13. Death certificate information may be used to supplement antemortem race information only when race is coded unknown in the patient record or when the death certificate information is more specific.

Example 1: In the cancer record Race 1 through Race 5 are coded as 99 Unknown. The death certificate states race as black. Change cancer record for Race 1 to 02 Black and Race 2 through Race 5 to 88.

Example 2: Race 1 is coded in the cancer record as 96 Asian. Death certificate gives birthplace as China. Change Race 1 in the cancer record to 04 Chinese and code Race 2 through Race 5 as 88.

EDITING GUIDELINES

All tumors for the same patient should have the same race code(s).

Cases diagnosed prior to January 1, 2000:

For cases diagnosed prior to January 1, 2000, Race 2 through Race 5 must be blank **unless** the patient has multiple records and at least one primary is diagnosed on or after January 1, 2000. In this case, the race codes must be identical on each record.

Cases diagnosed on or after January 1, 2000:

1. If only one race is reported for the person, use code 88 for the remaining race fields (Race 2 - Race 5).
2. If the patient is multiracial, code all races using items Race 1 through Race 5.
3. If any race code is 99 Unknown, then all race codes must be 99 Unknown.
4. If Race 1 is 01-98, Race 2 through Race 5 cannot be 99.
5. If more than Race 1 is coded, and if any Race 2 through Race 5 is 88, then all subsequent race codes must be 88.
6. A unique race code (other than 88, 99 or blank {for diagnoses prior to 01/01/2000}) can be coded only once in Race 1 through Race 5. For example, do not code 01 White in Race 1 for one parent and 01 White in Race 2 for the other parent.
7. Document the specified race in a remarks field when any of the race fields are coded as 96 Other Asian, 97 Pacific Islander, NOS or 98 Other Race and a more specific race is given that is not included in the list of race codes. If there is no information on race in the medical record, document that there is no race information in a remarks field. If the information in the medical record is not consistent (for example, if the patient is identified as black in nursing notes and white in a dictated physical exam), document why the coded race was chosen.

Note: Do not code 96 Other Asian in a subsequent race field if a specific Asian race(s) has already been coded.

Example 1: Patient is described as Asian in a consult note and as second generation Korean American in the history. Code Race 1 as 08 Korean and Race 2 through Race 5 as 88.

HISTORY

1. Race 1 is the field used to compare with race data on cases diagnosed prior to January 1, 2000.
2. For cases diagnosed prior to January 1, 2000, Race 2 through Race 5 must be blank **unless** the patient has multiple records with at least one primary diagnosed on or after January 1, 2000. In this case, the race codes must be identical on each record..
3. Codes 08 - 13 became effective with diagnoses on or after January 1, 1988.
4. Code 14 became effective with diagnoses on or after January 1, 1994.
5. 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; Greater California is permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1988. Other SEER participants may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 Other Asian; 97 Pacific Islander, NOS; 98 Other; and 99 unknown.

RACE 2, 3, 4, 5

Item Length: 2

NAACCR Item #: 161, 162, 163, 164

NAACCR Name: Race 2, Race 3, Race 4, Race 5

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

All resources in the facility, including the medical record, face sheet, physician and nursing notes, photographs, and any other sources, must be used to determine race. If a facility does not print race in the medical record but does maintain it in electronic form, the electronic data must also be reviewed. Recommendation: document how the race code was determined in a text field.

The data item Race identifies the primary race of the patient.

Codes

- 01 White
- 02 Black
- 03 American Indian, Aleutian, Alaskan Native or Eskimo (includes all indigenous populations of the Western hemisphere)
- 04 Chinese
- 05 Japanese
- 06 Filipino
- 07 Hawaiian
- 08 Korean (Effective with 1/1/1988 dx)
- 09 Asian Indian, Pakistani (Effective with 1/1/1988 dx)
- 10 Vietnamese (Effective with 1/1/1988 dx)
- 11 Laotian (Effective with 1/1/1988 dx)
- 12 Hmong (Effective with 1/1/1988 dx)
- 13 Kampuchean (including Khmer and Cambodian) (Effective with 1/1/1988 dx)
- 14 Thai (Effective with 1/1/1994 dx)
- 20 Micronesian, NOS (Effective with 1/1/1991)
- 21 Chamorran (Effective with 1/1/1991 dx)
- 22 Guamanian, NOS (Effective with 1/1/1991 dx)
- 25 Polynesian, NOS (Effective with 1/1/1991 dx)
- 26 Tahitian (Effective with 1/1/1991 dx)
- 27 Samoan (Effective with 1/1/1991 dx)
- 28 Tongan (Effective with 1/1/1991 dx)
- 30 Melanesian, NOS (Effective with 1/1/1991 dx)
- 31 Fiji Islander (Effective with 1/1/1991 dx)
- 32 New Guinean (Effective with 1/1/1991 dx)
- 88 No further race documented

- 96 Other Asian, including Asian, NOS and Oriental, NOS (Effective with 1/1/1991 dx)
- 97 Pacific Islander, NOS (Effective with 1/1/1991 dx)
- 98 Other
- 99 Unknown

SEER Participants San Francisco, San Jose-Monterey, and Los Angeles are permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1987. Greater California is permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1988. Other SEER participants may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 Other Asian; 97 Pacific Islander, NOS; 98 Other; and 99 unknown.

Coding Instructions

1. Code the primary race(s) of the patient in fields Race 1, Race 2, Race 3, Race 4, and Race 5. The five race fields allow for the coding of multiple races consistent with the Census 2000. Rules 2 - 8 further specify how to code Race 1, Race 2, Race 3, Race 4 and Race 5. See Editing Guidelines below for further instructions.
2. If a person's race is a combination of white and any other race(s), code the appropriate other race(s) first and code white in the next race field.
3. If a person's race is a combination of Hawaiian and any other race(s), code Race 1 as 07 Hawaiian and code the other races in Race 2, Race 3, Race 4, and Race 5 as appropriate.

Example: Patient is described as Japanese and Hawaiian. Code Race 1 as 07 Hawaiian, Race 2 as 05 Japanese, and Race 3 through Race 5 as 88.

4. If the person is not Hawaiian, code Race 1 to the first stated non-white race (02 - 98).

Example: Patient is stated to be Vietnamese and Black. Code Race 1 as 10 Vietnamese, Race 2 as 02 Black, and Race 3 through Race 5 as 88.

Note: in the following scenarios, only the race code referred to in the example is coded. For cases diagnosed after January 1, 2000, all race fields must be coded.

5. The fields Place of Birth, Race, Marital Status, Name, Maiden Name, and Hispanic Origin are inter-related. Use the following guidelines in priority order:
 - a. Code the patient's stated race, if possible. Refer to Appendix "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" for guidance.

Example 1: Patient is stated to be Japanese. Code as 05 Japanese.

Example 2: Patient is stated to be German-Irish. Code as 01 White.

Example 3: Patient is described as Arabian. Code as 01 White.

Exception: When the race is recorded as Oriental, Mongolian, or Asian (coded to 96 Other Asian) and the place of birth is recorded as China, Japan, the Philippines, or another Asian nation, code the race based on birthplace information.

Example 4: The person's race is recorded as Asian and the place of birth is recorded as Japan. Code race as 05 Japanese because it is more specific than 96 Asian, NOS.

Example 5: The person describes himself as an Asian-American born in Laos. Code race as 11 Laotian because it is more specific than 96 Asian, NOS.

6. If the patient's race is determined on the basis of the races of relatives, there is no priority to coding race, other than to list the non-white race(s) first.

Example: The patient is described as Asian-American with Korean parents. Code race as 08 Korean because it is more specific than 96 Asian [-American].

7. If no race is stated in the medical record, or if the stated race cannot be coded, review the documentation for a statement of a race category.

Example 1: Patient described as a black female. Code as 02 Black.

Example 2: Patient describes herself as multi-racial (nothing more specific) and nursing notes say "African-American." Code as 02 Black.

Example 3: Patient states she has a Polynesian mother and Tahitian father. Code Race 1 as 25 Polynesian, Race 2 as 26 Tahitian and Race 3 through Race 5 as 88.

8. If race is unknown or not stated in the medical record and birth place is recorded, in some cases race may be inferred from the nationality. Refer to the Appendix entitled "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" to identify nationalities from which race codes may be inferred.

Example 1: Record states: "this native of Portugal..." Code race as 01 White per the Appendix.

Example 2: Record states: “this patient was Nigerian...” Code race as 02 Black per the Appendix.

Exception If the patient’s name is incongruous with the inferred race, code Race 1 through Race 5 as 99, Unknown.

Example 1: Patient’s name is Siddhartha Rao and birthplace is listed as England. Code Race 1 through Race 5 as 99 Unknown.

Example 2: Patient’s name is Ping Chen and birthplace is Ethiopia. Code Race 1 through Race 5 as 99 Unknown.

9. Use of patient name in determining race
 - a. Do not code race from name alone, especially for females with no maiden name given.
 - b. In general, a name may be an indicator of a racial group, but should not be taken as the only indicator of race.
 - c. A patient name may be used to identify a more specific race code.

Example 1: Race reported as Asian, name is Hatsu Mashimoto. Code race as 05 Japanese.

Example 2: Birthplace is reported as Guatemala and name is Jose Chuicol [name is identified as Mayan]. Code race as 03 Native American

- d. A patient name may be used to infer Spanish ethnicity or place of birth, but a Spanish name alone (without a statement about race or place of birth) cannot be used to determine the race code. Refer to ethnicity guidelines for further information.

Example: Alice Gomez is a native of Indiana (implied birthplace: United States). Code Race 1 through Race 5 as 99 Unknown, because we know nothing about her race.

10. Persons of Spanish or Hispanic origin may be of any race, although persons of Mexican, Central American, South American, Puerto Rican, or Cuban origin are usually white. Do NOT code a patient stated to be Hispanic or Latino as 98 Other Race in Race 1 and 88 in Race 2 through Race 5.

Example: Miss Sabrina Fitzsimmons is a native of Brazil. Code race as 01 White per Appendix.

11. When the race is recorded as Negro or African-American, code race as 02.

12. Code 03 should be used for any person stated to be Native American or [western hemisphere] Indian, whether from North, Central, South, or Latin America. See additional ethnicity coding guidelines under Spanish Surname or Origin for instructions on coding Central, South, or Latin American Indians.
13. Death certificate information may be used to supplement antemortem race information only when race is coded unknown in the patient record or when the death certificate information is more specific.

Example 1: In the cancer record Race 1 through Race 5 are coded as 99 Unknown. The death certificate states race as black. Change cancer record for Race 1 to 02 Black and Race 2 through Race 5 to 88.

Example 2: Race 1 is coded in the cancer record as 96 Asian. Death certificate gives birthplace as China. Change Race 1 in the cancer record to 04 Chinese and code Race 2 through Race 5 as 88.

EDITING GUIDELINES

All tumors for the same patient should have the same race code(s).

Cases diagnosed prior to January 1, 2000:

For cases diagnosed prior to January 1, 2000, Race 2 through Race 5 must be blank **unless** the patient has multiple records and at least one primary is diagnosed on or after January 1, 2000. In this case, the race codes must be identical on each record.

Cases diagnosed on or after January 1, 2000:

1. If only one race is reported for the person, use code 88 for the remaining race fields (Race 2 - Race 5).
2. If the patient is multiracial, code all races using items Race 1 through Race 5.
3. If any race code is 99 Unknown, then all race codes must be 99 Unknown. If Race 1 is 01-98, Race 2 through Race 5 cannot be 99.
4. If more than Race 1 is coded, and if any Race 2 through Race 5 is 88, then all subsequent race codes must be 88.
5. A unique race code (other than 88, 99 or blank {for diagnoses prior to 01/01/2000}) can be coded only once in Race 1 through Race 5. For example, do not code 01 White in Race 1 for one parent and 01 White in Race 2 for the other parent.
6. Document the specified race in a remarks field when any of the race fields are coded as 96 Other Asian, 97 Pacific Islander, NOS or 98 Other Race and a more specific race is given that is not included in the list of race codes. If there is no information on race in the medical record, document that there is no race information in a remarks field. If the

information in the medical record is not consistent (for example, if the patient is identified as black in nursing notes and white in a dictated physical exam), document why the coded race was chosen.

Note: Do not code 96 Asian in a subsequent race field if a specific Asian race(s) has already been coded.

Example 1: Patient is described as Asian in a consult note and as second generation Korean American in the history. Code Race 1 as 08 Korean and Race 2 through Race 5 as 88.

Example 2: Patient is described as having one Thai parent and one Malaysian parent. Code Race 1 as 14 Thai, Race 2 as 96 Other Asian (where Malaysian is coded), and Race 3 through Race 5 as 88.

HISTORY

1. Race 1 is the field used to compare with race data on cases diagnosed prior to January 1, 2000.
2. For cases diagnosed prior to January 1, 2000, Race 2 through Race 5 must be blank **unless** the patient has multiple records and at least one primary is diagnosed on or after January 1, 2000. In this case, the race codes must be identical on each record.
3. Codes 08 - 13 became effective with diagnoses on or after January 1, 1988.
4. Code 14 became effective with diagnoses on or after January 1, 1994.
5. 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. Other SEER participants may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 Other Asian; 97 Pacific Islander, NOS; 98 Other; and 99 unknown.

SPANISH SURNAME OR ORIGIN

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

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

Codes

- 0 Non-Spanish/Non-Hispanic
- 1 Mexican (includes Chicano)
- 2 Puerto Rican
- 3 Cuban
- 4 South or Central American (except Brazil)
- 5 Other specified Spanish/Hispanic origin (includes European; excludes Dominican Republic)
- 6 Spanish, NOS; Hispanic, NOS; Latino, NOS
There is evidence, other than surname or maiden name, that the person is Hispanic but he/she cannot be assigned to any of the categories 1-5.
- 7 Spanish surname only (effective with diagnosis on or after 1/1/1994)
The only evidence of the person's Hispanic origin is the surname or maiden name and there is no contrary evidence that the patient is not Hispanic.
- 8 Dominican Republic (effective with diagnosis on or after 1/1/2005)
- 9 Unknown whether Spanish/Hispanic or not

Coding Instructions

1. Coding Spanish Surname or Origin is not dependent on race. A person of Spanish descent may be white, black, or any other race.
2. Portuguese, Brazilians and Filipinos are not Spanish; code non-Spanish (code 0).
3. All information should be used to determine the Spanish/Hispanic Origin including the stated ethnicity in the medical record, stated Hispanic origin on the death certificate, birthplace, information about life history and/or language spoken found in the abstracting process and a last name and maiden name found on a list of Hispanic/Spanish names. Assign code 7 when the only evidence of the patient's Hispanic origin is a surname or maiden name and there is no evidence that the patient is not Hispanic. Code 7 is ordinarily for central registry use only. If the origin is not stated in the medical record and the hospital registry does not have a list of Hispanic surnames, assign code 9 "Unknown whether Spanish/Hispanic or not". Code 7 was adapted for use effective with 1/1/1994 diagnoses.

COMPUTED ETHNICITY

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

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

Ethnicity derived from the same algorithm facilitates comparisons between regions with large populations. When data collectors use identical methods and rules to code the Hispanic population, it may be possible to identify population denominators.

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

Do not record results from NHIA in this field.

Codes

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

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

COMPUTED ETHNICITY SOURCE

Item Length: 1

NAACCR Item #: 210

NAACCR Name: Computed Ethnicity Source

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

Do not record results of NHIA in this field.

Codes

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

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

NHIA Derived Hispanic Origin

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

The NAACCR Hispanic Identification Algorithm (NHIA) is a computerized algorithm that uses a combination of variables to directly or indirectly classify cases as Hispanic for analytic purposes. The computer program that is run to derive Hispanic origin will automatically assign the code for this data item. The algorithm must be run for all cases.

Codes

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

SEX

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

Code the sex of the patient at the time of diagnosis.

Codes

- 1 Male
- 2 Female
- 3 Other (hermaphrodite)
- 4 Transsexual
- 9 Not stated/Unknown

Definition:

Transsexual: Surgically altered gender

MARITAL STATUS AT DIAGNOSIS

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

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

Codes

- 1 Single (never married)
- 2 Married (including common law)
- 3 Separated
- 4 Divorced
- 5 Widowed
- 9 Unknown

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

Persons of the opposite sex living together as part of a long-term personal relationship would be coded to '2,' Married (including common law).

Persons of the same sex living together as part of a long-term personal relationship would be coded according to their legal status (usually single, separated, divorced, or widowed).

**SECTION IV
DESCRIPTION OF THIS NEOPLASM**

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DATE OF DIAGNOSIS

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

The date of diagnosis is the month, day and year the tumor was first diagnosed by a recognized medical practitioner, whether clinically or microscopically confirmed.

Date fields are recorded in the month, day, century, year format (MMDDCCYY) with 99 for unknown day or month and 9999 for unknown year.

Most SEER registries collect the month, day, and year of diagnosis. The third and fourth digits (day) are recoded to 99 when the data are transmitted to SEER.

Codes for Month

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

Codes for Day

01	
02	
03	
..	
..	
31	
99	Unknown day

Codes for Year

Code the four-digit year of diagnosis
Record 9999 for unknown year

Special Codes

99999999	Unknown date
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Coding Instructions

The diagnosis date refers to the first diagnosis by any recognized medical practitioner.

1. Code the date of diagnosis for this cancer.
2. The first diagnosis of cancer may be **clinical** (i.e. based on physical exam, scans or laboratory results for hematopoietic malignancies)
 - a. Do not change the date of diagnosis when a clinical diagnosis is confirmed later by positive histology or cytology.

Example: On May 15, 2004, the physician states that the patient has lung cancer based on clinical findings. The patient has a positive biopsy of the lung in June 3, 2004. The date of diagnosis remains May 15, 2004 (05152004).

- b. If the patient receives first course treatment and there is no information about the date of diagnosis, use the date of admission as the date of diagnosis.
 - c. If the patient receives first course of treatment and there is no information about the date of diagnosis nor is there an admission date, code the date of first treatment as the date of diagnosis.
3. Positive **tumor markers** alone are not diagnostic of cancer. Use the date of clinical, histologic, or positive cytologic confirmation as the date of diagnosis.

Example 1: The patient has an elevated PSA and the physical examination is negative. The physician documents only that the patient is referred for a needle biopsy of the prostate. The biopsy is positive for adenocarcinoma. The date of diagnosis is the date of the positive biopsy.

Example 2: The patient has an elevated PSA and the physical examination is negative. The physician documents that he/she suspects that the patient has prostatic cancer and is referring the patient for a needle biopsy. The needle biopsy is positive. The date of diagnosis is the date the physician documented that he/she suspects that the patient has prostatic cancer.

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

4. **Suspicious cytology only** is not diagnostic of cancer. Use the date of clinical, histologic, or **positive** cytologic confirmation as the date of diagnosis.

Note: Suspicious cytology alone is never used for case ascertainment.
5. If a recognized medical practitioner says that, in **retrospect**, the patient had cancer at an earlier date, code the date of diagnosis as the earlier date. If the original slides are reviewed and the pathologist documents cancer, code the diagnosis date as the date the original slides were made.

Example: The patient had an excision of a benign fibrous histiocytoma in January 2004. Six months later, a wide reexcision was positive for malignant fibrous histiocytoma. The physician documents in the chart that the previous tumor (benign fibrous histiocytoma) must have been malignant. Code the diagnosis date as January 2004.

6. If there is **no review** of previous slides with a revised diagnosis of cancer, and **no physician's statement** that, in retrospect, the previous tumor was malignant, or if information on the previous tumor is unclear, do not back-date the date of diagnosis.

Example: The patient had a total hysterectomy and a bilateral salpingo oophorectomy (BSO) in June 2004 with pathology diagnosis of papillary cystadenoma of the ovaries. In December 2004 the patient is diagnosed with widespread metastatic papillary cystadenocarcinoma. The slides from June 2004 are not reviewed and there is no physician statement saying the previous tumor was malignant. The date of diagnosis is December 2004.

7. Code the **date of death** as the date of diagnosis for:
- Autopsy only cases
 - Death Certificate Only cases
8. If the case is found by **death certificate** and
- There is no mention of cancer in the nursing home records or in the work-up records, code the date of death as the date of diagnosis. The case remains a Death Certificate Only case.
 - The death certificate is signed by a physician and there is no additional follow-back information, code the date of death as the date of diagnosis. The case remains a Death Certificate Only case.
 - No additional information is gathered from another source code the date of death as the date of diagnosis. The case remains a Death Certificate Only case.
9. **Estimate the date of diagnosis** if an exact date is not available.
- Estimating the **month**
 - Code "spring of" to April
 - Code "summer" or "middle of the year" to July
 - Code "fall" or "autumn" as October
 - For "winter of," try to determine whether the physician means the first of the year or the end of the year and code January or December as appropriate.
 - Code "early in year" to January
 - Code "late in year" to December
 - Use whatever information is available to calculate the month of diagnosis

Example 1: Admitted October 2004. History states diagnosed 7 months ago. Subtract 7 from the month of admit and code date of diagnosis to March 2004 (03992004).

Example 2: Outpatient bone scan done January 2004 that states history of prostate cancer. The physician says the patient was diagnosed in 2004. Assume bone scan was part of initial work-up and code date of diagnosis to January 2004 (012004).

- Code the month of admission when there is no basis for estimation
- Code month as 99 if there is no basis for approximation

- b. Estimating the year
 - i. Code “a couple of years” to two years earlier
 - ii. Code “a few years” to three years earlier
 - iii. Use whatever information is available to calculate the year of diagnosis
 - iv. Code the year of admission when there is no basis for estimation
 - v. Code year as 9999 when there is no basis for approximation of the year.
- c. Estimating **both the month and year**: use whatever information is available to calculate the month and year of diagnosis.

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

- 1. If the only information available is that the patient **had cancer when admitted** to the nursing home, use the date of admission as the date of diagnosis.
- 2. If the only information available is that the patient **had cancer while in the nursing home**, but it is unknown whether the patient had cancer when admitted, use the best approximation possible for date of diagnosis. If there is no basis for an approximation, the default code is the date of admission to the nursing home.

SEQUENCE NUMBER-CENTRAL

Item Length: 2

NAACCR Item #: 380

NAACCR Name: Sequence Number--Central

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

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

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

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

Codes

In Situ/Malignant as Federally Required based on Diagnosis Year

- 00 One primary only in the patient's lifetime
- 01 First of two or more primaries
- 02 Second of two or more primaries
-
- .. (Actual number of this primary)
-
- 35 Thirty-fifth of thirty-five or more primaries
- 99 Unspecified or unknown sequence number of Federally required in situ or malignant tumors. Sequence number 99 can be used if there is a malignant tumor and its sequence number is unknown. (If there is known to be more than one malignant tumor, then the tumors must be sequenced.)

Non-malignant Tumor as Federally Required based on Diagnosis Year

- 60 Only one non-malignant tumor or central registry-defined neoplasm
- 61 First of two or more non-malignant tumors or central registry-defined neoplasms
- 62 Second of two or more non-malignant tumors or central registry-defined neoplasms
-
- 87 Twenty-seventh of twenty-seven
- 88 Unspecified or unknown sequence number of non-malignant tumor or central-registry defined neoplasms. (Sequence number 88 can be used if there is a non-malignant tumor and its sequence number is unknown. If there is known to be more than one non-malignant tumor, then the tumors must be sequenced.)
- 98 Cervix carcinoma in situ (CIS/CIN III, Diagnosis Years 1996-2002)

Type of Neoplasm/Sequence Number Series

Neoplasm	Sequence Number--Central Numeric Series
<u>Series 1: In situ/Malignant as Federally Required based on Diagnosis Year</u>	00-35,99
All in situ (behavior code 2): Cervix CIS, CIN III (diagnosis year before 1996) All other in situ including VIN III, VAIN III, AIN III	00-35
Malignant (behavior code 3)	
Juvenile astrocytoma (diagnosis year 2001 and later)*	
Invasive following in situ – new primary defined by SEER	
Unspecified Federally required sequence number or unknown	99
<u>Series 2: Non-malignant Tumor as Federally Required based on Diagnosis Year or State or Regional Registry Defined **</u>	60-87,88
<u>Examples:</u>	
Non-malignant tumor/benign brain	60-87
Borderline ovarian (diagnosis year 2001+)	60-87
Other borderline/benign	60-87
Skin SCC/BCC	60-87
PIN III (diagnosis year 2001+)	60-87
Cervix CIS/CIN III (diagnosis year 2003+)	60-87
Unspecified non-malignant tumor or central registry-defined sequence number	88
Cervix CIS/CINIII (diagnosis year 1996-2002)	98

*Juvenile astrocytomas should be reported as 9421/3.

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

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

Coding Instructions

1. For any reportable in situ or malignant cancer diagnosed in 2004 and forward, count all previous in situ/malignant reportable primaries which occurred over the lifetime of the patient to determine the correct sequence number. A 'reportable' primary refers to the site/histology of the tumor and the years for which its reporting was required. For 2004+ diagnoses, see Reportability Requirements. A person did not have to be a resident of the SEER area for a primary to be counted.
 - a. If there are multiple primaries, sequence the cases chronologically as 01 (first of one or more), 02 (second primary), 03 (third primary), and assign the appropriate sequence number to all cases in the database. All primaries in the database for the patient should be evaluated/changed to reflect the correct sequence number.

Example 1: The patient has a history of breast cancer in 1960. She has colon cancer in 2004. Assign sequence number 02 to the colon cancer.

Example 2: In 1987, patient was diagnosed and treated for childhood leukemia in another state. After becoming a resident of a SEER region, the patient develops bladder cancer. The SEER registry assigns a sequence number of 02 to the bladder cancer.

- b. If there were no prior primaries, the sequence number is 00 unless the patient develops subsequent primaries. If a person has a primary with sequence 00 and then develops another reportable /2 or /3 primary, the sequence number of the first primary is changed from 00 to 01.

Exception: There are certain cancers that were only reportable for some years. The following are some examples (not a complete list):

Borderline tumors of the ovary were reported for 1992-2000

Refractory anemia was reported only for 2001+

Myelodysplastic syndromes were only reported for 2001+

Cervix in situ were only required prior to 1996 diagnosis year

Example 1: The patient was diagnosed with carcinoma in situ of the cervix in 1994. In 2004 the patient was diagnosed with lung cancer. The SEER registry assigns a sequence number of 01 to the carcinoma in situ of the cervix and a sequence number of 02 to the lung cancer.

Example 2: The patient was diagnosed with carcinoma in situ of the cervix in 2003. In 2004 the patient was diagnosed with lung cancer. The SEER registry is not required to collect the 2003 carcinoma in situ of the cervix and assigns a sequence number of 00 to the lung cancer.

2. For any reportable non-malignant tumor of the brain/CNS diagnosed in 2004 and forward, count all previous non-malignant tumors of the brain/CNS primaries in chronological order which occurred over the lifetime of the patient to determine the correct sequence number. The previous and newly diagnosed cancers are restricted to primary site codes C700-C729, C751-C753 with behavior codes of /0 or /1. A person did not have to be a resident of the SEER area for a primary to be counted.
 - a. If there were prior non-malignant brain/CNS, sequence the case chronologically as 61 (if it is the first), 62 (if it is the second),...,... If the first tumor is in the registry's database, change the sequence number from 60 to 61.
 - b. If there were no prior or subsequent non-malignant brain/CNS tumors, the sequence number is 60.
3. If a patient has both a non-malignant brain/CNS tumor and a reportable /2 or /3 tumor, they are sequenced independent of each other and their chronology, i.e., the non-malignant tumor has a sequence number of 60 and the reportable /2 or /3 tumor has a sequence number of 00.
4. If a registry chooses to collect tumors other than those required by SEER (see Reportability Requirements), those tumors should be sequenced in the 60-87 series with the non-malignant brain tumors.

Example: Cervix in situ was diagnosed in 2003 and lung cancer was diagnosed in 2004. The the cervix in situ, if collected, would be a sequence number 60 and the lung would be assigned a sequence number of 00.

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

PRIMARY SITE

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

For cases diagnosed 1/1/2001 and later, code the primary site using the topography section of the *International Classification of Diseases for Oncology*, Third Edition (ICD-O-3).

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

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

Coding Instructions

Site-Specific Topography Terms (See the Coding Guidelines for Topography and Morphology in the introduction of the ICD-O-3 for additional details)

Refer to "Determining Multiple Primaries" in the first section of this manual to determine the number of primaries. Use all of the information for a single primary to code the site.

1. Code the **site** in which the **primary tumor originated, even if it extends into an adjacent "subsite."**

Example 1: Final diagnosis is adenocarcinoma of the upper lobe of the right lung. Code the topography to lung, upper lobe (C341).

Example 2: Pathology report shows adenocarcinoma arising in an ectopic patch of endometriosis on the sigmoid colon. Code the primary site to sigmoid colon (C187), the site in which the cancer originated.

Example 3: Patient has a right branchial cleft cyst; the pathology report identifies an adenocarcinoma arising in an ectopic focus of thyroid tissue within the branchial cleft cyst. Thyroidectomy pathology is negative. Code primary site to branchial cleft (C104).

Example 4: The patient had a total hysterectomy with a bilateral salpingo-oophorectomy ten years ago for non cancer reasons. She now has widespread cystadenocarcinoma in the peritoneum. Code the primary site to peritoneum, NOS (C482). (The chart may or may not state that the patient has extra-ovarian carcinoma).

Example 5: The patient has a 4 cm tumor in the right breast. The tumor originated in the upper inner quadrant and extends into the lower inner quadrant. Code primary site to upper inner quadrant of breast (C502).

2. Use the SEER Site Grouping Table in the Rules for Determining Multiple Primaries section to code the primary site specified in the table in those rare cases when:

- a. A single tumor overlaps adjacent **sites** in the same group
- b. Multiple tumors reported as a single primary involve adjacent **sites** in the same group

Example: The patient has a 5cm tumor overlapping the base of tongue and anterior 2/3 of tongue. Use the SEER Site Grouping Table to determine the correct code for the primary site, C029 (Tongue, NOS).

3. Code the last digit of the primary site code to '8' when a **single tumor overlaps** an adjacent **subsite(s)** of an organ and the point of origin cannot be determined.,

Example: The patient has a 5cm tumor that involves the dorsal surface and anterior 2/3 of tongue. Code the primary site to C028 (overlapping lesion of tongue).

4. Code the last digit of the primary site code to '9' for single primaries, when **multiple tumors arise in different subsites** of the same anatomic site, unless the subsite is defined in one of the site groups listed in the SEER Site Grouping Table. Refer to the SEER Site Grouping Table in the section entitled "How to Determine Same vs Different Primary Site" to determine the primary site code for specified site groups.

Example 1: During a TURB, the physician describes multiple papillary tumors in the bladder neck (C675) and the lateral wall of the bladder (C672). Code the primary site as bladder, NOS (C679).

Example 2: Patient has an infiltrating duct tumor in the upper outer quadrant (C504) of the right breast and another infiltrating duct carcinoma in the lower inner (C503) quadrant of the right breast. Code the primary site as breast, NOS (C509).

5. Some histology/behavior terms in ICD-O-3 have a **related site code** in parenthesis; for example: hepatoma (C220).
 - a. Code the site as documented in the medical record and ignore the suggested ICD-O-3 code when a primary site is specified in the medical record.

Example: The pathology report says "ductal carcinoma of the head of the pancreas." The listing in ICD-O-3 is ductal carcinoma 8500/3 (C50). Code the primary site to head of pancreas, NOT to breast as suggested by the ICD-O-3.

- b. Use the site code suggested by ICD-O-3 when the primary site is the same as the site code suggested or the primary site is unknown

Example 1: The biopsy is positive for hepatoma, but there is no information available about the primary site. Code the primary site to liver (C220) as suggested by ICD-O-3.

Example 2: The patient has an excision of the right axillary nodes which reveals metastatic infiltrating duct carcinoma. The right breast is negative. The ICD-O-3 shows duct carcinoma (8500) with a suggested site of breast (C50_). Code the primary site as breast, NOS (C509).

6. Code the primary site, not the metastatic site. If a tumor is metastatic and the primary site is unknown, code the primary site as unknown (C809).
7. When the medical record does **not** contain **enough information** to assign a primary site:

- a. Consult a physician advisor to assign the site code
- b. Use the NOS category for the organ system or the Ill Defined Sites (C760-C768.) if the physician advisor cannot identify a primary site,
- c. Code Unknown Primary Site (C809) if there is not enough information to assign an NOS or Ill Defined Site category.

Leukemia

1. Code leukemia primaries to bone marrow (C421); blood cells originate in the bone marrow.

Lymphoma

Definitions

Extralymphatic: Originating in tissue or an organ that is not a part of the lymphatic system.

Extranodal lymphoma: Lymphoma originating in tissue or organ other than lymph nodes. Lymphatic system organs may be extranodal. (e.g.: Spleen is a lymphatic system organ and is also extranodal.)

Lymphatic system: An umbrella term that includes: lymph nodes, spleen, thymus, tonsils, Waldeyer's ring, and Peyer's patches.

Nodal lymphoma: A lymphoma originating in lymph nodes.

Lymphoma Coding Instructions

1. When a single lymph node chain is involved, code that chain as the primary site.
2. When **multiple lymph node chains** are involved at the time of **diagnosis**, do not simply code the lymph node chain that was biopsied.
 - a. If it is possible to determine where the disease originated, code the primary site to that lymph node chain.
 - b. If multiple lymph node chains are involved and all involved chains are located in the same lymph node region (i.e. the same primary site code) and it is not possible to determine the lymph node chain where the disease originated, code the primary site to lymph nodes of the specified nodal region (C77_).
 - c. If multiple lymph node chains are involved and the involved chains are in different lymph node regions, code C778 (lymph nodes of multiple regions).
3. When the lymphoma is **extranodal and is**
 - a. **Confined to the organ of origin**, code the organ of origin.

Example: Pathology from a stomach resection shows lymphoma. No other pathologic or clinical disease identified. Code the primary site as stomach, NOS (C169).

- b. Present in an **extranodal organ/site and** in that organ/site's **regional lymph nodes** code the extranodal organ/site as the primary site.

Lymphomas that are primary in an extranodal organ/site may metastasize to that

organ/site's regional lymph nodes. In rare cases a lymphoma may spread from the lymph node to an extranodal site or extralymphatic organ by direct extension.

Example 1: Lymphoma is present in the spleen and splenic lymph nodes. Code the primary site to spleen (C422).

Example 2: Lymphoma is present in the stomach and the gastric lymph nodes. Code the primary site to stomach, NOS (C169).

- c. Present in **extranodal organ(s)/site and non-regional lymph nodes**, consult the physician to determine the primary site. If a site cannot be determined, code primary site to Lymph Node, NOS (C779).
4. If the **primary site is unknown** or not given:
 - a. Code retroperitoneal lymph nodes if described as retroperitoneal mass
 - b. Code inguinal lymph nodes if described as inguinal mass
 - c. Code mediastinal lymph nodes if described as mediastinal mass
 - d. Code mesenteric lymph nodes if described as mesenteric mass
 - e. If the primary site is unknown code Lymph Nodes, NOS (C779)

Exception: Code unknown primary site (C809) only when there is no evidence of lymphoma in lymph nodes and/or the medical record documents that the physician suspects that it is an extranodal lymphoma

Esophagus

There are two systems that divide the esophagus into three subsites. The first system divides the esophagus into the upper third, middle third, and lower third. The second system describes the subsites as the cervical esophagus, the thoracic esophagus and the abdominal esophagus. The subsites for these two different systems are not identical. Assign the ICD-O-3 topography code that describes the primary site documented in the medical record. See the SEER *Self Instructional Manual for Tumor Registrars, Book 4* for illustrated descriptions of each system.

Kaposi Sarcoma

Kaposi sarcoma is a rare condition. When not AIDS-related, it usually presents as localized disease with an easily recognized primary site.

AIDS-related Kaposi sarcoma usually presents as a disseminated disease with involvement of mucosal surfaces, visceral surfaces of organs, and skin. It is important to review consecutive records carefully to determine the extent of involvement at diagnosis. Review of a single record may reveal only the site being treated during that admission.

1. Code Kaposi to the **site in which it arises**.
2. If the Kaposi is present in the **skin and another site** simultaneously, code to the specified skin site, (C44_).
3. If the **primary site is unknown** or cannot be determined, code skin, NOS (C449).

Sarcoma

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

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

Example: The pathology identifies a mixed Mullerian tumor of the uterus. Code the site to uterus, NOS (C559).

Laterality

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

Laterality describes the side of a paired organ or side of the body on which the reportable tumor originated. For each primary you need to determine whether laterality should be coded.

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

Codes

- 0 Not a paired site
- 1 Right: origin of primary
- 2 Left: origin of primary
- 3 Only one side involved, right or left origin unspecified
- 4 Bilateral involvement, lateral origin unknown; stated to be single primary
- 9 Paired site, but no information concerning laterality; midline tumor

Coding Instructions

1. Code laterality using codes 1-9 for all of the sites listed in the following table.
2. Code the side where the primary tumor originated
 - a. Assign **code 3** if the laterality is not known but the tumor is confined to a single side of the paired organ.

Example: Pathology report: Patient has a 2 cm carcinoma in the upper pole of the kidney. Code laterality as 3 because there is documentation that the disease exists in only one kidney, but it is unknown if the disease originated in the right or left kidney.
 - b. **Code 4** is seldom used EXCEPT for the following diseases:
 - i. Both ovaries involved simultaneously, single histology
 - ii. Bilateral retinoblastomas
 - iii. Bilateral Wilms tumors

Note: Laterality may be coded for sites other than those required above.

3. Assign **code 9** when there is a midline tumor or when the disease originated in a paired site, but the laterality is unknown.

Example 1: Admitting history says patient was diagnosed with lung cancer based on a positive sputum cytology. Patient is treated for painful bony metastases. There is no information about laterality in the diagnosis of this lung cancer.

Example 2: Patient has an excision of a melanoma located just above the umbilicus. Assign code 9 for a midline tumor.

Sites for Which Laterality Codes Must Be Recorded

ICD-O-3 Code	Site or Subsite
C079	Parotid gland
C080	Submandibular gland
C081	Sublingual gland
C090	Tonsillar fossa
C091	Tonsillar pillar
C098	Overlapping lesion of tonsil
C099	Tonsil, NOS
C300	Nasal cavity (excluding nasal cartilage, nasal septum)
C301	Middle ear
C310	Maxillary sinus
C312	Frontal sinus
C340	Main bronchus (excluding carina)
C341- C349	Lung
C384	Pleura
C400	Long bones of upper limb, scapula, and associated joints
C401	Short bones of upper limb and associated joints
C402	Long bones of lower limb and associated joints
C403	Short bones of lower limb and associated joints
C413	Rib, clavicle (excluding sternum)
C414	Pelvic bones (excluding sacrum, coccyx, symphysis pubis)
C441	Skin of the eyelid
C442	Skin of the external ear
C443	Skin of other and unspecific parts of the face (if midline, assign code 9)
C445	Skin of the trunk (if midline, assign code 9)
C446	Skin of upper limb and shoulder
C447	Skin of the lower limb and hip
C471	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C472	Peripheral nerves and autonomic nervous system of the lower limb and hip
C491	Connective, subcutaneous, and other soft tissues of upper limb and shoulder
C492	Connective, subcutaneous, and other soft tissues of the lower limb and hip
C500- C509	Breast

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ICD-O-3 Code	Site or Subsite
C569	Ovary
C570	Fallopian tube
C620- C629	Testis
C630	Epididymis
C631	Spermatic cord
C649	Kidney, NOS
C659	Renal pelvis
C669	Ureter
C690- C699	Eye and adnexa
C700	Cerebral meninges, NOS (Effective with cases diagnosed 1/1/2004)
C710	Cerebrum (Effective with cases diagnosed 1/1/2004)
C711	Frontal lobe (Effective with cases diagnosed 1/1/2004)
C712	Temporal lobe (Effective with cases diagnosed 1/1/2004)
C713	Parietal lobe (Effective with cases diagnosed 1/1/2004)
C714	Occipital lobe (Effective with cases diagnosed 1/1/2004)
C722	Olfactory nerve (Effective with cases diagnosed 1/1/2004)
C723	Optic nerve (Effective with cases diagnosed 1/1/2004)
C724	Acoustic nerve (Effective with cases diagnosed 1/1/2004)
C725	Cranial nerve, NOS (Effective with cases diagnosed 1/1/2004)
C740- C749	Adrenal gland
C754	Carotid body

Note: A laterality code of 1-4 or 9 **must** be assigned for the above sites except as noted. If the site is not listed on the table, assign code 0 for laterality. Laterality **may** be coded for sites other than those required above.

Diagnostic Confirmation

Item Length: 1

NAACCR Item #: 490

NAACCR Name: Diagnostic Confirmation

Records the best method used to confirm the presence of the cancer being reported. The data item is not limited to the confirmation at the time of diagnosis; it is the best method of confirmation during the entire course of the disease.

Codes

Microscopically Confirmed

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

Not Microscopically Confirmed

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

Confirmation Unknown

- 9 Unknown whether or not microscopically confirmed; death certificate only

Coding Instructions

1. The codes are in **priority order**; code 1 has the highest priority. Always code the procedure with the lower numeric value when presence of cancer is confirmed with multiple diagnostic methods.
2. Change to a lower code, if at ANY TIME during the course of disease the patient has a diagnostic confirmation which has a higher priority.
3. Assign **code 1** when the microscopic diagnosis is based on
 - a. Tissue specimens from biopsy, frozen section, surgery, autopsy or D&C
 - b. Bone marrow specimens (aspiration and biopsy)
 - c. For leukemia only, positive hematologic findings including peripheral blood smears, CBCs and WBCs
4. Assign **code 2** when the microscopic diagnosis is based on
 - a. Examination of cells (rather than tissue) including but not limited to: sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears.
 - b. Paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid
5. Assign **code 4** when there is information that the diagnosis of cancer was microscopically confirmed, but the type of confirmation is unknown.

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

Example 1: The presence of alpha-fetoprotein for liver cancer

Example 2: An abnormal electrophoretic spike for multiple myeloma or Waldenstrom macroglobulinemia.

Example 3: If the workup for a prostate cancer patient is limited to a highly elevated PSA and the physician diagnoses and/or treats the patient based only on that PSA, code the diagnostic confirmation to 5.

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

Morphology

Item Length: 6

NAACCR Item #: 521

NAACCR Name: Morph—Type&Behav ICD-O-3

The International Classification of Diseases for Oncology, Third Edition (ICD-O-3), is used for coding the morphology of all cancers. In the Alphabetic Index all morphology codes are indicated by an ‘M-‘ preceding the code number. The ‘M-‘ should not be coded. The ‘/’ appearing between the histology and behavior codes is also not recorded.

Morphology is a 6-digit code consisting of three parts:

- A. Histologic type (4-digits)
- B. Behavior code (1-digit)
- C. Grading or differentiation; or for lymphoma and leukemia, designation of T-cell, B-cell, null cell, or NK cell (1-digit)

The morphology of a tumor can be coded only after the determination of multiple primaries has been completed. (Refer to the Rules for Determining Multiple Primaries to determine the number of primaries.)

To code morphology (histology, behavior and grade), use the best information from the entire pathology report (microscopic description, final diagnosis, comments.)

General Rule

If the final diagnosis gives a specific histology, code it. Similarly, if grade is specified in the final diagnosis, code it. Exceptions are found on the following pages under “Histologic Type,” “Behavior Code,” and “Grade, Differentiation, or Cell Indicator.”

Histologic Type ICD-O-3

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

The data item Histologic Type describes the microscopic composition of cells and/or tissue for a specific primary. In the rare instance where there is no tissue pathology, code the histology the medical practitioner uses to describe the tumor. The tumor type or histology is a basis for staging and determination of treatment options. It affects the prognosis and course of the disease.

The *International Classification of Diseases for Oncology*, Third Edition (ICD-O-3) is the standard reference for coding the histology for tumors diagnosed in 2001 and later. Do not record the 'M' that precedes the histology code. Refer to *ICD-O-3* for guidance in coding the histology. See sections *Coding Guidelines for Topography and Morphology*, and *Summary of Principal Rules for Using the ICD-O*, Third Edition.

The histology can be coded only after the determination of multiple primaries has been made.

Synonyms and Equivalent Terms

Mixed, combined, and complex are **usually** used as synonyms when describing histology.

Definitions

Cancer, NOS (8000) and carcinoma, NOS (8010) are not interchangeable.

Carcinoma, NOS (8010) and adenocarcinoma (8140) are interchangeable (See ICD-O-3).

Complex (mixed, combined) histology: The pathologist uses **multiple histologic terms** to describe a tumor. The histologic terms are frequently connected by the word "and" (for example ductal and lobular carcinoma).

Different histology: The first three digits of the ICD-O-3 histology code are different.

Different subtypes: The NOS cell types often have multiple subtypes; for example, scirrhous adenocarcinoma (8143), adenocarcinoma, intestinal type (8144), and linitis plastica (8141) are subtypes of Adenocarcinoma, NOS (8140).

Majority of Tumor:

Terms that mean the majority of tumor	Terms that DO NOT mean the majority of tumor
Predominantly	With foci of
With features of	Focus of/focal
Major	Areas of
Type ¹	Elements of
With Differentiation ¹	Component ¹
Pattern (Only if written in College of American Pathologists [CAP] Protocol) ²	
Architecture (Only if written in College of American Pathologists [CAP] Protocol) ²	

Note: Examples of CAP protocols for specific primary sites may be found on the website - http://www.cap.org/cancerprotocols/protocols_intro.html

Mixed/combined histology: Different cell types in one tumor; terms used interchangeably. In most cases, the terms mixed and combined are used as synonyms; however the term mixed may designate a specific tumor.

Not Otherwise Specified (NOS): “Not Otherwise Specified.”

Same histology: The first three digits of the ICD-O-3 histology code are identical.

Coding Instructions

Refer to “Determining Multiple Primaries” in the first section of this manual to determine the number of primaries. Use all of the information for a single primary to code the histology.

1. If there is no tumor specimen, code the histology described by the medical practitioner.

Example 1: The patient has a CT scan of the brain with a final diagnosis of glioblastoma multiforme (9440). The patient refuses all further workup or treatment. Code the histology to glioblastoma multiforme (9440).

Example 2: If the physician says that the patient has carcinoma, code carcinoma, NOS (8010).

2. Use the histology stated in the **final diagnosis** from the pathology report. Use the pathology from the procedure that resected the majority of the primary tumor.

If a more specific histologic type is definitively described in the microscopic portion of the pathology report or the comment, code the more specific diagnosis.

3. Lymphomas may be classified by the **WHO Classification**, **REAL system**, **Rappaport**, or **Working Formulation**. The WHO Classification is preferred. See page 13 in the ICD-O-3 for a discussion of hematologic malignancies.

1 Effective 1/1/1999 diagnosis

2 Effective 1/1/2003 diagnosis

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

Histology Coding Rules for Single Tumor

- The rules are in hierarchical order. Rule 1 has the highest priority.
- Use the rules in priority order.
- Use the first rule that applies to the case. (Do not apply any additional rules.)

1. Code the histology if only one type is mentioned in the pathology report.
2. Code the **invasive histology** when both invasive and in situ tumor are present

Example: Pathology report reads infiltrating ductal carcinoma and cribriform ductal carcinoma in situ. Code the invasive histology 8500/3.

Exception: If the histology of the invasive component is an ‘NOS’ term (e.g., carcinoma, adenocarcinoma, melanoma, sarcoma), then code the histology of the specific term associated with the in situ component and an invasive behavior code.

3. Use a **mixed** histology code if one exists

Examples of mixed codes: (This is not a complete list, these are examples only)

8490 Mixed tumor, NOS
9085 Mixed germ cell tumor
8855 Mixed liposarcoma
8990 Mixed mesenchymal sarcoma
8951 Mixed mesodermal tumor
8950 Mixed Mullerian tumor
9362 Mixed pineal tumor
8940 Mixed salivary gland tumor, NOS
9081 Teratocarcinoma, mixed embryonal carcinoma and teratoma

4. Use a **combination** histology code if one exists

Examples of combination codes: (This is not a complete list; these are examples only)

8255 Renal cell carcinoma, mixed clear cell and chromophobe types
8523 Infiltrating duct carcinoma mixed with other types of carcinoma
8524 Infiltrating lobular carcinoma mixed with other types of carcinoma
8560 Adenosquamous carcinoma
8045 Combined small cell carcinoma, combined small cell-large cell

5. Code the **more specific term** when one of the terms is ‘NOS’ and the other is a more specific description of the same histology.

Example 1: Pathology report reads poorly differentiated carcinoma, probably squamous in origin. Code the histology as squamous cell carcinoma rather than the non-specific term “carcinoma.”

Example 2: The pathology report from a nephrectomy reads renal cell carcinoma (8312) (renal cell identifies the affected organ system rather than the histologic cell type) in one portion of the report and clear cell carcinoma (8310) (a histologic cell type) in another section of the report. Code clear cell carcinoma (8310); renal cell carcinoma (8312) refers to the renal system rather than the cell type, so renal cell is the less specific code.

6. Code the **majority** of tumor.
 - a. Based on the pathology report description of the tumor.
 - b. Based on the use of majority terms. See definition for majority terms.
7. Code the **numerically higher** ICD-O-3 code. This is the rule with the lowest priority and should be used infrequently.

Histology Coding Rules for Multiple Tumors with Different Behaviors in the Same Organ Reported as a Single Primary

1. Code the histology of the invasive tumor when one lesion is in situ (/2) and the other is invasive (/3).

Example: At mastectomy for removal of a 2 cm invasive ductal carcinoma, an additional 5 cm area of intraductal carcinoma was noted. Code histology and behavior as invasive ductal carcinoma (8500/3).

Histology Coding Rules for Multiple Tumors in Same Organ Reported as a Single Primary

1. Code the histology when multiple tumors have the same histology.
2. Code the histology to adenocarcinoma (8140/_; in situ or invasive) when there is an adenocarcinoma and an adenocarcinoma in a polyp (8210/_ , 8261/_ , 8263/) in the same segment of the colon or rectum.
3. Code the histology to carcinoma (8010/_; in situ or invasive) when there is a carcinoma and a carcinoma in a polyp (8210/_) in the same segment of the colon or rectum.
4. Use a **combination** code for the following:
 - a. Bladder: Papillary and urothelial (transitional cell) carcinoma (8130)
 - b. Breast: Paget Disease and duct carcinoma (8541)
 - c. Breast: Duct carcinoma and lobular carcinoma (8522)
 - d. Thyroid: Follicular and papillary carcinoma (8340)
5. Code the more specific term when one of the terms is 'NOS' and the other is a more specific description of the same histology.
6. Code all other multiple tumors with different histologies as multiple primaries.

How to determine same vs different histologies for benign and borderline primary intracranial and CNS tumors (C70.0-C72.9, C75.1-C75.3) (Based on histologic groupings)

When there are **multiple tumors**, use the following table to determine if the tumors are the same histology or different histologies.

Histologic groupings to determine same histology for non-malignant brain tumors

Histologic Group	ICD-O-3 Code
Choroid plexus neoplasm	9390/0, 9390/1
Ependymoma	9383, 9394, 9444
Neuronal and neuronal-glial neoplasm	9384, 9412, 9413, 9442, 9505, 9506
Neurofibroma	9540/0, 9540/1, 9541, 9550, 9560
Neurinomatosis	9560
Neurothekeoma	9562
Neuroma	9570
Perineurioma, NOS	9571

Instructions for Using Histologic Group Table

1. **Both** histologies are listed **in the table**
 - a. Histologies that are in the same **grouping** or row in the table are the **same histology**.

Note: Histologies that are in the same grouping are a progression, differentiation or subtype of a single histologic category.
 - b. Histologies listed in **different groupings** in the table
2. One or both of the **histologies** is **not** listed **in the table** are **different histologies**.
 - a. If the **ICD-O-3 codes** for both histologies have the **identical** first three digits, the histologies are the **same**.
 - b. If the first three digits of the **ICD-O-3** histology code are **different**, the histology types are different.

Leukemia/Lymphoma (Chronic Lymphocytic Leukemia [CLL] and Small Lymphocytic Lymphoma [SLL])

1. Code the diagnosis of chronic lymphocytic leukemia (9823/3) and/or small lymphocytic lymphoma (9670/3) to SLL if there are positive lymph nodes or deposits of lymphoma/leukemia in organs or in other tissue. Code the histology to CLL if there are no physical manifestations of the disease other than a positive blood study or positive bone marrow.

Behavior Code

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

SEER requires registries to collect malignancies with in situ /2 and malignant /3 behavior codes as described in ICD-O-3. SEER requires registries to collect benign /0 and borderline /1 intracranial and CNS tumors for cases diagnosed on or after 1/1/2004. Behavior is the fifth digit of the morphology code after the slash (/). See ICD-O-3 (page 66) for a discussion of the behavior code.

Codes

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

Coding Instructions

Behavior codes 0 (benign) and 1 (borderline) are reportable for intracranial and CNS sites only, beginning with January 1, 2004 diagnoses.

Metastatic or Nonprimary Sites

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

In situ

Clinical evidence alone cannot identify the behavior as in situ; the code must be based on pathologic examination and documentation.

In situ and Invasive

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

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

ICD-O-3 Histology/Behavior Code Listing

ICD-O-3 may have only one behavior code, either in situ /2 or malignant /3, listed for a specific histology. If the pathology report describes the histology as in situ /2 and the ICD-O-3 histology code is only listed with a malignant /3 behavior code, assign the histology code listed and change the behavior code to in situ /2. If the pathology report describes histology as malignant /3 and the ICD-O-3 histology code is only listed with an in situ /2 behavior code, assign the histology code listed and change the behavior code to malignant /3. See the Morphology and Behavior Code Matrix discussion on page 29 in ICD-O-3.

Example: The pathology report says large cell carcinoma in situ. The ICD-O-3 lists large cell carcinoma as 8013/3; there is only a malignant listing. Change the /3 to /2 and code the histology and behavior code to 8013/2 as specified by the physician.

Synonyms for In situ

AIN III (C211)
Behavior code '2'
Bowen disease (not reportable for C440-C449)
Clark level I for melanoma (limited to epithelium)
Confined to epithelium
Hutchinson melanotic freckle, NOS (C44_)
Intracystic, non-infiltrating
Intraductal
Intraepidermal, NOS
Intraepithelial, NOS
Involvement up to, but not including the basement membrane
Lentigo maligna (C44_)
Lobular, noninfiltrating (C50_)
Noninfiltrating
Noninvasive
No stromal invasion/involvement
Papillary, noninfiltrating or intraductal
Precancerous melanosis (C44_)
Queyrat erythroplasia (C60_)
Stage 0 (except Paget's disease (8540/3) of breast and colon or rectal tumors confined to the lamina propria)
VAIN III (C529)
VIN III (C51_)

Grade, Differentiation or Cell Indicator

Item Length: 1
NAACCR Item #: 440
NAACCR Name: Grade

Grade, Differentiation (Codes 1, 2, 3, 4, 9)

Pathologic testing determines the grade, or degree of differentiation, of the tumor. For cancers, the grade is a measurement of how closely the tumor cells resemble the parent tissue (organ of origin). Well differentiated tumor cells closely resemble the tissue from the organ of origin. Poorly differentiated and undifferentiated tumor cells are disorganized and abnormal looking; they bear little or no resemblance to the tissue from the organ of origin.

Pathologists describe the tumor grade by levels of similarity. Pathologists may define the tumor by describing two levels of similarity (two-grade system which may be used for colon); by describing three levels of similarity (three-grade system); or by describing four levels of similarity (four-grade system). The four-grade system describes the tumor as grade I, grade II, grade III, and grade IV (also called well differentiated, moderately differentiated, poorly differentiated, and undifferentiated/anaplastic). These similarities/differences may be based on pattern (architecture), cytology, or nuclear features or a combination of these elements depending upon the grading system that is used. The information from this data item is useful for determining prognosis.

Cell Indicator (Codes 5, 6, 7, 8, 9)

Describes the lineage or phenotype of the cell that became malignant. Cell indicator codes apply to lymphomas and leukemias and for these diagnoses, cell indicator takes precedence over grade/differentiation.

See the ICD-O-3 chapter *Morphology* for further instructions on coding grade.

Codes

- 1 Grade I; grade i; grade 1; well differentiated; differentiated, NOS
- 2 Grade II; grade ii; grade 2; moderately differentiated; moderately well differentiated; intermediate differentiation
- 3 Grade III; grade iii, grade 3; poorly differentiated; dedifferentiated
- 4 Grade IV; grade iv; grade 4; undifferentiated; anaplastic
- 5 T-cell; T-precursor
- 6 B-Cell; Pre-B; B-precursor
- 7 Null cell; Non T-non B
- 8 NK cell (natural killer cell) (effective with diagnosis 1/1/1995 and after)
- 9 Grade/differentiations unknown, not stated, or not applicable

General Coding Rules

1. The site-specific coding guidelines in Appendix C also include rules for coding grade for the following primary sites: prostate, kidney, lymphoma, leukemia, astrocytoma, and sarcoma.
2. Code the grade from the final diagnosis in the pathology report. If there is more than one path report, and the grades in the final diagnoses differ, code the highest grade for the primary site from any pathology report.
3. If grade is not stated in the final pathology diagnosis, use the information in the microscopic section, addendum, or comment to code grade.
4. If more than one grade is recorded for a single tumor, code the highest grade, even if it is a focus.

Example: Pathology report reads: Grade II adenocarcinoma with a focus of undifferentiated adenocarcinoma. Code the tumor grade as grade 4.

5. Code the grade from the **primary tumor** only, never from a metastatic site or a recurrence.
6. Code the grade for all **unknown primaries** to 9 (unknown grade) unless grade is explicit by histology (i.e. anaplastic carcinoma (grade = 4).
7. Code the grade of the invasive component when the tumor has **both in situ** and **invasive** portions. If the **invasive** component **grade** is **unknown**, code the grade as unknown (9).
8. Code the information from the **consult** if the specimen is sent to a specialty pathology department for a consult.
9. If there are **multiple pathology consults**, ask the pathologist or physician advisor to determine which information should be used.
10. Do **not code** the grade assigned to **dysplasia**, i.e.: High grade dysplasia (adenocarcinoma in situ) would be coded to 9 (unknown grade).

Coding Grade for Cases without Pathology or Cytology Confirmation

Code the grade of tumor given on a Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET) report if there is no tissue diagnosis (pathology or cytology report). Use the MRI or PET grade only when there is no tissue diagnosis.

In situ Tumors

In situ tumors are not always graded. Code the grade if it is specified for an in situ lesion unless there is an invasive component. Do not code the in situ grade if the tumor has both in situ and invasive components.

Terminology Conversion Table

Terminology Conversion Table

Description	Grade	SEER Code
Differentiated, NOS	I	1
Well differentiated	I	1
Fairly well differentiated	II	2
Intermediate differentiation	II	2
Low grade	I-II	2
Mid differentiated	II	2
Moderately differentiated	II	2
Moderately well differentiated	II	2
Partially differentiated	II	2
Partially well differentiated	I-II	2
Relatively or generally well differentiated	II	2
Medium grade, intermediate grade	II-III	3
Moderately poorly differentiated	III	3
Moderately undifferentiated	III	3
Pleomorphic	III	3
Poorly differentiated	III	3
Relatively poorly differentiated	III	3
Relatively undifferentiated	III	3
Slightly differentiated	III	3
Dedifferentiated	III	3
High grade	III-IV	4
Undifferentiated, anaplastic, not differentiated	IV	4
Non-high grade		9

Two-Grade System

Some cancers are graded using a two-grade system, for an example, colon cancer. If the grade is listed as 1/2 or as low grade, assign code 2. If the grade is listed as 2/2 or as high grade, assign code 4.

Two-Grade Conversion Table

Grade	Differentiation / Description	SEER Code
1/2, I/II	Low grade	2
2/2, II/II	High grade	4

Three-Grade System

There are several sites for which a three-grade system is used, such as peritoneum, endometrium, fallopian tube, prostate, bladder and soft tissue sarcoma. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but simply divides the spectrum into 3 rather than 4 categories (see Three-Grade Conversion Table below). The expected outcome is more favorable for lower grades.

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the following table to convert the grade to SEER codes:

Three-Grade Conversion Table*

Grade	Differentiation / Description	SEER Code
1/3, I/III	Low grade	2
2/3, II/III	Intermediate grade	3
3/3, III/III	High grade	4

Do not use for breast primaries

Breast Cancer

Priority Order for Coding Breast Cancer Grade

Code grade in the following priority order:

1. Bloom-Richardson scores 3-9 converted to grade (See following table)
2. Bloom Richardson grade (low, intermediate, high)
3. Nuclear grade only
4. Terminology
 - a. Differentiation (well differentiated, moderately differentiated, etc).
5. Histologic grade
 - a. Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv

Breast Grading Conversion Table

BR Scores	BR Grade	Nuclear Grade	Terminology	Histologic Grade	SEER Code
3-5	Low	1/3; 1/2	Well differentiated	I/III; 1/3	1
6, 7	Intermediate	2/3	Moderately differentiated	II/III; 2/3	2
8, 9	High	2/2; 3/3	Poorly differentiated	III/III; 3/3	3

Bloom-Richardson (BR)

1. **BR may also be called:** modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade
2. BR may be expressed in **scores** (range 3-9)
3. The score is based on three morphologic features of “invasive no-special-type” breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells).
4. Use the Breast Grading Conversion Table to convert the score, grade or term into the SEER code
5. BR may be expressed as a **grade** (low, intermediate, high)
6. BR grade is derived from the BR score. Note that the conversion of low, intermediate, and high for breast is different from the conversion used for all other tumors.

Kidney Cancer

Priority Order for Coding Kidney Cancer Grade

Code grade in the following priority order:

1. Fuhrman's grade
2. Nuclear grade
3. Terminology (well diff, mod diff)
4. Histologic grade (grade 1, grade 2)

These prioritization rules do not apply to Wilms tumor (8960). Use the general rules for coding grade for Wilms tumor.

Prostate

Priority Rules for Coding Prostate Cancer Grade

Code grade in the following priority order:

1. Gleason's grade (Use the table to convert Gleason's grade information into the appropriate code)
2. Terminology
 - a. Differentiation (well differentiated, moderately differentiated, etc.)
3. Histologic grade
 - a. Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv
4. Nuclear grade only

Gleason's Pattern

Prostate cancers are commonly graded using Gleason's score or pattern. Gleason's grading is based on a 5-component system, meaning it is based on 5 histologic patterns. The pathologist will evaluate the primary (majority) and secondary patterns for the tumor. The pattern is written as a range, with the majority pattern appearing first and the secondary pattern as the last number

Example: A Gleason pattern of 2 + 4 means that the primary pattern is 2 and the secondary pattern is 4.

Gleason's Score

The patterns are added together to create a score.

Example: If the pattern is 2 + 4, the pattern score is 6 (the sum of 2 and 4).

1. If the pathology report contains only **one number**, and that number is **less than or equal to 5**, it is a pattern.
2. If the pathology report contains only **one number**, and that number is **greater than 5**, it is a score.
3. If the pathology report specifies a specific **number out of a total of 10**, the first number given is the score.

Example: The pathology report says "Gleason's 3/10". The Gleason's score would be 3.

4. If there are **two numbers other than 10**, assume they refer to two patterns. The first number is the primary pattern and the second is the secondary pattern.

Example: If the pathology report says "Gleason's 3 + 5," the Gleason's score would be 8, the sum of 3 and 5.

Use the following table to convert Gleason's pattern or score into SEER codes:

Gleason Conversion Table

Gleason's Score	Gleason's Pattern	Histologic Grade	Terminology	SEER Code
2, 3, 4	1, 2	I	Well differentiated	1
5, 6	3	II	Moderately differentiated	2
7, 8, 9, 10	4, 5	III	Poorly differentiated	3

Note: Gleason's score 7 was previously coded to moderately differentiated (2). Effective with cases diagnosed 1/1/2003, Gleason's score 7 is coded to poorly differentiated (3).

Astrocytoma

Grade astrocytomas according to ICD-O-3 rules

1. Do not use the **WHO grade** to code this field.
2. Do not automatically code **glioblastoma multiforme** as grade IV. If no grade is given, code unknown, 9.
3. If **no grade** is given, code unknown, 9.

Lymphoma and Leukemia

1. Do not use the terms “high grade,” “low grade,” and “intermediate grade” to code differentiation. These terms refer to histology, not grade.
2. The designation of T-cell, B-cell, null cell, or NK cell has **precedence** over any statement of differentiation.
 - a. Code ANY statement of **T-cell, B-cell, null cell, or NK cell**:

T-cell (code 5)

Cortical T
Mature T
Pre-T
Pro-T
T-cell phenotype
T-precursor

B-Cell (code 6)

B-cell phenotype
B-precursor
Pre-B
Pre-pre-B
Pro-B

Null-Cell; Non-T-non-B (code 7)

Null-cell
Non T-non-B
Common cell

NK (Natural Killer) cell (code 8)

NK/T cell

Cell type not determined, not stated or not applicable (code 9)

Combined B cell and T cell

- b. Use any source to code information on cell type whether or not marker studies are documented in the patient record.

Example: The history portion of the medical record documents that the patient has a T-cell lymphoma. There are no marker studies on the chart. Code the grade as T-cell.

Sarcoma

If sarcomas are graded low, intermediate or high grade by the pathologist use the three-grade system table.

ICD-O-2 Conversion Flag

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

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

Codes

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

ICD-O-3 Conversion Flag

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

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

Codes

- 0 Morphology (Morph--Type&Behav ICD-O-3 originally coded in ICD-O-3
- 1 Morphology (Morph--Type&Behav ICD-O-3 converted from (Morph--Type&Behav ICD-O-2 without review
- 3 Morphology (Morph--Type&Behav ICD-O-3 converted from (Morph--Type&Behav ICD-O-2 with review
- Blank Not converted

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SECTION V
COLLABORATIVE STAGING AND CODING INSTRUCTIONS
From version 1.0

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INTRODUCTION

The Collaborative Staging System is a carefully selected set of data items that describe how far a cancer has spread at the time of diagnosis. Most of the data items have traditionally been collected by cancer registries, including tumor size, extension, lymph node status, and metastatic status. New items were created to collect information necessary for the conversion algorithms, including the evaluation fields that describe how the collected data were determined, and site/histology-specific factors that are necessary to derive the final stage grouping for certain primary cancers. In addition to the items coded by the registrar, this unified data set also includes several data items derived from the computer algorithms that classify each case in multiple staging systems: the sixth edition of the AJCC TNM system (TNM), Summary Stage 1977 (SS77), and SEER Summary Stage 2000 (SS2000).

AJCC TNM staging provides forward flexibility and clinical utility for individual cancer cases. TNM is dynamic and is changed periodically to meet the decision-making needs of clinicians regarding appropriate treatment methods and the evaluation of their results. The AJCC TNM staging system uses three basic descriptors that are then grouped into stage categories. The first component is “T,” which describes the extent of the primary tumor. The next component is “N,” which describes the absence or presence and extent of regional lymph node metastasis. The third component is “M,” which describes the absence or presence of distant metastasis. The final stage groupings (determined by the different permutations of “T,” “N,” and “M”) range from Stage 0 through Stage IV. The stage group is generated when specific criteria are met in the TNM system, for example, prostate cancer stage grouping will only be generated for adenocarcinomas. When a case does not meet the criteria for stage grouping, the result will be reported as Not Applicable. An example of this type of case is leiomyosarcoma of the uterus, which is specifically excluded from TNM staging in both the uterus and the soft tissue sarcoma chapter. The Collaborative Staging System is based on, and compatible with, the terminology and staging in the sixth edition of the *AJCC Cancer Staging Manual*,¹ published in 2002. The general rules of the TNM system have been incorporated into the general rules for Collaborative Staging.

Summary Staging provides a measure for cancer surveillance with longitudinal stability for population-based cancer registries. Summary staging is a single digit system and has only eight categories: in situ, local, regional to lymph nodes, regional by direct extension, both regional lymph nodes and regional extension, regional not otherwise specified, distant, and unknown. It is less complex than other staging systems and was developed for registrars and epidemiologists who want some information on stage but did not wish to collect the more detailed EOD or TNM system. Summary Staging can be useful when a series of cases is so small that only general categories produce enough data for meaningful analysis. The version of Summary Staging commonly used dates from 1977²; the site-specific sections were revised and updated in a new edition published in 2001³.

The Collaborative Staging System uses a modified EOD format to collect information about each case. The SEER Extent of Disease (EOD)⁴ coding system provided longitudinal stability for epidemiological and cancer control studies. More detailed than the Summary Staging System, EOD was developed to assure consistency over time as other staging systems changed. EOD also allows collected data to be collapsed into different and previous staging systems. SEER EOD is a five-field, 10 digit system: tumor size (3 digits), extension of the primary tumor (2 digits), regional lymph node involvement (highest specific lymph node chain involved by tumor) (1 digit), the number of pathologically reviewed regional lymph nodes that are positive (2 digits), and the number of pathologically examined regional lymph nodes (2 digits).

CHANGES IN ABSTRACTING RULES

Note: This introductory discussion refers to schemas based on primary site when in fact some schemas, such as melanoma and lymphoma, are based on histologic type. The schemas are referred to as site-specific for the sake of brevity.

Agreement among the participating organizations has resulted in resolution of the rule for timing of data collection and the development of standardized coding rules so that a single format can be used to collect stage information. The timing rule effective 1/1/2004 for Collaborative Staging is: “use all information gathered through completion of surgery(ies) in first course of treatment, or all information available within four months of the date of diagnosis in the absence of disease progression, whichever is *longer*.” This timing rule change allows the CS Data Set to derive a “best stage” using pathologic data supplemented by clinical data.

Disease progression is defined as further direct extension or distant metastasis known to have developed after the diagnosis was established. Information about tumor extension, lymph node involvement, or distant metastasis obtained after disease progression is documented should be excluded from the Collaborative Staging fields. Collaborative Staging represents the aggregate information obtained during the period of diagnosis and work-up, not just the initial contact with the patient. For example, within the limits of the timing rule, if further diagnostic tests show more precise extension or a more precise tumor size, this revised information is not considered disease progression. In other words, Collaborative Staging does not consider as disease progression a change from lack of evidence of disease (status unknown) to known status of disease (negative or positive). However, a change from negative status to positive, is disease progression. Take, for example, an asymptomatic patient who is treated surgically. She then develops bone pain and is found to have osseous metastases within a few weeks of surgery. This would be considered disease progression because she was asymptomatic at the time her treatment decisions were made. Furthermore, if the treatment plan is discontinued or changed due to a revised disease status, this is progression of disease and collection of Collaborative Staging information stops at this point.

Other rule modifications have been made and are printed in the site/histology-specific chapters.

In the process of bringing together the principles of Summary Stage, the TNM categories and stage groupings, and the SEER Extent of Disease coding structure, the Collaborative Staging System has also attempted to update abstracting rules to deal with the contemporary health care environment, in which completeness of staging documentation in the medical record has become an issue. In many circumstances, a patient's insurance will not pay for an imaging study or lab test that is expected to be negative but may otherwise be considered part of an ‘ideal’ cancer staging workup. Similarly, the content of clinician notes has changed over time to simply report any symptomatic, suspicious, or involved areas rather than chronicle every body part that is normal. This change in documentation is a source of frustration to data collectors who rely on statements of normalcy or negativity to establish the boundaries of how far the cancer has spread.

When clinical practice changes and data collection guidelines do not, the completeness of the data is affected. The implementation of the Collaborative Staging System introduces a paradigm shift in the collection of information documenting the extent of disease, particularly in the collection of information about regional lymph nodes or distant metastases for primary sites not easily examined by palpation, observation, physical examination, or other clinical methods. These ‘inaccessible’ primary sites include (but are not limited to) bladder, kidney, prostate, esophagus, stomach, lung, liver, corpus uteri, and ovary.

The Collaborative Staging System allows data collectors to record regional lymph nodes as negative (based on clinical evaluation) rather than unknown when there is no mention of regional lymph node involvement in the physical examination, pre-treatment diagnostic testing or surgical exploration, and the

patient receives what would be usual treatment to the primary site (treatment appropriate to the stage of disease as determined by the physician). The basis for this shift in the approach to information missing from the medical record is that typically the clinician reports positive findings and tends to remain silent on some or all negative findings. This new coding guideline also allows data collectors to record distant metastasis clinically as none rather than unknown (again, based on clinical evaluation) when the clinician proceeds with usual treatment of the primary site, since this action presumes the absence of distant metastasis that would otherwise change the treatment approach.

These guidelines apply primarily to localized or early (T1, T2) stage in the TNM system for inaccessible primary sites such as those mentioned previously. The code(s) for unknown information can and should be used in situations where there is reasonable doubt that the tumor is no longer localized. An example would be when there is clinical evidence that a prostate cancer has penetrated through the capsule into the surrounding tissues (regional direct extension/T3a) and regional lymph node involvement is not mentioned.

By coding regional lymph nodes as negative and/or coding distant metastasis as none rather than coding these fields as unknown, the Collaborative Staging System computer algorithms will be able to derive a stage group that includes the best information.

For accessible primary sites that can be observed, palpated or examined without instruments, such as breast, oral cavity, skin, salivary gland, thyroid, and other organs, there should be some description of the regional lymph nodes. A statement such as "remainder of examination negative" is sufficient to code regional lymph nodes as clinically negative.

In summary, the developers of the CS model believe that it will improve the quality of data being collected by the cancer registry community. Uniform rules and standardized training will make it easier for cancer registry personnel to complete staging tasks.

HOW THE COLLABORATIVE STAGING SYSTEM WORKS

For each cancer case, the data collector determines the site of origin or general histology for the cancer. The data items specific to that cancer site/histology are extracted from the medical record and coded in the Collaborative Staging System fields. When data collection is complete, the data collector activates the computer algorithms to derive the values for the items in the TNM system and Summary Stage (both 1977 and 2000). These algorithms are provided in portable platform-independent form by the Task Force. The classification or stage of each tumor is actually determined by the computer in a consistent and accurate manner (see Mapping and the Computer Algorithm, below).

Table 1 lists the individual Collaborative Staging data items, both input and derived, together with their NAACCR item number, length and other information, as published in the NAACCR Standards Volume II Version 10.1, Chapter X, Data Descriptor Table (revised November 2003).

MAPPING AND THE COMPUTER ALGORITHM

Once the data collector has coded all of the Collaborative Staging System elements for a case (the input values), the coded values are passed to a computer program that generates the correct stage for the case in three systems: AJCC TNM, 6th edition; SEER Summary Stage 1977; and SEER Summary Stage 2000. The program returns a set of values for the set of output items included in Table 1.

The output values are returned as a set of numeric codes designed for storage in the computerized abstract. Each of the numeric codes is also provided with a display value, or English language character string showing the meaning of the code. For example, a returned value of 12 for T means T1a, and a 15 means T1b.

The computer algorithm that generates the stages is based on the values in the mapping columns for each of the Collaborative Staging System data elements. Mapping is provided from each code to the appropriate category in TNM and each summary stage. Some schemas require reference to two or more tables to determine the appropriate category. The mapping column either contains the category or a pointer to a further table where the category can be determined. Once each of the categories is determined, a further step is performed to generate the final stage groups. Although the data collector does not code the stage groups directly, the rules by which the stages are derived are explicit in all of the tables, and the logic that the computer program follows should be fully evident from the tables available to the data collector.

As part of the output of the CS algorithm, two additional fields should be stored by the computer in the CS data base: CS Version 1st and CS Version Latest. CS Version 1st is the number of the version initially used to code CS fields and may be updated if cases are recoded, for example for a special study, using a later version of the Collaborative Staging manual. Depending on the structure of the registry software, CS Version 1st could be stored automatically by the computer or entered manually by the abstractor. The meaning and interpretation of CS Version 1st will be dependent on vendor implementation and local practices. This field should be interpreted with caution in a dataset where the actual coding procedures are unknown. CS Version Latest is the number of the version of the CS algorithm used most recently to derive the CS output fields and should be updated by the computer (rather than manually) every time the CS Derived items are re-computed.

Table 1. Allowable Values and Format for Collaborative Staging Data Items

INPUT ITEMS						
Data Item Name	NAACCR Data Item Number	Character Length	Allowable Values (site-specific unless otherwise stated)	Right Justified, Zero filled	Blanks: Yes or No	NAACCR Ver 10.1 Column #
CS Tumor Size	2800	3	000-999	Yes	No	629-631
CS Extension	2810	2	00-99	Yes	No	632-633
CS Tumor Size/Ext Eval	2820	1	0-9	N/A	No	634-634
CS Lymph Nodes	2830	2	00-99	Yes	No	635-636
CS Reg Nodes Eval	2840	1	0-9	N/A	No	637-637
Regional Nodes Examined	830	2	00-90, 95, 96, 97, 98, 99 (all sites)	Yes	No	541-542
Regional Nodes Positive	820	2	00-90, 95, 97, 98, 99 (all sites)	Yes	No	539-540
CS Mets At Dx	2850	2	00-99	Yes	No	638-639
CS Mets Eval	2860	1	0-9	N/A	No	640-640
CS Site-Specific Factor 1	2880	3	000-999	Yes	No	641-643
CS Site-Specific Factor 2	2890	3	000-999	Yes	No	644-646
CS Site-Specific Factor 3	2900	3	000-999	Yes	No	647-649
CS Site-Specific Factor 4	2910	3	000-999	Yes	No	650-652
CS Site-Specific Factor 5	2920	3	000-999	Yes	No	635-655
CS Site-Specific Factor 6	2930	3	000-999	Yes	No	656-658

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Table 1 continued. Allowable Values and Format for Collaborative Staging Data Items

OUTPUT ITEMS						
Data Item Name	NAACCR Data Item Number	Character Length	Allowable Values	Right Justified, Zero filled	Blanks: Yes or No	NAACCR Ver 10.1 Column #
Derived AJCC T	2940	2	00, 01, 05, 06, 07, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 29, 30, 31, 32, 33, 39, 40, 41, 42, 43, 44, 49, 88, 99	N/A	N/A	659-660
Derived AJCC N	2960	2	00, 01, 02, 03, 04, 09, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 29, 30, 31, 32, 33, 39, 88, 99	N/A	N/A	662-663
Derived AJCC M	2980	2	00, 10, 11, 12, 13, 19, 88, 99	N/A	N/A	665-666
Derived AJCC T Descriptor	2950	1	c, p, a, y	N/A	N/A	661-661
Derived AJCC N Descriptor	2970	1	c, p, a, y	N/A	N/A	664-664
Derived AJCC M Descriptor	2990	1	c, p, a, y	N/A	N/A	667-667
Derived AJCC Stage Group	3000	2	00, 01, 02, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 70, 71, 72, 73, 74, 88, 90, 99	N/A	N/A	668-669
Derived AJCC Flag	3030	1	Blank, 1, 2	N/A	Yes	672-672
Derived SS1977	3010	1	Blank, 0, 1, 2, 3, 4, 5, 7, 8, 9	N/A	Yes	670-670

Derived SS1977 Flag	3040	1	Blank, 1, 2	N/A	Yes	673-673
Derived SS2000	3020	1	Blank, 0, 1, 2, 3, 4, 5, 7, 8, 9	N/A	Yes	671-671
Derived SS2000 Flag	3050	1	Blank, 1, 2	N/A	Yes	674-674
CS Version 1 st	2935	6	000000-999999	N/A	No	705-710
CS Version Latest	2936	6	000000-999999	N/A	No	711-716

HOW MAPPING WAS DETERMINED

The Collaborative Staging Task Force based its codes for the extension, lymph nodes, and metastases fields on SEER's Extent of Disease, which had been designed to accommodate collapsing into TNM 3rd edition and the SEER Summary Stages. Some fundamental restructuring of the EOD codes was necessary to accommodate the sixth edition of TNM with its greater detail and supplementary prognostic information. For example, in EOD, all lymph node involvement (regional and distant) was coded in the lymph nodes field. In Collaborative Staging, regional lymph node involvement is coded in the CS lymph node field, and distant lymph node involvement is coded with other distant metastases. In each table, codes were added or combined where necessary to accommodate the 6th edition of TNM. The following rules and procedures were used to determine the correct mapping to TNM 6th edition:

- Downstaging rule.** The Collaborative Staging Task Force applied the stated rule from the AJCC manual, "If there is doubt concerning the T, N, or M classification to which a particular case should be assigned, then the lower (less advanced) category should be assigned." When a mapping could be made to more than one classification, for example, T1 or T2, the mapping was always made to the lower or less extensive category. Occasionally this rule did not seem to apply, for example, when a lower category seemed to provide an exclusive list, while the higher category was more general. The downstaging rule was not applied to the assignment of stage group, only to the assignment of T, N, and M classification.
- Use of NOS.** The Collaborative Staging Task Force added NOS (not otherwise specified) to some of its T, N, M, and stage group categories for clarity and ease of processing. The NOS is added when a further breakdown of the T, N, and M permutations into subsets is available, but the correct subset cannot be determined. NOS can appear in both the descriptions of codes and the mapping. This NOS terminology is not official AJCC usage. The NOS can safely be ignored in reports and analyses when it is not a useful distinction. In addition, the data collector should only code to a category such as "Stated as T1 NOS" when the appropriate subset (e.g., T1a or T1b) cannot be determined.

Example. For glottic larynx, T1 means "Tumor limited to the vocal cord(s) . . ." T1a means tumor limited to one vocal cord, and T1b means tumor involves both vocal cords. In Collaborative Staging, the subgroup of T1 NOS is designated for use when the tumor is known to be limited to the vocal cords, but it cannot be determined whether one or both cords are involved. In Collaborative Staging, the category T1 would be used to mean all of the T1's, including the T1a's, T1b's, and T1 NOS's.

REFERENCES

1. Greene FL, Page DL, Fleming ID et al. *AJCC Cancer Staging Manual, sixth edition*. American Joint Committee on Cancer. New York: Springer-Verlag, 2002.
2. Shambaugh EM and Weiss MA. SEER Summary Staging Guide 1977. Bethesda, MD: National Cancer Institute, NIH Publication Number 98-2313, reprinted December 1997.
3. Young JL, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (eds). *Summary Staging Manual 2000: Codes and Coding Instructions*. Bethesda, MD: National Cancer Institute, NIH Publication Number 01-4969, 2001
4. Fritz AG and Ries LAG (eds). *SEER Extent of Disease Coding, 1998: Codes and Coding Instructions, Third Edition*. Bethesda, MD: National Cancer Institute, NIH Publication Number 98-1999, April 1999

GENERAL INSTRUCTIONS FOR USING THE COLLABORATIVE STAGING SYSTEM CODES AND CODING INSTRUCTIONS

The Collaborative Staging System schemas consist of the 15 data fields necessary to derive T, N, M, and Stage Group according to the sixth edition of the *AJCC Cancer Staging Manual*; Summary Stage 1977; and SEER Summary Stage 2000.

This manual provides codes and coding instructions for the process of data entry. In order to derive the desired T, N, M, and Stage Group in the TNM system or the Summary Stage(s), the computer algorithms described in the introduction must be used. This manual provides the logic of the computer algorithms in table format for each schema, but is not intended to be used for generating the stages manually, because for some sites, additional tables are necessary to determine T, N, M, or Stage Group. These additional tables are available for review on the Collaborative Staging web site, <http://www.cancerstaging.org>

These schemas apply to cases diagnosed January 1, 2004 and later. **Do NOT use these schemas for cases diagnosed prior to January 1, 2004**; cases diagnosed prior to 01/01/2004 should be coded to whatever coding system was in effect at the time of diagnosis.

GENERAL GUIDELINES

Note: These general instructions refer to schemas based on primary site when, in fact, some schemas, such as melanoma and lymphoma, are based on histologic type. The schemas are referred to as site-specific for the sake of brevity.

1. Collaborative Staging is collected on all cases regardless of whether they are microscopically confirmed. A description of the type of diagnostic confirmation is collected in a separate data item. The diagnostic confirmation field can be used to exclude non-microscopically confirmed cases during analysis as necessary, since the *AJCC Cancer Staging Manual* states that “all cases should be microscopically confirmed. Cases not microscopically confirmed should be coded from the schema for the site/histology the clinician considers most likely to be the primary.”
2. Collaborative Staging is collected on all sites/histologies. Summary Stage 1977 and Summary Stage 2000 are generated for all sites and histologies. The TNM elements and stage group are only generated for cases that meet the TNM criteria. For example, there is no TNM schema for brain.
 - a. The Collaborative Staging System consists of 94 schemas, most of which are site-specific. Some malignancies that can develop in many parts of the body are coded according to the histology of the case. For example, all lymphomas are coded according to the lymphoma schema, regardless of the organ in which the lymphoma develops.
3. All schemas apply to all histologies unless otherwise noted. Summary Stage 1977 and Summary Stage 2000 are generated for all histologies. The computer algorithms for determining the final TNM stage group take into account any histologies that are excluded from TNM staging. For example, the TNM schema for prostate applies only to adenocarcinomas. For excluded histologies, the computer algorithm returns values representing “Not Applicable,” meaning that AJCC T, N, M, and Stage Group are not generated for that site-histology combination.

4. **Timing of Data Collection:** The data collected in the Collaborative Staging System are limited to
 - information gathered through completion of surgery(ies) in first course of treatment, OR
 - all information available within four months of the date of diagnosis in the absence of disease progression (metastasis known to have developed after the diagnosis was established should be excluded)
 - whichever is *longer*.
5. Site-specific and histology-specific guidelines take precedence over general guidelines. Always read the notes pertaining to a specific site or histology schema.
6. For each field, code the highest applicable number. (Exception: codes for Unknown, Not Applicable, and NOS categories such as Localized, NOS do not take priority over more specific codes with lower numbers.) The codes are ordered in a hierarchy so that increasing numbers generally indicate increasing degrees of tumor involvement. The hierarchies are not the same for the different staging systems, and Collaborative Staging generally follows the hierarchies of the TNM system.
 - a. Combination codes (for example, code 35 for “25 plus 30”) have been assigned when using the higher number does not result in the appropriate mapping for all three stage groups. Combination codes have been omitted when use of a higher number results in correct mapping for all three staging systems.
7. For the fields CS Tumor Size, CS Extension, CS Lymph Nodes, and CS Mets at DX, Collaborative Staging records the greatest extent of disease based on combined clinical and operative/pathological assessment.
 - a. Gross observations at surgery are particularly important when all malignant tissue is not removed. In the event of a discrepancy between pathology and operative reports concerning excised tissue, priority is given to the pathology report.
 - b. Clinical information, such as a description of skin involvement for breast cancer and size of the primary lesion and distant lymph nodes for any site, can change the stage. Clinical information should be reviewed carefully to assure accurate recording of the Collaborative Staging data set.
8. When the patient does not receive preoperative treatment and the operative/pathology information disproves the clinical information, code the operative/pathology information.
9. When the patient does receive preoperative treatment, the greatest extent of disease prior to the beginning of treatment should be recorded. Preoperative, or neoadjuvant, treatment is defined as systemic (chemotherapy, hormone therapy, or immunotherapy) treatment or radiation therapy that is administered as an attempt to shrink the tumor, improve resectability, or control symptoms before the patient undergoes surgery. In the infrequent situation where post-operative disease is more extensive despite neoadjuvant treatment, this can be coded in the method of evaluation field for extension, regional lymph nodes or metastases at diagnosis.
10. The fields Reg LN Pos and Reg LN Exam are based on pathologic (microscopic) information only.
11. The fields CS Tumor Size/Ext Eval, CS Reg Nodes Eval, and CS Mets Eval document how the most extensive tumor was established as well as whether the patient received preoperative treatment.
12. Site-Specific Factors (SSFs) are included in every schema. They are incorporated into the staging algorithms when additional information is necessary to derive tumor (T), lymph node (N), metastasis (M), or TNM stage group, or where the factor is considered to be of clinical or prognostic importance.

Information formerly coded as tumor markers, such as estrogen receptor assay or progesterone receptor assay for breast, is coded in site-specific factors. For sites/histologies where some or all site specific factors are not used, they are coded 888, not applicable. Table 2 lists the schemas that require one or more Site Specific Factors.

Table 2. Site Specific Factors Used For Primary Site/Histology Schemas

SSF	Sites/histologies where used		
1	head and neck* colon rectum liver pleura melanoma	mycosis breast ovary placenta prostate testis melanoma/conjunctiva melanoma/choroid	fungoides melanoma/iris and ciliary body retinoblastoma brain other cns thyroid other endocrine Kaposi sarcoma lymphoma
2	head and neck*, liver, melanoma, breast, prostate, testis, lymphoma		
3	head and neck*, melanoma, breast, prostate, testis, lymphoma		
4	head and neck*, melanoma, breast, prostate, testis		
5	head and neck*, breast, prostate, testis		
6	head and neck*, breast, prostate		

* head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

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13. Metastasis known to have developed after the initial extent of disease was established (in other words, disease progression) should be excluded when determining the farthest extent of disease at the time of diagnosis.
 14. Autopsy reports are used in coding the Collaborative Staging System in the same way as are pathology reports, applying the same rules for inclusion and exclusion.
 15. The extent of disease may be described only in terms of T (tumor), N (node), and M (metastasis) characteristics. In such cases, assign the code in the appropriate field that corresponds to the TNM information. If there is a discrepancy between documentation in the medical record and the physician's assignment of TNM, the documentation takes precedence. Cases of this type should be discussed with the physician who assigned the TNM.

STRUCTURE AND FORMAT OF SITE/HISTOLOGY-SPECIFIC CODE SCHEMAS

The schemas in this manual are listed according to the order of the first ICD-O-3 primary site code to which a schema applies. Schemas for which there is no TNM classification are included in ICD-O-3 sequence in the manual. Some of the histology-based schemas appear in site code order (for example, melanoma of the skin is with other skin schemas), and others are at the end of the list. Two indices to the schemas are provided at the end of this manual, one by ICD-O-3 code and the other by common primary site and histology terms.

Within the schemas themselves, the code structures for the various organs, lymph nodes, and other tissues are organized according to the T, N, and M categories (T1, then T2, then T3, for example). As such, they may not be sequential for Summary Stage definitions. Regardless of the relative order of the codes in the schemas, the staging algorithms will properly account for the information.

The categories of TNM are the basis for the CS Extension, CS Lymph Nodes and CS Mets at DX fields. Tissues categorized under T in the TNM system are listed in CS Extension and tissues categorized under M are listed in the CS Mets at DX field. However, for the Summary Staging (1977 and/or 2000) algorithms, there may be codes in the CS Extension field that map to regional direct extension or distant stage, and there may be codes in CS Mets at DX that map to regional or even localized disease. The details of the case should be coded in the fields where they are listed; the computer algorithm is designed to generate the correct stage. It should also be noted that information in fields other than CS Extension may be used to derive the T, N, M and Stage Group, for example tumor size and various site-specific factors.

CODING “NONE” VS. “UNKNOWN” IN THE COLLABORATIVE STAGING SYSTEM, TNM AND SUMMARY STAGE

As noted in the introduction, cancers of certain primary sites are not easily examined by palpation, observation, physical examination, or other clinical methods. These ‘inaccessible’ primary sites include, but are not limited to, bladder, kidney, prostate, esophagus, stomach, lung, liver, corpus uteri and ovary.

A new coding rule in the Collaborative Staging System applies to these inaccessible sites, primarily for localized or early (T1, T2) stage cancers. The Collaborative Staging System allows data collectors to record regional lymph nodes as negative (based on clinical evaluation) rather than unknown when there is no mention of regional lymph node involvement in the physical examination, pre-treatment diagnostic testing or surgical exploration, and the patient receives what would be usual treatment to the primary site (treatment appropriate to the stage of disease as determined by the physician).

This new coding guideline also permits data collectors to record distant metastasis clinically as none rather than unknown (again, based on clinical evaluation) when the clinician proceeds with usual treatment of the primary site, since this action presumes that there are no distant metastases that would otherwise change the treatment approach.

The code(s) for unknown information can and should be used in situations where there is reasonable doubt that the tumor is no longer localized. For example, when there is clinical evidence that a prostate cancer has penetrated through the capsule into the surrounding tissues (regional direct extension/T3a) and regional lymph node involvement is not mentioned, it would be correct to code lymph node involvement and metastases at diagnosis as unknown in the absence of any specific information regarding nodes or distant metastases.

For accessible primary sites that can be observed, palpated or examined without instruments, such as breast, oral cavity, skin, salivary gland, thyroid, and other organs, there should be some description of the regional lymph node status. A statement such as “remainder of examination negative” is sufficient to code regional lymph nodes as clinically negative.

CHOOSING THE CORRECT CODING SCHEMA FOR A CASE

Most of the Collaborative Staging System schemas apply to cases defined by their primary site codes in ICD-O-3. A few of the schemas apply to cases defined by their histologic type codes in ICD-O-3, and these schemas take precedence over the schema for the site. The histologically defined schemas are shown in Table 3.

TABLE 3. HISTOLOGY-SPECIFIC CODING SCHEMAS

Melanoma (ICD-O-3 morphology codes 8720-8790)

Kaposi sarcoma (9140)

Retinoblastoma (9510-9514)

Lymphoma (9590-9699 and 9702-9729)

Mycosis Fungoides (9700-9701)

Hematopoietic and reticuloendothelial system (9731-9989)

A case with one of these ICD-O-3 histologic types must be coded using the schema for the histologic type group.

Melanomas are further broken down by primary site code, as follows:

Malignant melanoma of the skin, vulva, penis and scrotum (C44.0-C44.9, C51.0-C51.2, C51.8-C51.9, C60.0-C60.1, C60.8-C60.9, C63.2)

Malignant melanoma of conjunctiva (C69.0)

Malignant melanoma of iris and ciliary body (C69.4)

Malignant melanoma of choroid (C69.3)

Malignant melanoma of other eye (C69.1, C69.2, C69.5, C69.8-C69.9)

For cases with all other histologic types, the correct schema to use is determined by the primary site code.

Each schema clearly states the applicable primary site codes and histologic type codes at the beginning of the schema.

Note: The appropriate site or histology schema to use for coding surgical treatment(s) may be different from the site or histology schema used for coding the Collaborative Staging data set. For example, an extralymphatic lymphoma of the stomach treated surgically would use the lymphoma schema in this manual to code Collaborative Staging, but surgery would be coded using the stomach codes for surgery of primary site. Refer to the treatment coding rules in the SEER Program coding manual or the FORDS manual for more details.

SCHEMAS WHERE TUMOR SIZE IS NECESSARY FOR AJCC STAGING

In order to classify the T category for certain sites/histologies, it is necessary to know the size of the primary tumor, usually for T1 - T3. For the following sites/histologies, the size of the primary tumor must be recorded in order to assign the T category and derive a stage group. Tumor size is not necessary

to assign Summary Stage. The name of the Collaborative Staging schema and its website file name (shown in parentheses) are double indented under the **TNM chapter** and *subsite* names. (See Table 4.)

Table 4. Schemas Where Tumor Size Is Necessary For AJCC Staging

Lip and oral cavity

Lip

Upper Lip (LipUpper)

Lower Lip (LipLower)

Other Lip (OthLip)

Oral Cavity

Anterior Tongue (AntTongue)

Upper Gum (GumUpper)

Lower Gum (GumLower)

Other Gum (OthGum)

Floor of Mouth (FOM)

Hard Palate (HardPalate)

Buccal Mucosa (BuccalMucosa)

Other Mouth (OthMouth)

Pharynx

Oropharynx

Oropharynx (Oropharynx)

Base of Tongue (BaseTongue)

Soft Palate (SoftPalate)

Hypopharynx

Hypopharynx (Hypopharynx)

Major Salivary Glands

Parotid Gland (ParotidGland)

Submandibular Gland

(SubmandibularGland)

Other Salivary Gland (OthSalivary)

Thyroid

Thyroid (Thyroid)

Anal Canal

Anus (Anus)

Liver including Intrahepatic Bile Ducts

Liver and intrahepatic bile ducts (Liver)

Exocrine Pancreas

Pancreas Head (PancreasHead)

Pancreas Body and Tail

(PancreasBodyTail)

Other Pancreas (OthPancreas)

Lung

Lung (Lung)

Bone

Bone (Bone)

Soft tissue sarcoma

Heart and Mediastinum

(HeartMediastinum)

Soft Tissue (SoftTissue)

Peritoneum (Peritoneum)

Carcinoma of the Skin

Skin, Vulva, Penis, Scrotum–Carcinoma

(Skin)

Carcinoma of the Eyelid

Skin of Eyelid–Carcinoma (SkinEyelid)

Breast

Breast (Breast)

Vulva

Vulva (Vulva)

Cervix Uteri

Cervix (Cervix)

Kidney

Kidney (Kidney)

Carcinoma of the Conjunctiva

Conjunctiva–Carcinoma (Conjunctiva)

Malignant Melanoma of the Uvea

Iris and Ciliary Body–Melanoma ciliary
body only) (MelanomaIrisCiliary)

Choroid–Melanoma Melanoma Choroid)

Carcinoma of the Lacrimal Gland

Lacrimal gland–Carcinoma
(LacrimalGland)

Sarcoma of the Orbit

Orbit (Orbit)

SCHEMAS THAT DO NOT USE TUMOR SIZE FOR AJCC STAGING

In order to classify both summary stage and the AJCC T category for certain sites/histologies, it is necessary to know how far the tumor has extended in a contiguous, continuous or direct manner from its point of origin. For the following sites/histologies, the extension of the primary tumor must be recorded in order to assign the T category and derive a stage group. The name of the Collaborative Staging schema and its website file name (in parentheses) are double indented under the **TNM chapter** and *subsite* names. (See Table 5.)

Table 5. Schemas That Do Not Use Tumor Size For AJCC Staging

Pharynx	Extrahepatic bile ducts
Nasopharynx	Extrahepatic bile ducts
Nasopharynx (Nasopharynx)	(ExtraHepaticDucts)
Other Larynx (OthLarynx)	Other Biliary and Biliary, NOS
Glottic Larynx	(OthBiliary)
Glottic Larynx (GlotticLarynx)	Ampulla of Vater
Supraglottic Larynx	Ampulla (Ampulla)
Supraglottic Larynx (SupraLarynx)	Pleural mesothelioma
Anterior Surface of Epiglottis	Pleura (Pleura)
(AntEpiglottis)	Melanoma of the Skin
Subglottic Larynx	Skin, Vulva, Penis Scrotum–Melanoma
Subglottic Larynx (SubLarynx)	(Melanoma)
Nasal Cavity and Paranasal Sinuses	Vagina
Nasal Cavity (NasalCavity)	Vagina (Vagina)
Maxillary Sinus (MaxillarySinus)	Corpus uteri
Ethmoid Sinus (EthmoidSinus)	Corpus uteri (Corpus)
Esophagus	Ovary
Esophagus (Esophagus)	Ovary (Ovary)
Stomach	Fallopian Tube
Stomach (Stomach)	Fallopian tube (FallopianTube)
Small Intestine	Gestational trophoblastic tumor
Small intestine (SmallIntestine)	Placenta (Placenta)
Colon and rectum	Penis
Colon (Colon)	Penis (Penis)
Rectum (Rectum)	Prostate
Gallbladder	Prostate (Prostate)
Gallbladder (Gallbladder)	

Testis

Testis (Testis)

Renal Pelvis and Ureter

Renal Pelvis and Ureter (RenalPelvis)

Urinary Bladder

Bladder (Bladder)

Urethra

Urethra (Urethra)

Malignant Melanoma of the Conjunctiva

Conjunctiva–Melanoma
(MelanomaConjunctiva)

Malignant Melanoma of the Uvea

Iris and Ciliary Body–Melanoma (iris
only) (MelanomaIrisCiliary)

Retinoblastoma

Retinoblastoma (Retinoblastoma)

Lymphoid neoplasms

Mycosis Fungoides (MF)
Malignant Lymphoma (Lymphoma)

Table 6. Schemas For Which AJCC Staging Is Not Applicable

For the following schemas, TNM is not applicable. The name of the Collaborative Staging schema and its website file name (in parentheses) are shown below.

Other pharynx (OthPharynx)	Other CNS (OthCNS)
Other digestive (OthDigestive)	Other endocrine (OthEndocrine)
Middle ear (MiddleEar)	Other eye (OthEye)
Other sinus (OthSinus)	Melanoma of Other Eye (MelanomaOthEye)
Trachea (Trachea)	Kaposi sarcoma (KS)
Other respiratory (OthRespiratory)	Hematopoietic, Reticuloendothelial,
Other adnexa (OthAdnexa)	Immunoproliferative and
Other female genital (OthFemaleGen)	Myeloproliferative Neoplasms
Other male genital (OthMaleGen)	(HemeRetic)
Other urinary (OthUrinary)	Other Ill-defined and Unknown Primary
Brain (Brain)	Sites (OthIllDef)

DEATH CERTIFICATE ONLY CASES

Death Certificate **only** cases are coded as unknown (usually 9, 99, 999, etc.) or not applicable (usually 8, 88, 888, etc.) in all Collaborative Staging fields. Although there may be some site/histology-specific exceptions, the usual pattern for coding Death Certificate Only cases is as follows:

CS Tumor Size	999	CS Mets Eval	9
CS Extension	99	CS Site-Specific Factor 1	888
CS Tumor Size/Ext Eval	9	CS Site-Specific Factor 2	888
CS Lymph Nodes	99	CS Site-Specific Factor 3	888
CS Reg Nodes Eval	9	CS Site-Specific Factor 4	888
Reg LN Pos	99	CS Site-Specific Factor 5	888
Reg LN Exam	99	CS Site-Specific Factor 6	888
CS Mets at DX	99		

USE OF AUTOPSY INFORMATION IN COLLABORATIVE STAGING

Information obtained from autopsy may be used in either of two ways in the Collaborative Staging System. The evaluation fields must then be coded correctly to indicate how the autopsy information is to be interpreted. If a patient with a suspected diagnosis of cancer dies and an autopsy is performed, extent of disease information obtained from the autopsy may be included along with other clinical and pathologic information, if it meets the timing rules for inclusion. In this case, the computer algorithm will assign the T, N, or M to “p” (pathologic) classification. If cancer is not suspected at the time of autopsy,

the extent of disease information from the autopsy is included, but the algorithm will assign the T, N, and M to the autopsy (a) classification of the TNM system rather than to clinical or pathologic evaluation. Each of the evaluation field schemas has appropriate codes to allow this distinction.

DEFINITIONS OF ADJACENT TISSUES, STRUCTURES, AND ORGANS

Adjacent connective tissue

Some of the Collaborative Staging System schemas for ill-defined or non-specific sites in this manual contain a code for adjacent connective tissue, which is defined here as the unnamed tissues that immediately surround an organ or structure containing a primary cancer. Use this code when a tumor has invaded past the outer border (capsule, serosa, or other edge) of the primary organ into the organ's surrounding supportive structures but has not invaded into larger structures or adjacent organs.

The structures identified in ICD-O-3 as connective tissue include the following: adipose tissue; aponeuroses; arteries; blood vessels; bursa; connective tissue, NOS; fascia; fatty tissue; fibrous tissue; ganglia; ligaments; lymphatic channels (not nodes); muscle; nerves (spinal, sympathetic and peripheral); skeletal muscle; subcutaneous tissue; synovia; tendons; tendon sheaths; veins; and vessels, NOS. In general, these tissues do not have specific names. These tissues form the framework of many organs, provide support to hold organs in place, bind tissues and organs together, and serve as storage sites for nutrients. Blood, cartilage and bone are sometimes considered connective tissues, but in this manual they would be listed separately.

Adjacent organs

Organs are anatomic structures with specific physiologic functions other than (or in addition to) support and storage. Continuous tumor growth from one organ into an organ anatomically next to the primary would be coded to the appropriate code for 'adjacent organs/structures' in the Collaborative Staging schemas for ill-defined and non-specific sites.

Adjacent structures

Connective tissues large enough to be given a specific name would be considered adjacent structures. For example, the brachial artery has a name, as does the broad ligament. Continuous tumor growth from one organ into an adjacent named structure would be coded to the appropriate code for 'adjacent organs/structures' in the Collaborative Staging for ill-defined or non-specific sites.

AMBIGUOUS TERMINOLOGY

INTERPRETING AMBIGUOUS TERMINOLOGY FOR COLLABORATIVE STAGING

Determination of the cancer stage is both a subjective and objective assessment of how far the cancer has spread. Sometimes the clinician is hesitant to commit to a definite statement that a particular organ or tissue is involved by the cancer and uses what data collectors refer to as "ambiguous terminology." The following lists can generally be used to interpret the intent of the clinician; however, if individual clinicians use these terms differently, the clinician's definitions and choice of therapy should be recognized. If a term used in a diagnostic statement is not listed below, consult the clinician to determine the intent of the statement.

Involvement

adherent
 apparent(ly)
 appears to
 comparable with
 compatible with
 consistent with
 contiguous/continuous with
 encroaching upon*
 extension to, into, onto, out onto
 features of
 fixation to another structure**
 fixed**
 impending perforation of
 impinging upon
 impose/imposing on
 incipient invasion
 induration
 infringe/infringing
 into*
 intrude
 invasion to into, onto, out onto
 most likely
 onto*
 overstep
 presumed
 probable
 protruding into (unless encapsulated)
 suspected
 suspicious
 to*
 up to

* interpreted as involvement whether the description is clinical or operative/pathological
 ** interpreted as involvement of other organ or tissue

DO NOT Consider as Involvement

abuts
 approaching
 approximates
 attached
 cannot be excluded/ruled out
 efface/effacing/effacement
 encased/encasing
 encompass(ed)
 entrapped
 equivocal
 extension to without invasion/
 involvement of
 kiss/kissing
 matted (except for lymph nodes)
 possible
 questionable
 reaching
 rule out
 suggests
 very close to
 worrisome

HOW TO CODE THE COLLABORATIVE STAGING SYSTEM DATA ELEMENTS

Note: This procedure focuses on only the Collaborative Staging data fields and assumes other registry operations such as case finding, completion of text fields and other data fields, edit checking and case submission are also being performed appropriately.

1. Before you begin to code using the Collaborative Staging System, read completely the general rules in this manual.
2. Read the medical record carefully to determine the primary site and histology and identify the correct ICD-O-3 codes. While you are reviewing the record, make mental notes about the tissues and lymph nodes that are involved by tumor.
3. If the histology is melanoma (8720-8790), Kaposi sarcoma (9140), retinoblastoma (9510-9514), lymphoma (9590-9699 and 9702-9729), mycosis fungoides (9700-9701), or hematopoietic and reticuloendothelial system (9731-9989), use the histology-specific schema for the appropriate histology-site combination.
4. Otherwise, turn to the correct site-specific schema in the Part II of this manual. Schemas are in ICD-O-3 order by the first code that uses the schema. Verify that you are in the correct chapter by confirming that the code is in the list at the beginning of the schema.
5. Begin assigning codes for the 15 fields in the Collaborative Staging System. Be sure to read the notes and follow the site/histology-specific instructions at the beginning of each data field. Some schemas may have site-specific factors associated with extension, lymph nodes or metastasis; keep these in mind as you assign the codes.
 - a. Code the tumor size in the CS Tumor Size field.
 - b. Code how far the tumor has directly spread in the CS Extension field.
 - c. Code how the farthest tumor spread was determined in the CS Tumor Size/Ext Eval field.
 - d. Code whether regional lymph nodes are involved in the CS Lymph Nodes field.
 - e. Code how the farthest regional node spread was determined in the CS Reg Node Eval field.
 - f. Code the number of positive regional lymph nodes from the pathology report in the Reg Nodes Pos field.
 - g. Code the number of regional lymph nodes examined by the pathologist in the Reg Nodes Exam field.
 - h. Code the farthest distant metastasis (including distant lymph nodes) in the CS Mets at Dx field.
 - i. Code how the distant metastasis was determined in the CS Mets Eval field.
 - j. Code the six site-specific factors. If the first site-specific factor is listed as "Not Applicable," code 888 in all site specific factors. Otherwise, code the specific information requested for each site specific factor. When the next site-specific factor is 888 Not Applicable, all the remaining site-specific factors will also be 888.

Congratulations! You have collected all the facts about the case and the codes are ready for the computer to convert into the T, N, M, Stage Group, Summary Stage 1977 and Summary Stage 2000. Depending on your software system, the final stage information may be derived now, when the case is saved, or prior to exiting the case. Finish the rest of the abstract, edit check it and save it.

When the computer derives the final stage information, the program will check the histology code and other coded information to determine whether T, N, M and Stage Group will be generated for the case. If the histology code is on the computer's exceptions list for that site, the T, N, M, and Stage Group will be reported as "Not Applicable." Summary Stage is generated for every case. The computer algorithm will also record which version of the Collaborative Staging System was used to derive the final stages.

CS TUMOR SIZE

Item Length: 3
NAACCR Item #: 2800
NAACCR Name: CS Tumor Size

Records the largest dimension or diameter of the **primary tumor**, and is always recorded in millimeters. To convert centimeters to millimeters, multiply the dimension by 10. If tumor size is given in tenths of millimeters, round down if between .1 and .4 mm, and round up if between .5 and .9 mm.

Code	Description
000	Indicates no mass or no tumor found; for example, when a tumor of a stated primary site is not found, but the tumor has metastasized.
001-988	Exact size in millimeters.
989	989 millimeters or larger.
990	Microscopic focus or foci only; no size of focus is given.
991	Described as less than 1 cm
992	Described as less than 2 cm
993	Described as less than 3 cm
994	Described as less than 4 cm
995	Described as less than 5 cm
	SITE-SPECIFIC CODES WHERE NEEDED
999	Unknown; size not stated; not stated in patient record.

Examples:

Mammogram shows 2.5 cm breast malignancy

Code as 025 (2.5 cm = 25 millimeters)

CT of chest shows 4 cm mass in RUL

Code as 040 (4 cm = 40 mm)

Thyroidectomy specimen yields 8 mm carcinoma

Code as 008

Prostate needle biopsy shows 0.6 mm carcinoma

Code as 001 (round up six-tenths of mm)

For schemas that do not use tumor size:

Code	Description
888	Not applicable

Instructions for Coding

1. Refer to general guidelines for Collaborative Staging for timing rules for data collection.
2. Refer to site/histology-specific instructions for additional information. Site/histology-specific instructions replace or over-ride general instructions. Where there are no site/histology-specific instructions, these general instructions apply.
3. Record tumor size information in the following order:
 - a. Record tumor size from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

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.
 - b. If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the largest size of tumor prior to treatment.

Example: Patient has a 2.2 cm mass in the oropharynx; fine needle aspiration of mass confirms squamous cell carcinoma. Patient receives course of neoadjuvant combination chemotherapy. Pathologic size of tumor after total resection is 0.8 cm. Record tumor size as 022.
 - c. 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 it should be taken as low priority, just above a physical exam.
 - d. If there is a difference in reported tumor size among imaging and radiographic techniques, record the largest size of tumor reported in the record.
 - e. In the infrequent event that the tumor does not respond to neoadjuvant treatment and is, in fact, more extensive after preoperative treatment as determined by the operative or pathology report, code the farthest extension and code CS Tumor Size/Ext Eval as 6, based on pathology/operative report after treatment.
4. Record the exact size of the primary tumor for all sites/histologies except those for which it is stated to be not applicable. If no size is given, code as 999.
 - a. Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastasis. However, if the tumor is described as a “cystic mass,” and only the size of the entire mass is given, code the size of the entire mass, since the cysts are part of the tumor itself.
 - b. Record the largest dimension or diameter of tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor.

Example 1: A 3.3 cm tumor would be 33 millimeters and would be coded as 033.

Example 2: Tumor is described as 2.4 x 5.1 x 1.8 cm in size. Record tumor size as 051.

- c. Record the size of the invasive component, if given.
- d. If both an *in situ* and an invasive component are present and the invasive component is measured, record the size of the invasive component even if it is smaller.

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

- e. Additional rule for breast primaries: 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 1: Infiltrating duct carcinoma with extensive *in situ* component; total size 2.3 cm. Record tumor size as 023.

Example 2: Duct carcinoma *in situ* covering a 1.9 cm area with focal areas of invasive ductal carcinoma. Record tumor size as 019.

Note: For breast cancer, document how the size of the tumor was determined in Site Specific Factor field 6. Information from the pathology report can be used to identify *in situ* versus invasive tumor even if exact size is not given. If tumor size is a clinical measurement only in the range 001-989, Site Specific Factor 6 must be coded as 888.

- f. For purely *in situ* lesions, code the size as stated.
- g. Microscopic residual tumor does not affect overall tumor size.
- h. Do **not** add 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.
- i. If an excisional biopsy is performed and residual tumor at time of resection of the primary is found to be larger than the excisional biopsy, code the size of the residual tumor.
- j. For an incisional needle biopsy, code tumor size as 999. Do not code the tumor size from a needle biopsy unless no residual tumor is found on further resection.
- k. Record tumor size (lateral dimension) for malignant melanoma. Depth of invasion is coded in a site-specific factor.

5. Special codes

- a. Tumor dimension is to be recorded for all schemas, except as noted below. Other information collected in this field in previous staging systems, such as depth of invasion for melanoma, has been moved to Site-Specific Factors for those sites/histologies.
- b. If size is not reported, code as 999, which means unknown size, not applicable, or not documented in the patient record.
- c. The descriptions in code 998 take precedence over any mention of size. Code 998 is used only for the following sites:
 - Esophagus (C15.0-C15.5, C15.8-C15.9): Entire circumference
 - Stomach (C16.0-C16.6, C16.8-C16.9): Diffuse, widespread—³/₄ or more, linitis plastica
 - Colorectal (M-8220/8221 with /2 or /3): Familial/multiple polyposis
 - Lung and main stem bronchus (C34.0-C34.3, C34.8-C34.9): Diffuse, entire lobe or lung
 - Breast (C50.0-C50.6, C50.8-C50.9): Inflammatory carcinoma; Diffuse, widespread—³/₄ or more of breast.
- d. Code 990, Microscopic focus or foci only; no size is given, should be used when no gross tumor is seen and tumor is only identified microscopically.

Note: the terms microscopic focus, microfocus, and microinvasion are NOT the same as [macroscopic] focal or focus. A macroscopic focus or foci indicates a very small or isolated area, pinpoint, or spot of tumor that may be visible grossly. Only tumor identified microscopically should be coded to 990.

Example 1: Ovary specimen: extensive cystic disease with focal areas of tumor seeding.
Disregard "focal" and code tumor size to 999 unknown.

Example 2: Cervix conization: severe dysplasia with focal areas of microinvasion.
Code tumor size as 990 microscopic focus, no size given.

- e. Codes 991 through 995 are non-specific size descriptions that, for some sites, could still be used to determine a T category. However, if a specific size is given, the more precise size should be coded in the range 001-989.
 - f. Other special codes in the range 996 to 997 are used on a site-specific basis. See the individual site/histology schemas for further information and definitions.
 - g. For the following diagnoses and/or primary sites, size is not applicable. Record as code 888.
 - Disseminated Langerhans cell histiocytosis (Letterer-Siwe disease)
 - Hematopoietic neoplasms
 - Immunoproliferative diseases
 - Leukemia
 - Malignant lymphoma (Hodgkin lymphoma and non-Hodgkin lymphoma)
 - Mast cell tumors
 - Multiple myeloma and other plasma cell tumors
 - Myelodysplastic syndromes
 - Myeloproliferative diseases
 - Unknown and ill-defined primary sites (C76.0–C76.5, C76.7–C76.8, C80.9)
 - h. The source of the tumor size (radiographs, endoscopy, pathology specimen, etc.) is documented in the CS Tumor Size/Ext Eval field.
6. It is strongly recommended that the choice of tumor size codes be documented in a related text field on the abstract.

CS EXTENSION

Item Length: 2
NAACCR Item #: 2810
NAACCR Name: CS Extension

Identifies contiguous growth (extension) of the primary tumor within the organ of origin or its direct extension into neighboring organs. For certain sites such as ovary, discontinuous metastasis is coded in the CS Extension field. See site-specific schemas for detailed codes and coding instructions.

Code	Description	TNM Mapping	SS77 Mapping	SS2000 Mapping
00	In situ; non-invasive	Tis	IS	IS
SITE/HISTOLOGY-SPECIFIC CODES				
80	Further contiguous extension			
95	No evidence of primary tumor	T0	U	U
99	Unknown extension; primary tumor cannot be assessed; not stated in patient record	TX	U	U

INSTRUCTIONS FOR CODING

1. Code the farthest documented extension of the primary tumor. Do not include discontinuous metastases to distant sites (these are coded in CS Mets at Dx) except for ovary and corpus uteri (see 2e below).
2. Record extension information in the following order:
 - a. Record extension from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.
 - b. If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the farthest extension identified prior to treatment (clinically).

Example: Patient has rectal mass firmly attached to pelvic wall (clinically T4, extension code 60). Patient undergoes preoperative radiation therapy. The pathology report from the low anterior resection shows residual tumor outside the rectum in perimuscular tissue (pathologically T3, extension code 40). Code extension as 60, because the preoperative treatment apparently “shrank” the tumor away from the pelvic wall.

- c. In the infrequent event that the tumor does not respond to neoadjuvant treatment and is, in fact, more extensive after preoperative treatment as determined by the operative or pathology report, code the farthest extension and code CS Tumor Size/Ext Eval as 6, based on pathology/operative report after treatment.

Example 1: Patient found to have an obstructing central lung tumor very close to the main stem bronchus (clinically T2, extension code 20). Patient undergoes six weeks of intensive chemotherapy. At thoracotomy, tumor was observed directly extending into trachea (pathologically T4, extension code 70). Code extension as 70, because the tumor was noted to be more extensive after the preoperative treatment.

Example 2: Patient has a 5.5 cm hard, moveable mass in the right breast (clinically T3, extension code 10) and receives preoperative chemotherapy. The pathology report from the modified radical mastectomy shows residual 2.8 cm mass with infiltration of the deep subcutaneous tissues over the mass (pathologically T2, extension code 20). Code extension as 20, because although the chemotherapy “shrank” the tumor, the residual tumor was found to be more extensive than the clinical presentation.

- d. Information on extent of disease from imaging/radiographic techniques can be used to code extension when there is no more specific extension information from a pathology or operative report, but it should be taken as low priority, just above a physical exam.
- e. If an involved organ or tissue is not mentioned in the schema, approximate the location and code it with listed organs or tissues in the same anatomic area.
- f. With the exception of corpus uteri and ovary, all codes represent contiguous (direct) extension of tumor from the site of origin to the organ/structure/tissue represented in the code.

Example: Carcinoma of the prostate with extension to pubic bone would be coded 60.
Carcinoma of the prostate with metastases to thoracic spine would be coded in CS Extension to the appropriate code for tumor extension and the metastases to the thoracic spine would be coded in the CS Mets at Dx field.

3. Refer to general guidelines for Collaborative Staging for timing rules for data collection.
4. Refer to the ambiguous terminology section for terms that constitute tumor involvement or extension.
5. If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, the extent of disease may be inferred from the T category stated by the physician.
6. If the only indication of extension in the record is the physician’s statement of a T category from the TNM staging system or a stage from a site-specific staging system, such as Dukes’ C, record the numerically lowest equivalent extension code for that T category.
7. Some site or histology schemas include designations such as T1, NOS; T2, NOS; Localized, NOS; and other non-specific categories. The NOS is added when there is further breakdown of the category into subsets (such as T1a, T1b, T1c), but the correct subset cannot be determined. The NOS designation, which can appear in both the descriptions of codes and the mapping, is not official AJCC descriptive terminology. The NOS should be disregarded in reports and analyses when it is not a useful distinction. The data collector should only code to a category such as “Stated as T1 NOS” when the appropriate subset (e.g., T1a or T1b) cannot be determined.
8. Distant metastases must be coded in the CS Mets at Dx field.
9. Do not code CS Extension as in situ if there is any evidence of nodal or metastatic involvement; use the code for Localized, NOS, if there is no better information.

Example: Excisional biopsy of breast tumor shows extensive DCIS. Sentinel node biopsy reveals one positive axillary node. Code CS Extension as 10, localized, NOS, because an in situ tumor theoretically cannot metastasize and apparently an area of invasion was missed by the pathologist.

10. The presence of microscopic residual disease or positive tumor margins does not increase the extension code.
11. It is strongly recommended that the choice of extension codes be documented in a related text field on the abstract.

CS TUMOR SIZE\EXT EVAL

Item Length: 1
 NAACCR Item #: 2820
 NAACCR Name: CS Tumor Size\Ext Eval

Records how the codes for the two items “CS Tumor Size” and “CS Extension” were determined, based on the diagnostic methods employed.

Note: This field is used primarily to describe whether the staging basis for the T category in the TNM system is clinical or pathological.

Code	Description	Staging Basis
0	No surgical resection done. Evaluation based on physical examination, imaging examination, or other non-invasive clinical evidence. No autopsy evidence used.	c
1	No surgical resection done. Evaluation based on endoscopic examination, diagnostic biopsy, including fine needle aspiration biopsy, or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.	c*
2	No surgical resection done, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy)	p
3	Surgical resection performed WITHOUT pre-surgical systemic treatment or radiation OR surgical resection performed, unknown if pre-surgical systemic treatment or radiation performed Meets criteria for AJCC pathologic staging. Evaluation based on evidence acquired before treatment, supplemented or modified by the additional evidence acquired during and from surgery, particularly from pathologic examination of the resected specimen	p
5	Surgical resection performed WITH pre-surgical systemic treatment or radiation; tumor size/extension based on clinical evidence	c
6	Surgical resection performed WITH pre-surgical systemic treatment or radiation, BUT tumor size/extension based on pathologic evidence	y
8	Evidence from autopsy only (tumor was unsuspected or undiagnosed prior to autopsy)	a
9	Unknown if surgical resection done Not assessed; cannot be assessed Unknown if assessed Not documented in patient record For sites with no TNM schema: not applicable	c

* For some primary sites, code 1 may be a pathologic staging basis, as determined by the site-specific chapter in the *AJCC Cancer Staging Manual, sixth edition*.

INSTRUCTIONS FOR CODING

1. Select the CS Tumor Size/Ext Eval code that documents the report or procedure from which the information about the farthest extension or size of the primary tumor was obtained; this may not be the numerically highest Eval code.

Example: Fine needle aspiration biopsy (Eval code 2) confirms adenocarcinoma of prostate. CT scan of pelvis (Eval code 1) shows tumor extension through the prostatic capsule into adjacent connective tissues. Code CS Tumor Size/Ext Eval as 1 because the CT scan showed more extensive tumor than the biopsy.

2. For primary sites/histologies where tumor size is not a factor in determining the T category in TNM (see Table 5 in the General Instructions), code CS Tumor Size/Ext Eval on the basis of the CS extension field only.
3. For primary sites where both tumor size and extension determine the T category in TNM (see Table 4 in the General Instructions), select the code that best explains how the information in the CS Tumor Size and CS Extension fields were determined.
 - a. If there is a difference between the derived category for the tumor size and the CS extension, select the evaluation code that reflects how the worse or higher category was determined.

Example: Tumor size for a breast cancer biopsy is 020 (maps to T1). There is ulceration of the skin (extension code 50, maps to T4). Code CS Tumor Size/Ext Eval field as 0, physical examination, because the ulceration information from the physical examination results in a higher T category.

- b. If the patient had no surgery, use code 0, 1, or 9.

Example 1: Patient has a chest x-ray showing an isolated 4 cm tumor in the right upper lobe. Patient opts for radiation therapy. Code this field as 0. Staging algorithm would identify information as clinical (c).

Example 2: Colon cancer with colonoscopy and biopsy confirming cancer. Code this field as 1. Staging algorithm would identify information as clinical (c). The biopsy does not meet the criteria for pathologic staging.

Example 3: Endoscopies for cervix or bladder would be coded as 1 in this field and the staging algorithm would identify the information as clinical (c).

Exception: Lung cancer with mediastinoscopy showing direct extension into mediastinum. Code this field as 1. Staging algorithm would identify information as pathologic (p), because mediastinoscopy is defined as a pathologic procedure in TNM.

- c. If the patient had surgery followed by other treatment(s), use code 3 or 9.
- d. If the size or extension of the tumor determined prior to treatment was the basis for neoadjuvant therapy, use code 5.
- e. If the size or extension of the tumor was greater after presurgical treatment than before treatment, use code 6. This code is likely to be used infrequently and maps to the “y” intercurrent treatment staging basis.
- f. If the patient had an autopsy, use code 2 if the diagnosis was known or suspected prior to death. Use code 8 if the malignancy was not known or suspected prior to death.

4. For sites/histologies where there is no TNM schema, this field may be coded 9, not applicable. (See Table 6 in the General Instructions.)
5. Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), ultrasonography, magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.
6. Codes 0-3 are oriented to the AJCC staging basis. In general, Code 1 includes microscopic analysis of tissue that is insufficient to meet the requirements for pathologic staging in the TNM system. However, pathologic staging requirements vary by site; for some site schemas, code 1 may be classified as pathologic. For specific classification rules, refer to the *AJCC Cancer Staging Manual, sixth edition*. For example, a total cystectomy is required to pathologically stage a bladder cancer. Any tissue removed during another procedure, such as a transurethral resection of a bladder tumor, would not meet the requirements for pathologic staging and should be coded to 1 in this field. Code 1 also includes observations at surgery, such as an exploratory laparotomy in which unresectable pancreatic cancer is identified, where further tumor extension is not biopsied.
7. Code 3 is considered pathologic staging across all sites. Use code 3 for a biopsy of tumor extension that meets the requirements for pathologic staging basis. In other words, according to TNM rules, if the biopsy documents the highest T category, the biopsy meets the requirements for pathologic staging basis and the CS Tumor Size/Ext Eval field should be coded to 3. For example, if a prostate cancer patient has a biopsy of the rectum that shows microscopic involvement of the rectal wall (T4), according to the *AJCC Cancer Staging Manual sixth edition* that patient meets the requirements for pathologic staging in the T category.

CS LYMPH NODES

Item Length: 2
 NAACCR Item #: 2830
 NAACCR Name: CS Lymph Nodes

Identifies the regional lymph nodes involved with cancer at the time of diagnosis.

Code	Description	TNM Mapping	SS77 Mapping	SS2000 Mapping
00	None; no regional lymph node involvement	N0	None	None
	SITE/HISTOLOGY-SPECIFIC CODES			
80	Lymph nodes, NOS	NX	RN	RN
90	Unknown; regional lymph nodes cannot be assessed; not stated in patient record	NX	U	U

For schemas that do not use the CS Lymph Nodes field:

Code	Description

INSTRUCTIONS FOR CODING

1. Record the specific regional lymph node chain farthest from the primary site that is involved by tumor either clinically or pathologically.
 - a. Regional lymph nodes are listed for each site/histology. In general, the regional lymph nodes in the chain(s) closest to the primary site have the lower codes. Nodes farther away from the primary or in farther lymph node chains have higher codes. Record the highest applicable code.

Exception: The higher codes for 'Regional lymph nodes, NOS'; 'Lymph nodes, NOS'; 'Stated as N1, no other information'; 'Stated a N2a, no other information', and so forth, should only be used when there is no available information as to the name(s) of the regional nodes involved.

Example: Peribronchial lymph nodes are positive on fine needle aspiration biopsy. Contralateral mediastinal mass noted on CT scan but not biopsied. Patient chooses radiation therapy as primary treatment. Use the code for contralateral mediastinal lymph node involvement as it is higher than the code for peribronchial lymph nodes.

- b. Record involved regional lymph nodes from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

- c. If there is a discrepancy between clinical information and pathologic information about the same lymph nodes, the pathologic information takes precedence if no preoperative treatment was administered.

Example: Axillary lymphadenopathy stated as “suspicious *for* involvement” noted on physical exam. After axillary dissection, all lymph nodes are negative. Code CS Lymph Nodes as 0, no regional lymph node involvement.

- d. For inaccessible sites, primarily for localized or early stage (T1, T2) cancers: record regional lymph nodes as negative rather than unknown (based on clinical evaluation) when there is no mention of regional lymph node involvement in the physical examination, pre-treatment diagnostic testing or surgical exploration, and the patient receives what would be usual treatment to the primary site (see general rules for further discussion).
- e. If there is direct extension of the primary tumor into a regional lymph node, record the involved node in this field.
- f. If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the farthest involved regional lymph nodes, based on information prior to surgery.

Example: Patient has a hard matted mass in the axilla (code 50) and a needle biopsy of the breast that confirms ductal carcinoma. Patient receives three months of chemotherapy. The pathology report from the modified radical mastectomy shows only scar tissue in the axilla with no involvement of axillary lymph nodes (Negative, code 00). Code CS Lymph Nodes as 50 because the chemotherapy apparently “sterilized” the lymph nodes.

- g. In the infrequent event that clinically involved regional lymph nodes do not respond to neoadjuvant treatment and are, in fact, more extensively involved after preoperative treatment as determined by the operative or pathology report, code the farthest extension and code CS Reg Nodes Eval as 6, based on pathology/operative report after treatment.

Example: Patient has needle biopsy-proven prostate cancer with no mention of involved lymph nodes on physical examination (Negative, code 00). He receives Lupron while deciding whether to undergo a radical prostatectomy. At the time of surgery, a laparoscopic pelvic node biopsy is reported to show metastases (Regional nodes involved, code 10) to lymph nodes and the prostatectomy is canceled. Code CS Lymph Nodes as 10 because the preoperative treatment (Lupron) had no effect on the lymph nodes.

- 2. Use code 00 for lymph node involvement when the CS Extension is coded in situ, even if no lymph nodes are removed, since “in situ” by definition means noninvasive. If there is evidence of nodal involvement associated with a tumor described as in situ, it would indicate that an area of invasion was missed and the primary tumor is not an in situ lesion, so lymph nodes can be coded as appropriate for the case.
- 3. For solid tumors, the terms “fixed” or “matted” and “mass in the hilum, mediastinum, retroperitoneum, and/or mesentery” (with no specific information as to tissue involved) are considered involvement of lymph nodes.
 - a. Any other terms, such as “palpable,” “enlarged,” “visible swelling,” “shotty,” or “lymphadenopathy” should be ignored, unless there is a statement of involvement by the clinician.

Exception: The terms adenopathy, enlargement, and mass in the hilum or mediastinum should be coded as involvement for lung primaries only.

- b. For lymphomas, *any* positive mention of lymph nodes indicates involvement of those lymph nodes.
 - c. Regional lymph nodes are not palpable for inaccessible sites such as bladder, kidney, prostate, esophagus, stomach, lung, liver, corpus uteri and ovary. The best description concerning regional lymph nodes will be on imaging studies or in the surgeon's evaluation at the time of exploratory surgery or definitive surgery. If regional lymph nodes for these inaccessible sites are not mentioned on imaging or exploratory surgery, they are presumed to be clinically negative.
 - d. The terms "homolateral," "ipsilateral," and "same side" are used interchangeably.
 - e. Any unidentified nodes included with the resected primary site specimen are to be coded as regional lymph nodes, NOS.
 - f. Where more specific categories are provided, the codes for "regional lymph node(s), NOS"; "lymph nodes, NOS"; and "Stated as N_, no additional information" should be used *only* after an exhaustive search for more specific information.
4. When size of involved regional lymph nodes is required, code from pathology report, if available.
 - a. Code the size of the metastasis, not the entire node, unless otherwise stated in site-specific schemas. The size of the metastasis within the lymph node can be inferred if the size for the entire node falls within one of the codes; for example, a single involved node 1.5 cm in size can be coded to "single lymph node \leq 2 cm" because the metastasis cannot be larger than 1.5 cm.
 5. If the only indication of lymph node involvement in the record is the physician's statement of an N category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' C, record the numerically lowest equivalent CS Lymph Nodes code for that N category.
 - a. If there is a discrepancy between documentation in the medical record and the physician's assignment of TNM, the documentation takes precedence. Cases of this type should be discussed with the physician who assigned the TNM.
 - b. If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, lymph node involvement may be inferred from the N category stated by the physician.
 6. Some site or histology schemas include designations such as N1, NOS; N2, NOS, and other non-specific categories. The NOS is added when there is further breakdown of the category into subsets (such as N1a, N1b, N1c), but the correct subset cannot be determined. The NOS designation, which can appear in both the descriptions of codes and the mapping, is not official AJCC descriptive terminology. The NOS should be disregarded in reports and analyses when it is not a useful distinction. The data collector should only code to a category such as "Stated as N1 NOS" when the appropriate subset (e.g., N1a or N1b) cannot be determined.
 7. For colon, rectosigmoid and rectum primaries, if there is a statement about tumor nodule(s) in the pericolic or perirectal fat, use the following guidelines for coding regional lymph node involvement:
 - Code as regional lymph node involvement if the nodule has a smooth contour.
 - Code as tumor extension if the nodule has an irregular contour.
 8. It is strongly recommended that the choice of regional lymph node codes be documented in a related text field on the abstract.

CODING REGIONAL LYMPH NODES FOR HEAD AND NECK SITES

For head and neck sites, regional lymph node information is coded in several fields. The CS Lymph Nodes field contains information about the nodes involved, their number and laterality. Site-Specific Factors 1 and 2 are used to code the size of involved lymph nodes and the presence of extracapsular extension. Site-Specific Factors 3 through 6 are used to code the presence or absence of lymph node involvement in each of 7 different levels and other groups defined by AJCC. The definitions of the levels are the same for all applicable head and neck sites. One digit is used to represent lymph nodes of a single level, with the three digits of Site-Specific Factor 3 representing lymph nodes of, respectively, Levels I-III; the digits of Site-Specific Factor 4 representing lymph nodes of Levels IV and V and the retropharyngeal nodes; the digits of Site-Specific Factor 5 representing lymph nodes of Levels VI and VII and the facial nodes; and the digits of Site-Specific Factor 6 representing the remaining Other groups as defined by AJCC. In each digit, a code 1 means Yes, the nodes are involved. See Figure 2a for the layout of Site-Specific Factors 3 through 6 and Figure 2b for the interpretation of a coded example.

Figure 2a. Layout of Site-Specific Factors for Head and Neck Sites

SSF 3	Levels I-III	<u> I </u>	<u> II </u>	<u> III </u>
SSF 4	Levels IV-V, retropharyngeal (RP)	<u> IV </u>	<u> V </u>	<u> RP </u>
SSF 5	Levels VI-VII, Facial (F)	<u> VI </u>	<u> VII </u>	<u> F </u>
SSF 6	Other groups Parapharyngeal (PP), Parotid (PA), Suboccipital (S)	<u> PP </u>	<u> PA </u>	<u> S </u>

Figure 2b. Example and Interpretation of Site-Specific Factors for Head and Neck Sites

Example: Left Radical Neck Dissection: 2 positive parotid node (< 3 cm with extra-capsular extension), 1 positive buccal (facial) node (2 cm), and 1 positive 2 cm submandibular node.

SSF 3	Levels I-III	<u> 1 </u>	<u> 0 </u>	<u> 0 </u>
SSF 4	Levels IV-V, retropharyngeal (RP)	<u> 0 </u>	<u> 0 </u>	<u> 0 </u>
SSF 5	Levels VI-VII, Facial (F)	<u> 0 </u>	<u> 0 </u>	<u> 1 </u>
SSF 6	Other groups Parapharyngeal (PP), Parotid (PA), Suboccipital (S)	<u> 0 </u>	<u> 1 </u>	<u> 0 </u>

<u>Stored in database as</u>		<u>Interpretation</u>
SSF 3	100	Level 1 only
SSF 4	000	All nodes neg
SSF 5	001	Facial nodes only
SSF 6	010	Parotid nodes only

UNKNOWN

In Site-Specific Factors 3-6 for lymph node levels, use code 9 only when it is unknown if lymph nodes are involved. Within each of the Site-Specific Factors 3-6, do not code 9 in some positions and 0 or 1 in other positions. If specific information is available about the positive or negative status of some but not all nodes in any one level or group, assume that the rest of the nodes in the same Site-Specific Factor are negative and code accordingly.

NOS

When the only information available is "Regional nodes, NOS" or "Cervical nodes, NOS" or "Internal jugular lymph nodes, NOS" or "Lymph nodes, NOS," code 0 in all digits of Site-Specific Factors 3-6.

Example 1: A carcinoma of the base of tongue involves bilateral submandibular nodes and left upper, mid-, and lower jugular nodes, the largest measuring 4 cm. There is no extracapsular extension. These are level I, II, III, and IV lymph nodes according to AJCC definitions. CS Lymph Nodes is coded 40 (bilateral or contralateral nodes). Site-Specific Factor 1 is coded 040 indicating the largest size. Site-Specific Factor 2 is coded 000 for no extracapsular extension. Site-Specific Factor 3 is coded 111, to show that levels I, II, and III are involved. Site-Specific Factor 4 is coded 100 to show that level IV is involved. Site-Specific Factors 5 and 6 are each coded 000, since no other nodes are involved.

Example 2: Laryngeal biopsy with squamous cell carcinoma, no other information available. CS Lymph Nodes is coded 99. Site-Specific factors 1-6 are each coded 999, since no information is available regarding lymph node involvement.

Example 3: Patient diagnosed elsewhere with carcinoma of oropharynx with cervical lymph node involvement. No other information available. CS Lymph Nodes is coded 50 (regional nodes, NOS, not stated if ipsilateral, bilateral, or contralateral, or if single or multiple). Site-specific Factors 1 and 2 are each coded 999. Site-Specific Factors 3-6 are each coded 000.

DEFINITIONS OF LEVELS FOR HEAD AND NECK SITES

The definitions of the levels and the lymph node chains included in each level are as follows:

Level I contains the submental and submandibular triangles bounded by the anterior and posterior bellies of the digastric muscle, and the hyoid bone inferiorly, and the body of the mandible superiorly.

Submandibular
Submaxillary
Submental

Level II contains the upper jugular lymph nodes and extends from the level of the skull base superiorly to the hyoid bone inferiorly.

Jugulodigastric (subdigastric)
Upper deep cervical

Upper jugular

Level III contains the middle jugular lymph nodes from the hyoid bone superiorly to the level of the lower border of the cricoid cartilage inferiorly.

Middle deep cervical

Mid-jugular

Level IV contains the lower jugular lymph nodes from the level of the cricoid cartilage superiorly to the clavicle inferiorly.

Jugulo-omohyoid (supraomohyoid)
Lower deep cervical
Lower jugular

Level V contains the lymph nodes in the posterior triangle bounded by the anterior border of the trapezius muscle posteriorly, the posterior border of the sternocleidomastoid muscle anteriorly, and the clavicle inferiorly. For descriptive purposes, Level V may be further subdivided into upper, middle, and lower levels corresponding to the superior and inferior planes that define Levels II, III, and IV.

Posterior cervical
Posterior triangle (spinal accessory and transverse cervical) (upper, middle, and lower, corresponding to the levels that define upper, middle, and lower jugular nodes)

Level VI contains the lymph nodes of the anterior central compartment from the hyoid bone superiorly to the suprasternal notch inferiorly. On each side, the lateral boundary is formed by the medial border of the carotid sheath.

Anterior deep cervical
Laterotracheal
Paralaryngeal
Paratracheal
Prelaryngeal (Delphian)
Pretracheal
Recurrent laryngeal

Level VII contains the lymph nodes inferior to the suprasternal notch in the superior mediastinum.

Upper mediastinal

Other groups

Buccinator (facial)
Nasolabial
Parapharyngeal

Periparotid and
intraparotid
Preauricular
Retropharyngeal
Sub-occipital

CS REG NODES EVAL

Item Length: 1
 NAACCR Item #: 2840
 NAACCR Name: CS Reg Nodes Eval

Records how the code for the item "CS Lymph Nodes" was determined, based on the diagnostic methods employed.

Code	Description	Staging Basis
0	No regional lymph nodes removed for examination. Evaluation based on physical examination, imaging, or other non-invasive clinical evidence. No autopsy evidence used.	c
1	No regional lymph nodes removed for examination. Evaluation based on endoscopic examination, diagnostic biopsy including fine needle aspiration of lymph node(s) or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.	c
2	No regional lymph nodes removed for examination, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy).	p
3	Regional lymph nodes removed for examination (removal of at least 1 lymph node) WITHOUT pre-surgical systemic treatment or radiation OR lymph nodes removed for examination, unknown if pre-surgical systemic treatment or radiation performed Meets criteria for AJCC pathologic staging.	p
5	Regional lymph nodes removed for examination WITH pre-surgical systemic treatment or radiation, and lymph node evaluation based on clinical evidence.	c
6	Regional lymph nodes removed for examination WITH pre-surgical systemic treatment or radiation, BUT lymph node evaluation based on pathologic evidence.	y
8	Evidence from autopsy; tumor was unsuspected or undiagnosed prior to autopsy.	a
9	Unknown if lymph nodes removed for examination Not assessed; cannot be assessed Unknown if assessed Not documented in patient record For sites that have no TNM staging: Not applicable	c

INSTRUCTIONS FOR CODING

1. Select the CS Reg Nodes Eval code that documents the report or procedure from which the information about the farthest involved regional lymph nodes was obtained; this may not be the numerically highest eval code.

Example: Modified radical neck dissection for hypopharyngeal cancer shows one lower jugular node involved (CS Reg LN code 10, Eval code 3). Physical exam shows hard, matted scalene (transverse cervical) node presumed to contain metastasis (CS Reg LN code 32, Eval code 0). Code CS Reg Nodes Eval as 0 since the scalene node involvement was determined clinically rather than by examination of tissue.

2. For sites/histologies where there is no TNM schema (see Table 5 in the General Instructions), CS Reg Node Eval may be coded 9 (not applicable).

3. Select the code that best explains how the information in the CS Lymph Nodes field was determined.

a. If the patient had no removal of lymph node(s), use code 0, 1, or 9.

Example 1: Prostate cancer with laparoscopic lymph node biopsy showing involved nodes; radical prostatectomy canceled. Code CS Reg Node Eval as 3. Staging algorithm would identify information as pathologic (p). According to AJCC, a positive biopsy of one or more regional lymph nodes is sufficient to meet the pathologic staging basis for prostate cancer.

Example 2: Lung cancer with CT scan or MRI showing involved contralateral mediastinal nodes. Code CS Reg Node Eval as 1. Staging algorithm would identify information as clinical (c).

- b. If the patient had removal of lymph node(s) surgery followed by other treatment(s), use code 3 or 9.
 - c. If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, the clinical status of lymph nodes takes precedence (code 5).
 - d. If the size, number or extension of regional lymph node involvement determined prior to treatment was the basis for neoadjuvant therapy, use code 5. However, if more extensive tumor is during lymph node examination after neoadjuvant therapy, use code 6.
 - e. If the patient had an autopsy, use code 2 if the diagnosis was known or suspected prior to death. Use code 8 if the malignancy was not known or suspected prior to death.
4. Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), ultrasonography, magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.
 5. Codes 0-3 are oriented to the AJCC staging basis. Code 1 includes microscopic analysis of tissue insufficient to meet the requirements for pathologic staging in the TNM system. For example, a needle biopsy of an axillary lymph node will document that a lymph node is involved by breast cancer, but does not meet the requirement for removal of a sufficient number of lymph nodes so that the highest N stage can be assessed. Pathologic staging requirements vary by site; for some site

schemas, code 1 may be classified as pathologic. For specific classification rules, refer to the *AJCC Cancer Staging Manual, sixth edition*. Code 1 also includes observations at surgery, such as abdominal exploration at the time of a colon resection, where regional lymph nodes are not biopsied.

6. Code 3 maps to pathologic staging across all sites. Use code 3 if the lymph node procedure meets the requirements for pathologic staging basis of regional lymph nodes. The requirements vary among sites as to the location and number of lymph nodes involved, the size of the involved nodes, and other characteristics. For prostate cancer, a positive biopsy of a single regional lymph node is sufficient to assign CS Reg Nodes Eval code 3 to the case.

REGIONAL NODES POSITIVE

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

Description

Records the exact number of regional lymph nodes examined by the pathologist and found to contain metastases.

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

INSTRUCTIONS FOR CODING

1. Record information about only regional lymph nodes in this field. Involved distant lymph nodes should be coded in the "CS Mets at Dx" field.
2. Rules for coding Regional Nodes Positive are the same for both in situ and invasive cases.
3. This field is based on pathologic information only. If no lymph nodes were removed for examination, or if a lymph node drainage area was removed but no lymph nodes were found, code as 98.
4. Record the total number of regional lymph nodes removed and found to be positive by pathologic examination.
 - a. The number of regional lymph nodes positive is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.
 - b. This field is to be recorded regardless of whether the patient received preoperative treatment.
5. Any combination of positive aspirated, biopsied, sampled or dissected lymph nodes should be coded to 97 if the number of involved nodes cannot be determined on the basis of cytology or histology.

6. For the following primary sites and histologies, the Regional Nodes Positive field is always coded as 99.

Placenta

Brain and Cerebral Meninges

Other Parts of Central Nervous System

Hodgkin and non-Hodgkin Lymphoma

Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms

Other and Ill-Defined Primary Sites

Unknown Primary Site

REGIONAL NODES EXAMINED

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

Records the total number of regional lymph nodes that were removed and examined by the pathologist.

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

INSTRUCTIONS FOR CODING

1. Record information about only regional lymph nodes in this field. Distant lymph node information should be coded in the "CS Mets at Dx" field.
2. Rules for coding Regional Nodes Examined are the same for in situ and invasive cases.
3. This field is based on pathologic information only. If no lymph nodes were removed for examination, or if a lymph node drainage area was removed but no lymph nodes were found, code as 00. If it is unknown whether nodes were removed or examined, code as 99.
4. Record the total number of regional lymph nodes removed and examined by the pathologist.
 - a. The number of regional lymph nodes examined is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.
 - b. If lymph nodes are aspirated and other lymph nodes are removed, use code 98.

- c. This field is to be recorded regardless of whether the patient received preoperative treatment.
- 5. 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.
- 6. For the following primary sites and histologies, the Regional Nodes Examined field is always coded as 99.

Brain and Cerebral Meninges

Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms

Hodgkin and non-Hodgkin Lymphoma

Other and Ill-Defined Primary Sites

Other Parts of Central Nervous System

Placenta

Unknown Primary Site

CS METS AT DX

Item Length: 2
 NAACCR Item #: 2850
 NAACCR Name: CS Mets at Dx

Identifies the distant site(s) of metastatic involvement at time of diagnosis.

Code	Description	TNM Mapping	SS77 Mapping	SS2000 Mapping
00	No; none	M0	None	None
10	Distant lymph node(s)	M1	D	D
40	Distant metastases except code 10 Distant metastasis, NOS Carcinomatosis	M1	D	D
	SITE/HISTOLOGY-SPECIFIC CODES WHERE NEEDED			
50	(40) + (10)	M1	D	D
99	Unknown; distant metastasis cannot be assessed; not stated in patient record	MX	U	U

For schemas that do not use the CS Mets at Dx field:

Code	Description

INSTRUCTIONS FOR CODING

1. This field represents distant metastases (the TNM M component or distant stage in Summary Staging) at the time of diagnosis. In other words, when the patient was diagnosed, tumor had already spread indirectly (through vascular or lymph channels) to a site remote from the primary tumor.

Note: The structure of the CS Mets at Dx field is based on the M category of TNM. In some schemas, there may be additional items in CS Extension or CS Lymph Nodes that map to distant stage in Summary Staging (77 and/or 2000) and there may be some items in CS Mets at Dx that map to regional stage in Summary Staging. Regardless of where such items are recorded, the staging algorithms will properly account for the information.

2. Assign the highest applicable code for metastasis at diagnosis, whether the determination was clinical or pathological and whether or not the patient had any preoperative systemic therapy.

3. Metastasis known to have developed after the extent of disease was established (also referred to as progression of disease) should not be recorded in the CS Mets at Dx field.
4. Record CS Mets at Dx as Code 00 (None) rather than Code 99 (Unknown) when the clinician proceeds with standard treatment of the primary site for localized or early (T1, T2) stage disease, since this action presumes that there are no distant metastasis that would otherwise alter the treatment approach. Code 99 can and should be used in situations where there is reasonable doubt that the tumor is no longer localized and there is no documentation of distant metastases.
5. If the only indication of extension in the record is the physician's statement of an M category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' D, record the numerically lowest equivalent extension code for that M category. In most cases, this will be 40, Distant metastasis, NOS.
6. If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, the extent of disease may be inferred from the M category stated by the physician.
7. Some site or histology schemas include a designation of M1, NOS. The NOS is added when there is further breakdown of the category into subsets (such as M1a, M1b, M1c), but the correct subset cannot be determined. The NOS designation, which can appear in both the descriptions of codes and the mapping, is not official AJCC descriptive terminology. The NOS should be disregarded in reports and analyses when it is not a useful distinction. The data collector should only code to a category such as "Stated as M1 NOS" when the appropriate subset (such as M1a or M1b) cannot be determined.
8. It is strongly recommended that the choice of distant lymph nodes and/or distant metastasis codes be documented in a related text field on the abstract.

CS METS EVAL

Item Length: 1
 NAACCR Item #: 2860
 NAACCR Name: CS Mets Eval

Records how the code for the item "CS Mets at Dx" was determined based on the diagnostic methods employed.

Code	Description	Staging Basis
0	No pathologic examination of metastatic tissue performed. Evaluation of distant metastasis based on physical examination, imaging examination, and/or other non-invasive clinical evidence. No autopsy evidence used.	c
1	No pathologic examination of metastatic tissue performed. Evaluation of distant metastasis based on endoscopic examination or other invasive technique. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging of distant metastasis.	c
2	No pathologic examination of metastatic tissue done prior to death, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy).	p
3	Pathologic examination of metastatic tissue performed WITHOUT pre-surgical systemic treatment or radiation OR pathologic examination of metastatic tissue performed, unknown if pre-surgical systemic treatment or radiation performed Meets criteria for AJCC pathologic staging of distant metastasis.	p
5	Pathologic examination of metastatic tissue performed WITH pre-surgical systemic treatment or radiation, and metastasis based on clinical evidence.	c
6	Pathologic examination of metastatic tissue performed WITH pre-surgical systemic treatment or radiation, BUT metastasis based on pathologic evidence.	y
8	Evidence from autopsy; tumor was unsuspected or undiagnosed prior to autopsy.	a
9	Not assessed; cannot be assessed Unknown if assessed Not documented in patient record <i>For sites with no TNM staging:</i> Not applicable	c

Instructions for Coding

1. Select the CS Mets Eval code that documents the report or procedure from which the information was obtained about metastatic involvement farthest from the primary site; this may not be the numerically highest eval code.

Example: Liver palpated and reported as normal during laparotomy for stomach cancer (Eval code 1). CT scan of brain shows multiple metastatic nodules (Eval code 0). Code CS Mets Eval as 0; the brain would be reported as involved but the liver would not be reported as involved..

2. For primary sites/histologies where there is no TNM schema (Table 6), this field may be coded as 9 (not applicable).

3. Select the code that best explains how the information in the CS Metastases field was determined.
 - a. If the patient had no examination of metastatic tissue, use code 0, 1, or 9.

Example 1: Patient has diagnosis of colon cancer by biopsy. CT scan shows liver metastasis. Code this field as 0. Staging algorithm will indicate information is clinical (c).

Example 2: Lung cancer with endoscopy of contralateral lung showing involvement of contralateral mainstem bronchus. Code this field as 1. Staging algorithm will indicate information is clinical (c).

Example 3: Prostate cancer with enlarged scalene node confirmed as cancer on needle biopsy. Code this field as 3. Staging algorithm will indicate information is pathologic (p), since the biopsy of the metastatic site confirms M1 disease.

- b. If the patient had removal of presumed metastatic tissue (even though the pathology report was negative), use code 3.
 - c. Code the method of evaluation for the site(s) farthest from the primary.

Example: Colon cancer patient has CT scan showing normal lungs. During the resection, the surgeon palpates the liver and finds it to be normal. Code this field as 0, since the CT scan shows that potential metastatic sites outside the surgical field are negative.

- d. If the patient had an autopsy, use code 2 if the diagnosis was known or suspected prior to death. Use code 8 if the malignancy was not known or suspected prior to death.
4. If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, the clinical status of metastases at diagnosis takes precedence (code 5).
5. If the patient has biopsies of some metastases while others are visible only on imaging, use code 6 to indicate if, after preoperative treatment, the biopsy is negative for metastasis but there is still evidence of clinical metastasis.
6. Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), ultrasonography, magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.
7. Any positive biopsy or resection of distant metastasis meets the requirement for pathologic staging basis and should be coded to CS Mets Eval code 3.
8. Code 1 includes endoscopy and observations at surgery, such as abdominal exploration at the time of a colon resection, where distant metastasis is not biopsied.

CS SITE-SPECIFIC FACTOR 1

Item Length: 3
NAACCR Item #: 2880
NAACCR Name: CS Site-Specific Factor1

Identifies additional information needed to generate stage, or prognostic factors that have an effect on stage or survival.

Code	Description
000	None
	SITE/HISTOLOGY-SPECIFIC CODES
999	Unknown; [site-specific title] cannot be assessed; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
888	Not applicable for this site

INSTRUCTIONS FOR CODING

1. If there is no site/histology-specific factor for a schema, code 888.
2. The following primary sites/histologies use Site Specific Factor 1 to code information. See the site-specific schemas for acceptable codes and their definitions.

<u>Site/Histology</u>	<u>Factor</u>
Head and neck*	Size of Lymph Nodes
Colon	Carcinoembryonic Antigen (CEA)
Rectosigmoid, rectum	Carcinoembryonic Antigen (CEA)
Liver	Alpha Fetoprotein (AFP)
Pleura	Pleural Effusion
Malignant Melanoma of Skin, Vulva, Penis, Scrotum	Measured Thickness (Depth), Breslow's Measurement
Mycosis Fungoides	Peripheral Blood Involvement
Breast	Estrogen Receptor Assay (ERA)
Ovary	Carbohydrate Antigen 125 (CA-125)
Placenta	Prognostic Scoring Index
Prostate	Prostate Specific Antigen Laboratory Value (PSA PSA Lab Value)
Testis	Alpha Fetoprotein (AFP)
Thyroid	Single vs. Multiple Nodules

- * Head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

<u>Site/Histology</u>	<u>Factor</u>
Melanoma of Conjunctiva	Measured Thickness (Depth), Breslow's Measurement
Melanoma of Choroid	Measured Thickness (Depth), Breslow's Measurement
Melanoma of Iris and Ciliary Body	Measured Thickness (Depth), Breslow's Measurement
Retinoblastoma	Extension Evaluated at Enucleation
Brain	WHO Grade
Other CNS	WHO Grade
Thyroid	Solitary vs. Multifocal
Other Endocrine	WHO Grade
Kaposi Sarcoma	Associated with HIV/AIDS
Lymphoma	Associated with HIV/AIDS

3. Code 000 Not done is used when there is a statement in the record that a test was not performed.
 - a. If there is no report of a lab test in the patient record, code as 999 Unknown; Not documented in patient record.
 - b. For Kaposi sarcoma, if AIDS status is not documented, code as 999 Unknown rather than 002, Not Present.

CS SITE-SPECIFIC FACTOR 2

Item Length: 3
NAACCR Item #: 2890
NAACCR Name: CS Site-Specific Factor2

Identifies additional information needed to generate stage, or prognostic factors that have an effect on stage or survival.

Code	Description
000	None
	SITE/HISTOLOGY-SPECIFIC CODES
999	Unknown; [site-specific title] cannot be assessed; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
888	Not applicable for this site

INSTRUCTIONS FOR CODING

1. If there is no site/histology-specific factor for a schema, code 888.
2. The following primary sites use Site Specific Factor 2 to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology

Head and neck*

Liver

Malignant Melanoma of Skin,

Vulva, Penis, Scrotum

Breast

Prostate

Testis

Hodgkin and non-Hodgkin Lymphoma

Factor

Extracapsular Extension, Lymph Nodes for
Head and Neck

Fibrosis Score

Ulceration

Progesterone Receptor Assay (PRA)

Prostate Specific Antigen (PSA)

Human Chorionic Gonadotropin (HCG)

Symptoms at Diagnosis

* Head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other

salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

3. Code 000 Not done is used when there is a statement in the record that a test was not performed.
 - a. If there is no report of a lab test in the health record, code as 999 Unknown; Not documented in patient record.
 - b. For malignant melanoma of skin, if ulceration is not mentioned in the pathology report, code as 000 No ulceration present.

CS SITE-SPECIFIC FACTOR 3

Item Length: 3
NAACCR Item #: 2900
NAACCR Name: CS Site-Specific Factor3

Identifies additional information needed to generate stage, or prognostic factors that have an effect on stage or survival.

Code	Description
000	None
SITE/HISTOLOGY-SPECIFIC CODES	
999	Unknown; [site-specific title] cannot be assessed; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
888	Not applicable for this site

INSTRUCTIONS FOR CODING

1. If there is no site/histology-specific factor for a schema, code 888.
2. The following primary sites use Site Specific Factor 3 to code information. See the site-specific schemas for acceptable codes and their definitions.

<u>Site/Histology</u>	<u>Factor</u>
Head and Neck*	Levels I-III, Lymph Nodes of Head and Neck
Malignant Melanoma of Skin, Vulva, Penis, Scrotum	Clinical Status of Lymph Node Mets
Breast	Number of Positive Ipsilateral Axillary Lymph Nodes
Prostate	CS Extension - Pathologic Extension
Testis	LDH (Lactate Dehydrogenase)
Lymphoma	International Prognostic Index (IPI) Score

* Head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

3. Code 000 Not done is used when there is a statement in the record that a test was not performed.
 - a. If there is no report of a lab test in the health record, code as 999 Unknown; Not documented in patient record.
 - b. For the lymphomas, if the IPI score is not stated in the record, code as 999 Unknown; Not documented in patient record. It is not necessary to calculate the IPI score from other information in the record.

FOR HEAD AND NECK SITES ONLY:

4. Use code 9 only when it is unknown if lymph nodes are involved. Within the Site-Specific Factors, do not code 9 in some positions and 0 or 1 in other positions. If specific information is available about the positive or negative status of some but not all nodes in any one level or group, assume that the rest of the nodes in the same Site-Specific Factor are negative and code accordingly.
5. When the only information available is “Regional nodes, NOS” or “Cervical nodes, NOS” or “Internal jugular lymph nodes, NOS” or “Lymph nodes, NOS,” code 0 in all digits of Site-Specific Factors 3-6.
6. See “Coding Regional Lymph Nodes for Head and Neck Sites” under CS Lymph Nodes for further information about the regional nodes of the head and neck, including definitions of the levels.

CS SITE-SPECIFIC FACTOR 4

Item Length: 3
NAACCR Item #: 2910
NAACCR Name: CS Site-Specific Factor4

Identifies additional information needed to generate stage, or prognostic factors that have an effect on stage or survival.

Code	Description
000	None
	SITE/HISTOLOGY-SPECIFIC CODES
999	Unknown; [site-specific title] cannot be assessed; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
888	Not applicable for this site

INSTRUCTIONS FOR CODING

1. If there is no site/histology-specific factor for a schema, code 888.
2. The following primary sites use Site Specific Factor 4 to code information. See the site-specific schemas for acceptable codes and their definitions.

<u>Site/Histology</u>	<u>Factor</u>
Head and Neck*	Levels IV-V, Lymph Nodes of Head and Neck
Malignant Melanoma of Skin, Vulva, Penis, Scrotum	Lactate Dehydrogenase (LDH)
Breast	Immunohistochemistry (IHC) of Regional Lymph Nodes
Prostate	Prostatic Acid Phosphatase (PAP)
Testis	Radical Orchiectomy Performed

* Head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

3. Code 000 Not done is used when there is a statement in the record that a test was not performed.
 - a. If there is no report of a lab test in the health record, code as 999 Unknown; Not documented in patient record.

FOR HEAD AND NECK SITES ONLY:

4. Use code 9 only when it is unknown if lymph nodes are involved. Within the Site-Specific Factors, do not code 9 in some positions and 0 or 1 in other positions. If specific information is available about the positive or negative status of some but not all nodes in any one level or group, assume that the rest of the nodes in the same Site-Specific Factor are negative and code accordingly.
5. When the only information available is “Regional nodes, NOS” or “Cervical nodes, NOS” or “Internal jugular lymph nodes, NOS” or “Lymph nodes, NOS,” code 0 in all digits of Site-Specific Factors 3-6.
6. See “Coding Regional Lymph Nodes for Head and Neck Sites” under CS Lymph Nodes for further information about the regional nodes of the head and neck, including definitions of the levels.

CS SITE-SPECIFIC FACTOR 5

Item Length: 3
NAACCR Item #: 2920
NAACCR Name: CS Site-Specific Factor5

Identifies additional information needed to generate stage, or prognostic factors that have an effect on stage or survival.

Code	Description
000	None
	SITE/HISTOLOGY-SPECIFIC CODES
999	Unknown; [site-specific title] cannot be assessed; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
888	Not applicable for this site

INSTRUCTIONS FOR CODING

1. If there is no site/histology-specific factor for a schema, code 888.
2. The following primary sites use Site Specific Factor 5 to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology

Head and Neck*
 Breast
 Prostate
 Testis

Factor

Levels VI-VIII, Lymph Nodes of Head and Neck
 Molecular Studies of Regional Lymph Nodes
 Gleason's Primary and Secondary Patterns
 Size of Metastasis in Lymph Nodes

* Head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

3. Code 000 Not done is used when there is a statement in the record that a test was not performed.
 - a. If there is no report of a lab test in the health record, code as 999 Unknown; Not documented in patient record.

FOR HEAD AND NECK SITES ONLY:

4. Use code 9 only when it is unknown if lymph nodes are involved. Within the Site-Specific Factors, do not code 9 in some positions and 0 or 1 in other positions. If specific information is available about the positive or negative status of some but not all nodes in any one level or group, assume that the rest of the nodes in the same Site-Specific Factor are negative and code accordingly.
5. When the only information available is “Regional nodes, NOS” or “Cervical nodes, NOS” or “Internal jugular lymph nodes, NOS” or “Lymph nodes, NOS,” code 0 in all digits of Site-Specific Factors 3-6.
6. See “Coding Regional Lymph Nodes for Head and Neck Sites” under CS Lymph Nodes for further information about the regional nodes of the head and neck, including definitions of the levels.

CS SITE-SPECIFIC FACTOR 6

Item Length: 3
NAACCR Item #: 2930
NAACCR Name: CS Site-Specific Factor6

Identifies additional information needed to generate stage, or prognostic factors that have an effect on stage or survival.

Code	Description
000	None
	SITE/HISTOLOGY-SPECIFIC CODES
999	Unknown; [site-specific title] cannot be assessed; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
888	Not applicable for this site

INSTRUCTIONS FOR CODING

1. If there is no site/histology-specific factor for a schema, code 888.
2. The following primary sites use Site Specific Factor 6 to code information. See the site-specific schemas for acceptable codes and their definitions.

Site/Histology

Head and Neck*

Breast

Prostate

Factor

Parapharyngeal, Parotid, Preauricular, and Sub-Occipital Lymph Nodes, Lymph Nodes for Head and Neck

Size of Tumor--Invasive Component

Gleason's Score

* Head and neck includes the following schemas: upper lip; lower lip; other lip; base of tongue; anterior tongue; upper gum; lower gum and retromolar trigone; other gum; floor of mouth; hard palate; soft palate/uvula; other mouth; buccal mucosa; parotid gland; submandibular gland; other salivary glands; oropharynx; anterior surface of epiglottis; nasopharynx; pyriform sinus/hypopharynx; other pharynx; nasal cavity; middle ear; maxillary sinus; ethmoid sinus; other sinus; glottic larynx; supraglottic larynx; subglottic larynx; other larynx

3. Code 000 Not done is used when there is a statement in the record that a test was not performed.
 - a. If there is no report of a lab test in the health record, code as 999 Unknown; Not documented in patient record.

For Head And Neck Sites Only:

4. Use code 9 only when it is unknown if lymph nodes are involved. Within the Site-Specific Factors, do not code 9 in some positions and 0 or 1 in other positions. If specific information is available about the positive or negative status of some but not all nodes in any one level or group, assume that the rest of the nodes in the same Site-Specific Factor are negative and code accordingly.
5. When the only information available is “Regional nodes, NOS” or “Cervical nodes, NOS” or “Internal jugular lymph nodes, NOS” or “Lymph nodes, NOS,” code 0 in all digits of Site-Specific Factors 3-6.
6. See “Coding Regional Lymph Nodes for Head and Neck Sites” under CS Lymph Nodes for further information about the regional nodes of the head and neck, including definitions of the levels.

SEER SUMMARY STAGE 1977

Item Length: 1

NAACCR Item #: 760

NAACCR Name: SEER SUMMARY STAGE 1977

For SEER registries who elect to have SEER submit their data to NAACCR, only. Tumors diagnosed before January 1, 2001, should be assigned a summary stage according to *SEER Summary Staging Guide*.

SEER Summary Stage 1977 is limited to information available within 2 months of the date of diagnosis.

Note: See also the data item Derived SS21977 [NAACCR Item #3010] for the value of SEER Summary Stage 1977 as generated by the Collaborative Staging algorithm.

Data may be submitted using either manually entered SEER Summary Stage 1977 code or Collaborative Stage generated code.

Codes

- 0 In situ
- 1 Localized
- 2 Regional, direct extension only
- 3 Regional, regional lymph nodes only
- 4 Regional, direct extension and regional lymph nodes
- 5 Regional, NOS
- 7 Distant
- 9 Unstaged

SEER SUMMARY STAGE 2000

Item Length: 1

NAACCR Item #: 759

NAACCR Name: SEER SUMMARY STAGE 2000

For SEER registries who elect to have SEER submit their data to NAACCR, only. Tumors diagnosed January 1, 2001 or after, should be assigned a summary stage according to *SEER Summary Staging Manual 2000*.

Summary stage should include all information available through completion of surgery(ies) in the first course of treatment or within 4 months of diagnosis in the absence of disease progression, whichever is longer.

Note: See also the data item Derived SS2000 [NAACCR Item #3020] for the value of SEER Summary Stage 2000 as generated by the Collaborative Staging algorithm.

Data may be submitted using either manually entered SEER Summary Stage 2000 code or Collaborative Stage generated code.

Codes

- 0 In situ
- 1 Localized
- 2 Regional, direct extension only
- 3 Regional, regional lymph nodes only
- 4 Regional, direct extension and regional lymph nodes
- 5 Regional, NOS
- 7 Distant
- 9 Unstaged

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**SECTION VI
FIRST COURSE OF THERAPY**

**All Diseases (including Benign and borderline intracranial & CNS tumors) Except
Leukemia and Hematopoietic Diseases**

Definitions

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

Disease recurrence: The patient must have had a disease-free interval or remission (the cancer was not clinically evident). Following a disease-free interval, there is documentation that the initial/original tumor gave rise to the later tumor.

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

Palliative treatment: The World Health Organization describes palliative care as treatment that improves the quality of life by preventing or relieving suffering. Palliative therapy is also part of the first course of therapy when the treatment destroys or modifies cancer tissue. Palliative therapy may also be part of the first course of therapy if it destroys proliferating cancer tissue.

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

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

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

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

Watchful waiting: A treatment option for patients with slow, indolent diseases, such as prostate cancer and chronic lymphocytic leukemia (CLL). The physician closely monitors the patient and delays treatment until the patient becomes symptomatic or there are other signs of disease progression, such as rising PSA.

Treatment Timing

Use the following instructions in hierarchical order.

1. Use the **documented** first course of therapy from the medical record. First course ends when the treatment plan is **completed**. (No matter how long it takes to complete the plan).

Example 1: First course of treatment for childhood leukemia typically spans two years from induction, consolidation, to maintenance.

Example 2: The first course of therapy for a breast cancer patient is surgery, chemotherapy, and radiation. The patient completes surgery and chemotherapy. Bone metastases are diagnosed before the radiation was started. The physician says that the patient will start the radiation treatment as planned. Code the radiation as first course of therapy since it was given in agreement with the treatment plan and the treatment plan was not changed as a result of disease progression.

2. First course of therapy ends when there is documentation of disease progression, recurrence or treatment failure.

Example 1: The documented treatment plan for sarcoma is chemotherapy, surgery, then radiation or chemotherapy depending upon the pathology from surgery. Scans show the tumor is not regressing after chemotherapy. Plans for surgery are cancelled and a different type of chemotherapy is started. Code only the first chemotherapy as first course. Do not code the second chemotherapy as first course because it is administered after documented treatment failure.

Example 2: The documented treatment plan for a patient with locally advanced breast cancer includes mastectomy, chemotherapy, radiation to the chest wall and axilla, and hormone therapy. The patient has the mastectomy and completes chemotherapy. During the course of radiation therapy, the liver enzymes are rising. Workup proves liver metastases. The physician stops the radiation and does not continue with hormone therapy (the treatment plan is altered). The patient is placed on a clinical trial to receive Hercepton for metastatic breast cancer. Code the mastectomy, chemotherapy, and radiation as first course of treatment. Do not code the Hercepton as first course of therapy because it is administered after documented disease progression.

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

Coding Instructions

1. When physician decides to do watchful waiting for a patient who has prostate cancer, the first course of therapy is no treatment. Code all of the treatment fields to 00, not done. When the disease progresses and the patient is symptomatic; any prescribed treatment is second course.
2. When the patient refuses treatment the first course of therapy is no treatment. Code the treatment fields to refused. If the patient later changes his/her mind and decides to have the prescribed treatment code:
 - a. Code the treatment as first course of therapy if it has been less than one year since the cancer was diagnosed and there has been no documented disease progression.
 - b. Code the treatment as second course of therapy if it has been more than one year since the original cancer was diagnosed or if there has been documented disease progression.
3. Code all treatment that was started and administered.

Example: The patient completed only the first dose of a planned 30 day chemotherapy regimen. Code chemotherapy as administered.

4. If a patient has multiple primaries and the treatment given for one primary also affects/treats the other primary, code the treatment for both primary sites.

Example 1: The patient had prostate and bladder cancer. The bladder cancer was treated with a TURB. The prostate cancer was treated with radiation to the prostate and pelvis. The pelvic radiation includes the regional lymph nodes for the bladder. Code the radiation as treatment for both the bladder and prostate cases.

Example 2: The patient had a hysterectomy for ovarian cancer. The pathology report reveals a previously unsuspected microinvasive cancer of the cervix. Code the hysterectomy as surgical treatment for both the ovarian and cervix primaries.

4. If a patient has multiple primaries and the treatment given affects only one of the primaries, code the treatments only on the site that is affected.

Example: The patient has colon and tonsil primaries. The colon cancer is treated with a hemicolectomy and the tonsil primary is treated with radiation to the tonsil and regional nodes. Do not code the radiation for the colon. Do not code the hemicolectomy for the tonsil.

5. If a patient is diagnosed with an unknown primary, code the treatment given as first course even if the correct primary is identified later.

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

First Course for Leukemia and Hematopoietic Diseases (diagnosed 1/2001 and after)

Leukemia:

Leukemia is grouped or typed by how quickly the disease develops and gets worse. **Chronic** leukemia gets worse **slowly**. **Acute** leukemia gets worse **quickly**.

Leukemias are also grouped by the **type of white blood cell** that is affected. The groupings are: **lymphoid** leukemia and **myeloid** leukemia.

Definitions

Consolidation: Repetitive cycles of chemotherapy given immediately after the remission.

Induction: Initial intensive course of chemotherapy.

Maintenance: Chemotherapy given for a period of months or years to maintain remission.

Remission: The bone marrow is normocellular with less than 5% blasts, there are no signs or symptoms of the disease, no signs or symptoms of central nervous system leukemia or other extramedullary infiltration, and all of the following laboratory values are within normal limits: white blood cell count and differential, hematocrit/hemoglobin level, and platelet count.

Treatment for leukemia is divided into **three phases**:

1. Remission induction (chemotherapy and/or biologic response modifiers)
2. CNS prophylaxis or consolidation (irradiation to brain, chemotherapy)
3. Remission continuation or maintenance (chemotherapy or bone marrow transplants).

Coding First Course of Therapy for Leukemia and Hematopoietic Diseases:

1. If a patient **has** a partial or complete **remission** during the first course of therapy:
 - a. Code all therapy that is “remission-inducing” as first course.
 - b. Code all therapy that is “consolidation” as first course.
 - c. Code all therapy that is “remission-maintaining” as first course.

Note: Do not record treatment given after the patient relapses (is no longer in remission).

2. Some patients do not have a remission. A change in the treatment plan indicates a failure to induce remission. If the patient does not have a remission:
 - a. Record the treatment given in an attempt to induce a remission.
 - b. Do not record treatment administered after the change in treatment plan.

Other Hematopoietic

Record all treatments as described above. The following treatments are coded as “other” in Other Treatment even though they do not “modify, control, remove, or destroy proliferating cancer tissue.” Follow the guidelines in the *Abstracting and Coding Guide for the Hematopoietic Diseases* to identify treatments. Some examples of “other” treatment include:

Example 1: Phlebotomy may be called blood removal, blood letting, or venisection.

Example 2: Transfusions may include whole blood, RBCs, platelets, plateletpheresis, fresh frozen plasma (FFP), plasmapheresis, and cryoprecipitate.

Example 3: Aspirin (also known as ASA, acetylsalicylic acid, or by a brand name) is used as a treatment for essential thrombocythemia.

- a. Only record aspirin therapy if it is given to thin the blood for symptomatic control of thrombocythemia. Use the following guidelines to determine whether aspirin is administered for thinning of blood for thrombocythemia rather than for pain control or cardiovascular protection:
 - i. Aspirin treatment for essential thrombocythemia is low dose, approximately 70-100 mg/day
 - ii. The dosage for pain control is approximately 325-1000 mg every 3-4 hours.
 - iii. Cardiovascular protection starts at about 160 mg/day.

Date Therapy Initiated

Item Length: 8

NAACCR Item #: 1260

NAACCR Name: Date of initial RX--SEER

Record the start date of the first course of therapy. This may be the start date of any type of treatment for this tumor; surgery, chemotherapy, radiation therapy, or other types of cancer-directed therapy. Treatment might be given in a hospital or non-hospital setting. Date fields are recorded in the month, day, century, year format (MMDDCCYY) with 99 for unknown day or month and 9999 for unknown year.

Most SEER registries collect the month, day, and year of therapy. The third and fourth digits (day) are recoded to 99 when the data are transmitted to SEER.

Codes for Month

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

Codes for Day

01	
02	
03	
..	
..	
31	
99	Unknown day

Codes for Year

Code the four-digit year of therapy initiation
Record 9999 for unknown year

Special Codes

00000000	No date, no first course treatment performed
99999999	Unknown date

Definitions

Cancer-directed therapy: Treatment administered to the patient in an attempt to destroy or modify cancer tissue.

Note: Surgical procedures coded in the data items Scope of Regional Lymph Node Surgery and Surgical Procedure of Other Site are not necessarily cancer-directed therapy.

Coding Instructions

1. Code **00000000** if no cancer-directed therapy was given.
 - a. If there was no first course therapy. For example, the patient had ONLY biopsy, bypass, or “watchful waiting”
 - b. Autopsy only cases
2. Code the **start date** of the first cancer-directed therapy. The first cancer-directed therapy may be coded in the following data items:
 - Surgery of Primary Site
 - Scope of Regional Lymph Node Surgery when cancer directed
 - Surgical Procedure of Other Site when cancer-directed
 - Radiation Therapy
 - Chemotherapy
 - Hormone Therapy
 - Immunotherapy,
 - Hematologic Transplant and Endocrine Procedures
 - Other Therapy
3. Code the date of **excisional biopsy** as the date therapy initiated if it is the first treatment. Code the date of a biopsy documented as incisional if further surgery reveals no residual or only microscopic residual.

Example: Breast core needle biopsy with diagnosis of infiltrating duct carcinoma; subsequent re-excision with no residual tumor noted. Code the date of the needle biopsy as the excisional biopsy date.
4. Code the date unproven therapy was initiated as the date therapy initiated.
5. If the exact **date** of the first treatment is **unknown**, code the date of admission to the hospital for inpatient or outpatient treatment.

6. Code **99999999**

- a. It is known the patient had first course therapy, but it is impossible to estimate the date
- b. Death certificate only cases

Surgery of Primary Site

Item Length: 2

NAACCR Item #: 1290

NAACCR Name: RX Summ--Surg Prim Site

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

General Coding Structure (See Appendix C for site-specific codes)

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

Coding Instructions

1. Code 00 if **no surgery** is performed on the primary site or if case was diagnosed at **autopsy, and would not be otherwise coded to 98.**
2. Use the site-specific coding scheme corresponding to the coded primary site.
3. Code the most **invasive, extensive, or definitive** surgery if the patient has multiple surgical procedures of the primary site even if there is no tumor found in the pathologic specimen. The codes in the range of 00-80 are **listed** in hierarchical but not necessarily numerical order. When more than one surgical procedure is performed, code the procedure listed furthest down the list within the codes 10-80.

Example: Patient has a needle biopsy of prostate that is positive for adenocarcinoma. The patient chooses to have a radical prostatectomy. The pathologic examination of the prostatectomy specimen shows no residual tumor. Code the radical prostatectomy.

4. Code an **excisional biopsy**, even when documented as **incisional**, when:
 - a. All disease is removed (**margins free**) OR
 - b. All gross disease is removed and there is only **microscopic residual at the margin**

Note: Do not code an excisional biopsy when there is macroscopic residual disease.

5. Code **total removal of the primary site** when a previous procedure resected a portion of the site and the current surgery removed the rest of the organ. The previous procedure may have been cancer directed or non-cancer directed surgery.
6. Code the removal of regional or distant **tissue/organs** when they are resected in continuity with the primary site (**en bloc**). Specimens from an en bloc resection may be submitted to pathology separately.

Example: Code an en bloc removal when the patient has a hysterectomy and an omentectomy.

7. Code surgery for extra-lymphatic lymphoma using the site-specific surgery coding scheme (not lymph node scheme) for the primary site.
8. Code **80** or **90** only when there is no specific information.
9. Code **98** for the following sites unless the case is death certificate only:
 - a. Primary sites
 - i. Brain (C700-C709) OR
 - ii. Spinal cord (C710-C719) OR
 - iii. Cranial nerves and other parts of the central nervous system (C720-C729)
 - b. Lymphoma with primary site in lymph nodes (C770-C779) AND histology
 - i. 9590-9596 OR
 - ii. 9650-9719 OR
 - iii. 9727-9729
 - c. Hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease
 - i. Primary sites: C420, C421, C423, or C424 AND
 - ii. Histologies: 9750, 9760-9764, 9820-9822, 9826, 9831-9920, 9931-9964, 9980-9989
 - iii. Unknown or ill-defined sites (C760-C768, C809)
10. Assign **code 99** for death certificate only (DCO) cases

Scope of Regional Lymph Node Surgery

Item Length: 1

NAACCR Item #: 1292

NAACCR Name: RX Summ--Scope Reg LN Sur

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

Codes

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

Coding Instructions

- 1. Code 0 when regional lymph node removal procedure was not performed.
- 2. Code regional lymph node procedures in this data item. Record distant lymph node removal in Surgical Procedure of Other Site.
- 3. Codes 1-7 are **hierarchical**. Code the procedure that is numerically higher.
- 4. The regional lymph node surgical procedure(s) may be done to **diagnose** cancer, **stage** the disease, or as a part of the initial **treatment**. Record all surgical procedures that remove, biopsy, or aspirate regional lymph node(s) whether or not there were any surgical procedures of the primary site.

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

- 5. The Scope of Regional Lymph Node field is **cumulative**; add the number of all of the lymph nodes removed during each surgical procedure performed as part of the first course of treatment.

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

6. If the operative report lists a lymph node dissection, but **no nodes were found by the pathologist**, code the Scope of Regional Lymph Node Surgery to 0 (No lymph nodes removed)
7. If the patient has **two primaries with common regional lymph nodes**, code the removal of regional nodes for both primaries.

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

11. Assign **code 9** for
 - a. Primary sites
 - i. Brain (C700-C709) OR
 - ii. Spinal cord (C710-C719) OR
 - iii. Cranial nerves and other parts of the central nervous system (C720-C729)
 - b. Lymphoma with primary site in lymph nodes (C770-C779) AND histology
 - i. 9590-9596 OR
 - ii. 9650-9719 OR
 - iii. 9727-9729
 - c. Hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease
 - i. Primary sites: C420, C421, C423, or C424 AND
 - ii. Histologies: 9750, 9760-9764, 9820-9822, 9826, 9831-9920, 9931-9964, 9980-9989
 - iii. Unknown or ill-defined sites (C760-C768, C809)

Surgical Procedure of Other Site

Item Length: 1

NAACCR Item #: 1294

NAACCR Name: Rx Summ--Surg Oth Reg/Dis

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

Codes

- 0 None; diagnosed at autopsy
- 1 Nonprimary surgical procedure performed
- 2 Nonprimary surgical procedure to other regional sites
- 3 Non-primary surgical procedure to distant lymph node(s)
- 4 Nonprimary surgical procedure to distant site
- 5 Combination of codes 2, 3, or 4
- 9 Unknown; death certificate only

Coding Instructions

- 1. Code 0 when no surgical procedures were performed that removed distant lymph node(s) or other tissue(s) or organ(s) beyond the primary site.
- 2. The codes are **hierarchical**. Code the procedure that is numerically higher.
- 3. Codes 1-5 have priority over codes 0 and 9
- 4. Do not code tissue or organs such as an appendix that were removed **incidentally**, and the organ was not involved with cancer.

Note: Incidental removal of organs means that tissue was removed for reasons other than removing cancer or preventing the spread of cancer. Examples of incidental removal of organ(s) would be removal of appendix, gallbladder, etc. during abdominal surgery.

Reason for No Surgery of Primary Site

Item Length: 1
NAACCR Item #: 1340
NAACCR Name: Reason for No Surgery

Records the reason that surgery was not performed on the primary site.

Codes

- 0 Surgery of the primary site was performed
- 1 Surgery of the primary site was not performed because it was not part of the planned first-course treatment
- 2 Surgery of the primary site was not recommended/performed because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.)
- 5 Surgery of the primary site was not performed because the patient died prior to planned or recommended surgery
- 6 Surgery of the primary site was not performed; it was recommended by the patient's physician, but was not performed as part of the first course of therapy. No reason was noted in the patient's record.
- 7 Surgery of the primary site was not performed; it was recommended by the patient's physician, but was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in the patient record.
- 8 Surgery of the primary site was recommended, but it is unknown if it was performed. Further follow up is recommended.
- 9 It is unknown if surgery of the primary site was recommended or performed; death certificate only cases and autopsy only cases.

Coding Instructions

- 1. Assign **code 0** when Surgery of Primary Site is coded in the range of 10-90 (the patient did have surgery of primary site)
- 2. Assign a code in the **range of 1-8** if Surgery of Primary Site is coded 00 or 98.
- 3. Assign **code 1**
 - a. There is no information in the patient's medical record about surgery AND
 - i. It is known that surgery is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had surgery of primary site.
 - b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include surgery of the primary site Patient elects to pursue

- no treatment following the discussion of radiation treatment. Discussion does not equal a recommendation.
- c. Only information available is that the patient was referred to a surgeon. Referral does not equal a recommendation.
 - d. Watchful waiting (prostate)
 - e. Patient diagnosed at autopsy
4. Assign **code 6**
- a. When it is known that surgery was recommended AND
 - b. It is known that surgery was not performed AND
 - c. There is no documentation explaining why surgery was not done.
5. Assign **code 7** (refused) if the patient refused recommended surgery, or made a blanket statement that he/she refused all treatment.
6. Assign **code 8** (unknown) if the treatment plan offered surgery, but it is unknown if the patient actually had the surgery.
7. Assign **code 9**
- a. When there is no documentation that surgery was recommended or performed
 - b. Death certificate only.
 - c. Autopsy only (Diagnosis 1/1/2003)

Radiation

Item Length: 1

NAACCR Item #: 1360

NAACCR Name: RX Summ--Radiation

Record the method of administration of radiation administered as a part of the first course of treatment. Record all radiation that is given, even if it is palliative.

The Commission on Cancer (COC) does not require the collection of the radiation summary data field effective 1/1/2002. If this data item is not reported by a COC hospital, SEER central registries can generate the code for this field by combining information from fields required by COC. Tables for deriving the radiation summary are included in this section.

Codes

- 0 None; diagnosed at autopsy
- 1 Beam radiation
- 2 Radioactive implants
- 3 Radioisotopes
- 4 Combination of 1 with 2 or 3
- 5 Radiation, NOS – method or source not specified
- 7 Patient or patient's guardian refused radiation therapy
- 8 Radiation recommended, unknown if administered
- 9 Unknown if radiation administered

Coding Instructions

1. Assign **code 0**
 - a. There is no information in the patient's medical record about radiation AND
 - i. It is known that radiation is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had radiation.
 - b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include radiation
 - c. Patient elects to pursue no treatment following the discussion of radiation treatment. Discussion does not equal a recommendation.
 - d. Only information available is that the patient was referred to a radiation oncologist. Referral does not equal a recommendation.
 - e. Watchful waiting (prostate)
 - f. Patient diagnosed at autopsy

2. Assign **code 1** for beam radiation directed to cancer tissue. The source of the beam radiation is not used for coding purposes. Sources may include, but are not limited to: X-ray, Cobalt, linear accelerator, neutron beam, betatron, spray radiation, stereotactic radiosurgery such as gamma knife and proton beam.
3. Assign **code 2** when the radiation is delivered by interstitial implant, molds, seeds, needles or intracavitary applicators. The radioactive material used in implants includes, but is not limited to: cesium, radium, radon, radioactive gold, and iodine.
4. Assign **code 3** when radioactive isotopes are given orally, intracavitary or by intravenous injection. Radioactive isotopes include but are not limited to: I-131 or P-32.
5. If the patient has multiple radiation types, code the dominant type (the greatest dose of radiation).
6. For cases diagnosed prior to 1/1/1998, radiation to the brain and/or central nervous system for lung and leukemia cases was coded in the field Radiation to the Brain and/or Central Nervous System.
7. Assign **code 9**
 - a. When there is no documentation that radiation was recommended or performed
 - b. Death certificate only.

Translation of Regional Treatment Modality and/or Boost Treatment Modality Field to RX Summ--Radiation

RX Summ—Radiation	Code	Regional Treatment Modality and/or Boost Treatment
0 None	00	No radiation treatment
1 Beam radiation	20	External beam, NOS
	21	Orthovoltage
	22	Cobalt-60, Cesium-137
	23	Photons (2-5 MV)
	24	Photons (6-10 MV)
	25	Photons (11-19 MV)
	26	Photons (>19 MV)
	27	Photons (mixed energies)
	28	Electrons
	29	Photons and electrons mixed
	30	Neutrons, with or without photons/electrons
	31	IMRT
	32	Conformal or 3-D therapy
	40	Protons
	41	Stereotactic radiosurgery, NOS
	42	Linac radiosurgery
	2 Radioactive implants	43
50		Brachytherapy, NOS
51		Brachytherapy, intracavitary, LDR
52		Brachytherapy, intracavitary, HDR
53		Brachytherapy, interstitial, LDR
54		Brachytherapy, interstitial, HDR
3 Radioisotopes	55	Radium
	60	Radioisotopes, NOS
	61	Strontium-89
4 Combination of 1 with 2 or 3	62	Strontium-90
	80	Combination modality, specified
5 Radiation therapy, NOS, method or source unspecified	85	Combination modality, NOS
	98	Other, NOS
9 Unknown	99	Unknown

If a code for TX Summ-Radiation is not received from hospital registrars, the code can be derived from the following sources if radiation is not received from hospital registries. The code for RX Summ—Radiation is derived from Rad-Boost RX Modality, Rad-Regional TX Modality, and/or Reason For No Radiation.

SEER Program Coding and Staging Manual 2004

Rad—Boost RX Modality	Rad—Regional TX Modality	RX Summ--Radiation
00	00, 99	0*
00	20-43	1
00	50-55	2
00	60-62	3
00	80-85	4
00	98	5
20-43	00, 20-43, 98, 99	1
20-43	50-55, 60-62, 80-85	4
50-55	00, 50-55, 98, 99	2
50-55	20-43, 80-85	4
50-55	60-62	3
60-62	00, 50-55, 60-62, 98, 99	3
60-62	20-43, 80-85	4
80-85	00-99	4
98	00, 98, 99	5
98, 99	20-43	1
98, 99	50-55	2
98, 99	60-62	3
98, 99	80-85	4
99	00	0*
99	99	9

* Reason No Radiation is reviewed for asterisked items only. If Reason for No Radiation is 7, RX Summ--Radiation is 7; If Reason for No Radiation is 8, RX Summ--Radiation code is 8.

Radiation Sequence with Surgery

Item Length: 1

NAACCR Item #: 1380

NAACCR Name: RX Summ--Surg/Rad Seq

This field records the order in which surgery and radiation therapies were administered for those patients who had **both surgery and radiation**. For the purpose of coding Radiation Sequence with Surgery, 'Surgery' is defined as a Surgical Procedure to the Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 1-7) or Surgical Procedure of Other Site (codes 1-5).

Codes

- 0 No radiation and/or surgery as defined above
- 2 Radiation before surgery
- 3 Radiation after surgery
- 4 Radiation both before and after surgery
- 5 Intraoperative radiation therapy
- 6 Intraoperative radiation with other radiation given before or after surgery
- 9 Sequence unknown, but both surgery and radiation were given

Definition

Surgery: Surgical Procedure to the Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 1-7) or Surgical Procedure of Other Site (codes 1-5).

Coding Instructions

Assign code 0 when

- The patient did not have either surgery or radiation.
- The patient had surgery but not radiation.
- The patient had radiation but not surgery

Note: For cases diagnosed prior to 1/1/1998, Radiation to the Brain and/or Central Nervous System was counted as radiation when coding this field.

Assign codes 2-9 when first course of therapy consists of both cancer-directed surgery and radiation therapy.

Chemotherapy

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

The data item Chemotherapy records the chemotherapy given as a part of the first course of treatment or the reason that chemotherapy was not given. See *SEER Self Instructional Manuals for Tumor Registrars Book 8* for chemotherapy drug codes.

Chemotherapeutic agents are chemicals that affect cancer tissue by means other than hormonal manipulation. The agents inhibit the production of cancer cells by interfering with DNA synthesis and mitosis. They may be divided into three classes with respect to their dependence on the cell cycle.

1. Alkylating agents are **not cell-cycle-specific**. Although they are toxic to all cells, they are especially toxic to proliferating cells.
2. Other drugs are **cell-cycle-specific**. Cells must be proliferating for these drugs to be effective.
3. Cell-cycle-specific drugs may also be **cell-cycle phase-specific**; such drugs are active only in one stage of the cell cycle.

Chemotherapy agents are also grouped by their ingredients and the way they attack the cells. Those groups are:

1. Alkylating
2. Antimetabolites
3. Natural products
4. Other miscellaneous

Codes

- 00 None, chemotherapy was not part of the planned first course of therapy; diagnosed at autopsy
- 01 Chemotherapy administered as first course therapy, but the type and number of agents is not documented in the patient record.
- 02 Single agent chemotherapy administered as first course therapy.
- 03 Multiagent chemotherapy administered as first course therapy.
- 82 Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.).
- 85 Chemotherapy was not administered because the patient died prior to planned or recommended therapy.
- 86 Chemotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record.

- 87 Chemotherapy was not administered. It was recommended by the patient's physician, but the treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
- 88 Chemotherapy was recommended, but it is unknown if it was administered.
- 99 It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in the patient record. Death certificate only.

Definitions

Chemotherapy recommended: There was a consult recommending chemotherapy or the attending physician documented that chemotherapy was recommended. A referral to a clinical oncologist does not equal a recommendation.

Multiple agent chemotherapy: Two or more chemotherapeutic agents were administered to destroy cancer tissue during the first course of therapy. The chemotherapeutic agents may or may not have been administered with other drugs classified as immunotherapy, hormone therapy, ancillary or other treatment.

Single agent chemotherapy: Only one chemotherapeutic agent was administered to destroy cancer tissue during the first course of therapy. The chemotherapeutic agent may or may not have been administered with other drugs classified as immunotherapy, hormone therapy, ancillary, or other treatment.

Coding Instructions

1. Code the chemotherapeutic agents whose actions are chemotherapeutic only; **do not code** the method of **administration**.
2. When chemotherapeutic agents are used as radiosensitizers or radioprotectants, they are given at a much lower dosage and do not affect the cancer. Radiosensitizers and radioprotectants are classified as ancillary drugs. Do not code as chemotherapy.
3. The physician may change a drug during the first course of therapy because the patient cannot tolerate the original agent. If the chemotherapeutic agent that is substituted belongs to the same group (alkylating, antimetabolites, natural products, or other miscellaneous), this is a continuation of the first course of therapy. If treated with a single agent and this agent is changed to another single agent in the same group code remains 02 single agent.
4. Assign **code 00** when
 - a. There is no information in the patient's medical record about chemotherapy AND
 - i. It is known that chemotherapy is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had chemotherapy.

- b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include chemotherapy
- c. Patient elects to pursue no treatment following the discussion of chemotherapy. Discussion does not equal a recommendation.
- d. Only information available is that the patient was referred to a clinical oncologist. Referral does not equal a recommendation.
- e. Watchful waiting (CLL)
- f. Patient diagnosed at autopsy

Example: Patient is diagnosed with multiple myeloma. There is no mention of treatment or treatment plans in the medical record. Follow-back finds that the patient died three months after diagnosis. There are no additional medical records or other pertinent information available. Assign code 00 since there is no reason to suspect that the patient had been treated.

- 5. Do not code combination of ancillary drugs administered with single agent chemotherapeutic agents as multiple chemotherapy. For example the administration of 5-FU (antimetabolite) and Leucovorin (ancillary drug) is coded to single agent (Code 02).
- 6. Assign **code 82** when the physician would have recommended chemotherapy but did not due to patient risk factors, such as:
 - a. Advanced **age**
 - b. **Comorbid** condition(s) (heart disease, kidney failure, other cancer, etc.).
- 7. Assign **code 99**
 - a. When there is no documentation that chemotherapy was recommended or performed
 - b. Death certificate only.

Hormone Therapy

Item Length: 2

NAACCR Item #: 1400

NAACCR Name: RX Summ--Hormone

The data item Hormone Therapy records therapy administered as first course treatment that affects cancer tissue by changing the patient's hormone balance. See *SEER Self Instructional Manuals for Tumor Registrars Book 8* for hormone therapy drug codes.

Hormones may be divided into three categories:

1. Hormones.
2. Antihormones.
3. Adrenocorticotrophic agents

Codes

- 00 None, hormone therapy was not part of the planned first course of therapy; not usually administered for this type and/or stage of cancer; diagnosed at autopsy only.
- 01 Hormone therapy administered as first course therapy.
- 82 Hormone therapy was not recommended/administered because it was contra indicated due to patient risk factors (comorbid conditions, advanced age, etc.).
- 85 Hormone therapy was not administered because the patient died prior to planned or recommended therapy.
- 86 Hormone therapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in the patient record.
- 87 Hormone therapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
- 88 Hormone therapy was recommended, but it is unknown if it was administered.
- 99 It is unknown whether a hormonal agent(s) was recommended or administered. Death certificate only.

Coding Instructions

1. Assign **code 00** when
 - a. There is no information in the patient's medical record about hormone therapy AND
 - i. It is known that hormone therapy is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had radiation.
 - b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include hormone therapy

- c. Patient elects to pursue no treatment following the discussion of hormone therapy treatment. Discussion does not equal a recommendation.
- d. Only information available is that the patient was referred to an oncologist. Referral does not equal a recommendation.
- e. Watchful waiting (prostate)
- f. Patient diagnosed at autopsy

2. Assign **code 99**

- a. When there is no documentation that surgery was recommended or performed
- b. Death certificate only.

- 3. Some types of cancer **thrive and proliferate because of hormones** (estrogen, progesterone and testosterone) that naturally occur in the body. These types of cancer may be treated by an **antihormone** or by the surgical removal/radiation of the organ(s) that produce the hormone, such as the testes and ovaries. **Surgical removal of organs** for hormone manipulation is not coded in this data item. Code these procedures in the data field Hematologic Transplant and Endocrine Procedures.
- 4. Other types of cancers are **slowed or suppressed by hormones**. These cancers are treated by administering hormones.

Example 1: Endometrial cancer may be treated with progesterone. Code all administration of progesterone to patients with endometrial cancer in this field. Even if the progesterone is given for menopausal symptoms, it has an effect on the growth or recurrence of endometrial cancer.

Example 2: **Follicular** and papillary cancers of the **thyroid** are often treated with thyroid hormone to suppress serum thyroid-stimulating hormone (TSH). If a patient with papillary and/or follicular cancer of the thyroid is given a thyroid hormone, code the treatment in this field.

- 5. Code the hormonal agent given as part of combination chemotherapy, e.g. MOPP, COPP whether it affects the cancer cells or not.

Immunotherapy

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

The data item Immunotherapy records immunotherapeutic (biological therapy, biotherapy or biological response modifier) agents administered as first course of therapy.

Immunotherapy **uses** the body's **immune system**, either directly or indirectly, to fight cancer or to lessen the side effects that may be caused by some cancer treatments. Record only those treatments that are administered to affect the cancer cells.

Immunotherapy is **designed** to:

1. Make **cancer cells** more **recognizable** and therefore more **susceptible** to destruction by the immune system.
2. **Boost** the killing power of **immune** system cells, such as T-cells, NK-cells, and macrophages.
3. **Alter** cancer cells' **growth patterns** of cancer cells to promote behavior like that of healthy cells
4. **Block** or **reverse** the process that **changes** a normal cell or a pre-cancerous cell into a cancerous cell.
5. **Enhance** the body's ability to **repair** or **replace** normal cells damaged or destroyed by other forms of cancer treatment, such as chemotherapy or radiation.
6. **Prevent** cancer cells from **spreading** to other parts of the body.

Codes

- 00 None, immunotherapy was not part of the planned first course of therapy; not customary therapy for this cancer; diagnosed at autopsy only.
- 01 Immunotherapy was administered as first course therapy.
- 82 Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age etc.).
- 85 Immunotherapy was not administered because the patient died prior to planned or recommended therapy.
- 86 Immunotherapy was not administered; it was recommended by the patient's physician, but was not administered as part of the first-course of therapy. No reason was noted in the patient's record.
- 87 Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
- 88 Immunotherapy was recommended, but it is unknown if it was administered.
- 99 It is unknown if immunotherapy was recommended or administered because it is not stated in patient record; death certificate only cases.

Definitions

Types of immunotherapy

Cancer Vaccines: Cancer vaccines are still in the experimental phase and are not coded in this data item. They may be coded in the field Other Therapy. Currently clinical trials use cancer vaccines for brain, breast, colon, kidney, lung, melanoma and ovary.

Interferons: Interferons belong to a group of proteins called cytokines. They are produced naturally by the white blood cells in the body. Interferon-alpha is able to slow tumor growth directly as well as activate the immune system. It is used for a number of cancers including multiple myeloma, chronic myelogenous leukemia (CML), hairy cell leukemia, and malignant melanoma.

Interleukins (IL-2) are often used to treat kidney cancer and melanoma.

Monoclonal Antibodies: Monoclonal antibodies are produced in a laboratory. The artificial antibodies are injected into the patient to seek out and disrupt cancer cell activities and to enhance the immune response against the cancer. For example, Rituximab (Rituxan) may be used for non-Hodgkin lymphoma, and trastuzumab (Herceptin) may be used for certain breast cancers.

Coding Instructions

1. Assign **code 00**
 - a. When there is no information in the patient's medical record about immunotherapy AND
 - i. It is known that radiation is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had immunotherapy.
 - b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include immunotherapy
 - c. Patient elects to pursue no treatment following the discussion of immunotherapy. Discussion does not equal a recommendation.
 - d. Only information available is that the patient was referred to an oncologist. Referral does not equal a recommendation.
 - e. Watchful waiting (prostate)
 - f. Patient diagnosed at autopsy
2. Assign **code 87**
 - a. If the patient refused recommended immunotherapy.
 - b. If the patient made a blanket refusal of all recommended treatment.
 - c. If the patient refused all treatment before any was recommended.

3. Assign **code 99**
 - a. When there is no documentation that immunotherapy was recommended or performed
 - b. Death certificate only.

Hematologic Transplant and Endocrine Procedures

Item Length: 2

NAACCR Item #: 3250

NAACCR Name: RX Summ--Transplnt/Endocr

This data item records systemic therapeutic procedure administered as part of the first course of treatment. These procedures include bone marrow transplants (BMT) and stem cell harvests with rescue (stem cell transplant), endocrine surgery and/or radiation performed for hormonal effect (when cancer originates at another site), as well as combination of transplants and endocrine therapy.

Codes

- 00 None, transplant procedure or endocrine therapy was not a part of the first course of therapy; not customary therapy for this cancer; diagnosed at autopsy only.
- 10 Bone marrow transplant, NOS. A bone marrow transplant procedure was administered as first course therapy, but the type was not specified.
 - 11 Bone marrow transplant autologous
 - 12 Bone marrow transplant allogeneic
- 20 Stem cell harvest (stem cell transplant) as first course therapy.
- 30 Endocrine surgery and/or endocrine radiation therapy as first course therapy.
- 40 Combination of transplant procedure with endocrine surgery and/or endocrine radiation (Code 30 in combination with 10, 11, 12, or 20) as first course therapy.
- 82 Transplant procedure and/or endocrine therapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.).
- 85 Transplant procedures and/or endocrine therapy were not administered because the patient died prior to planned or recommended therapy.
- 86 Transplant procedures and/or endocrine therapy were not administered; it was recommended by the patient's physician, but was not administered as part of first course therapy. No reason was noted in the patient record.
- 87 Transplant procedures and/or endocrine therapy were not administered; this treatment was recommended by the patient's physician but was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
- 88 Transplant procedures and/or endocrine therapy was recommended, but it is unknown if it was administered.
- 99 It is unknown if a transplant procedure or endocrine therapy was recommended or administered because it is not stated in patient record; death certificate only cases.

Definitions:

Bone marrow transplant (BMT): Procedure used to restore stem cells that were destroyed by chemotherapy and/or radiation. Replacing the stem cells allows the patient to undergo higher doses of chemotherapy.

BMT Allogeneic: Receives bone marrow or stem cells from a donor.

BMT Autologous: Uses the patient's own bone marrow and/or stem cells. The tumor cells are filtered out and the purified blood and stem cells are returned to the patient.

Note: Used for breast cancer, lymphoma, leukemia, aplastic anemia, myeloma, germ cell tumors, ovarian cancer, and small cell lung cancer.

Conditioning: High-dose chemotherapy with or without radiation administered prior to transplants such as BMT and stem cell to kill cancer cells. This conditioning also destroys normal bone marrow cells so the normal cells need to be replaced (rescue). The high dose chemotherapy is coded in the Chemotherapy field.

Hematopoietic Growth Factors: A group of substances that support hematopoietic (blood cell) colony formation. The group includes erythropoietin, interleukin-3, and colony-stimulating factors (CSFs). The growth-stimulating substances are ancillary drugs and not coded.

Non-Myeloablative Therapy: Uses immunosuppressive drugs pre- and post-transplant to ablate the bone marrow. These are not recorded as therapeutic agents.

Peripheral Blood Stem Cell Transplantation (PBSCT): Rescue that replaces stem cells after conditioning.

Rescue: Rescue is the actual BMT or stem cell transplant done after conditioning.

Stem Cells: Immature cells found in bone marrow, blood stream and umbilical cords. The stem cells mature into blood cells.

Coding Instructions

1. Assign **code 00**
 - a. When there is no information in the patient's medical record about transplant procedure or endocrine therapy AND
 - i. It is known that transplant procedure or endocrine therapy is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had transplant procedure or endocrine therapy.
 - b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include transplant procedure or endocrine therapy
 - c. Patient elects to pursue no treatment following the discussion of transplant procedure or endocrine therapy. Discussion does not equal a recommendation.
 - d. Only information available is that the patient was referred to an oncologist. Referral does not equal a recommendation.
 - e. Watchful waiting (CLL)
 - f. Patient diagnosed at autopsy

2. Assign **code 10** if the patient has “mixed chimera transplant (mini-transplant or non-myeloablative transplant). These transplants are a mixture of the patient’s cells and donor cells.
3. **Codes 11 and 12** have priority over code 10 (BMT, NOS).
4. Assign **code 12** (allogeneic) for a syngeneic bone marrow transplant (from an identical twin) or for a transplant from any person other than the patient.
5. Assign **code 20** when the patient has a stem cell harvest followed by a rescue or reinfusion (stem cell transplant). If the patient does not have a rescue, code the stem cell harvest as 88, recommended, unknown if administered.
6. Assign **code 30** for endocrine radiation and/or surgery. Endocrine organs are testes and ovaries. Endocrine radiation and/or surgical procedures must be bilateral, or must remove the remaining paired organ for hormonal effect.
7. Assign **code 87**
 - a. If the patient **refused** recommended **transplant or endocrine procedure**.
 - b. If the patient made a **blanket refusal** of all recommended treatment.
 - c. If the patient **refused all treatment** before any was recommended.
8. Assign **code 99**
 - a. When there is no documentation that transplant procedure or endocrine therapy was recommended or performed
 - b. Death certificate only.

Other Therapy

Item Length: 1
NAACCR Item #: 1420
NAACCR Name: RX Summ—Other

Other Therapy identifies other treatment given that cannot be classified as surgery, radiation, systemic therapy, or ancillary treatment.

Codes

- 0 None
- 1 Other
- 2 Other-Experimental
- 3 Other-Double Blind
- 6 Other-Unproven
- 7 Refusal
- 8 Recommended, unknown if administered
- 9 Unknown

Coding Instructions

1. Assign **Code 0** when
 - a. There is no information in the patient's medical record about other therapy AND
 - i. It is known that other therapy is not usually performed for this type and/or stage of cancer OR
 - ii. There is no reason to suspect that the patient would have had other therapy.
 - b. If the treatment plan offered multiple treatment options and the patient selected treatment that did not include other therapy
 - c. Patient elects to pursue no treatment following the discussion of other therapy. Discussion does not equal a recommendation.
 - d. Only information available is that the patient was referred for consideration of other therapy. Referral does not equal a recommendation.
 - e. Patient diagnosed at autopsy
2. Assign **code 1**
 - a. Hematopoietic treatments such as: phlebotomy, transfusions, or aspirin
 - b. Patient had cancer treatment that could not be assigned to the previous treatment fields (surgery, radiation, chemotherapy, immunotherapy, or systemic therapy)
3. Assign **Code 2** for any experimental or newly developed treatment that differs greatly from proven types of cancer therapy such as a clinical trial.

Note: Hyperbaric oxygen has been used to treat cancer in clinical trials, but it is also used to promote tissue healing following head and neck surgeries. Do not code the administration of hyperbaric oxygen to promote healing as an experimental treatment.

4. Assign **code 3** when the patient is enrolled in a double blind clinical **trial**. When the trial is complete and the code is broken, review and recode the therapy.
5. Assign **code 6** for **unconventional** methods whether they are the single therapy or given in combination with conventional therapy.
6. Assign **code 8** When other therapy was recommended by the physician but there is no information that the treatment was given.
8. Assign **code 9**
 - a. When there is no documentation that other therapy was recommended or performed
 - b. Death certificate only.

The following explanations and definitions are quoted from the website for the National Center for Complimentary and Alternative Medicine (NCCAM). Complementary and alternative medicine, as defined by NCCAM, is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine. While some scientific evidence exists regarding some CAM therapies, for most there are key questions that are yet to be answered through well-designed scientific studies--questions such as whether they are safe and whether they work for the diseases or medical conditions for which they are used.

- **Complementary** medicine is used **together with** conventional medicine. An example of a complementary therapy is using aromatherapy to help lessen a patient's discomfort following surgery.
- **Alternative** medicine is used **in place of** conventional medicine. An example of an alternative therapy is using a special diet to treat cancer instead of undergoing surgery, radiation, or chemotherapy that has been recommended by a conventional doctor.

See complete information on types of complementary and alternative medicine at <http://nccam.nih.gov/health/whatiscam/>

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**SECTION VII
FOLLOW UP INFORMATION**

Date of Last Follow up or of Death

Item Length: 8
NAACCR Item #: 1750
NAACCR Name: Date of Last Contact

SEER requires the registries to update the follow up information on all cases on an annual basis. The exception is carcinoma in situ of the cervix diagnosed on or after 1/1/1996. This data item records the date of last follow up or the date of death.

Date fields are recorded in the month, day, century, year format (MMDDCCYY) with 99 for unknown day or month and 9999 for unknown year.

SEER registries collect the month, day, and year of last follow up or of death. The third and fourth digits (day) are recoded to 99 when the data are transmitted to SEER.

Codes for Month

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

Codes for Day

01
02
03
..
..
31
99 Unknown day

Codes for Year

Code the four-digit year of follow up or death
Record 9999 for unknown year

Special Codes

99999999 Unknown date

Coding instructions

1. Code the date the patient was actually seen by the physician or contacted by the hospital registry as the follow up date. Do not code the date the follow up report was received.
2. Do not change the follow up date unless new information is available.
3. The field is associated with the patient, not the cancer, so all records (primary sites) for the same patient will have the same follow up date.

Vital Status

Item Length: 1
NAACCR Item #: 1760
NAACCR Name: Vital Status

SEER requires the registries to update the follow up information on all cases on an annual basis. The exception is carcinoma in situ of the cervix diagnosed on or after 1/1/1996. This field records the vital status of the patient on the date of last follow up.

If the patient has multiple records, the vital status must be identical on each record.

Codes

- 1 Alive
- 4 Dead

The field is associated with the patient, not the cancer, so if the patient has multiple tumors, vital status should be the same for all tumors.

ICD Code Revision Used for Cause of Death

Item Length: 1

NAACCR Item #: 1920

NAACCR Name: ICD Revision Number

SEER requires the registries to update the follow up information on all cases on an annual basis. The exception is carcinoma in situ of the cervix diagnosed on or after 1/1/1996. Shows the revision of the International Classification of Diseases (ICD) used to code the underlying cause of death.

If the patient has multiple records, the ICD Code Revision Used for Cause of Death must be identical on each record.

Codes

- 0 Patient alive at last follow up
- 1 ICD-10 (1999+ deaths)
- 7 ICD-7
- 8 ICDA-8
- 9 ICD-9

Underlying Cause of Death

Item Length: 4
NAACCR Item #: 1910
NAACCR Name: Cause of Death

This is the official underlying cause of death coded from the death certificate using ICD-7, ICDA-8, ICD-9, or ICD-10 codes.

Special Codes

0000 Patient alive at last contact
7777 State death certificate or listing not available
7797 State death certificate or listing available, but underlying cause of death not coded

Coding Instructions for ICD-10

1. Use the underlying cause of death as coded by a State Health Department even if the code seems to be in error.
2. Report the coded underlying cause of death code from another source such as NDI plus or state data exchange if the coded death certificate is not available.
3. If the coded underlying cause of death code is not on the death certificate and is not available from other sources, code 7797.
4. If neither the death certificate nor the coded underlying cause of death is available, code 7777.

Example: Medical doctor states patient died, but death certificate not available (not on state death file, not available through federal or state agencies), code 7777.

5. Ignore (do not record) decimal points when copying codes.
6. The cause of death code is commonly four characters. Ignore (do not code) a fifth character if present.
7. Left justify the codes; if less than four characters, left justify and add a 9 to the right.
8. If the underlying cause of death code is not available, do not attempt to code the underlying cause of death unless you have a trained ICD-10 nosologist on staff or on consult.

Beginning for deaths in 1999, the United States agreed to code all deaths using the *International Statistical Classification of Diseases and Related Health Problems*, Tenth Revision (ICD-10). The ICD-10 codes have up to four characters: a letter followed by 2 or 3 digits.

Examples:

Underlying Cause of Death	ICD-10	SEER Code
Malignant neoplasm of the thyroid	C73	C739
Acute appendicitis with peritonitis	K35.0	K350
Malignant neoplasm of stomach	C16.9	C169

If the patient has multiple records, the underlying cause of death must be identical on each record.

Type of Follow up

Item Length: 1

NAACCR Item #: 2180

NAACCR Name: SEER Type of Follow up

Codes for the type of follow up expected for a SEER case

Codes

- 1 “Autopsy Only” or “Death Certificate Only” case
- 2 Active follow up case
- 3 In situ cancer of the cervix uteri only
- 4 Case not originally in active follow up, but in active follow up now (San Francisco-Oakland only)

Coding Instructions

1. All cases other than in situ cancers of the cervix uteri must be followed annually, including benign and borderline intracranial and CNS tumors diagnosed 1/1/2004 and forward.
2. If information is received on a person with an in situ cancer of the cervix diagnosed before 1/1/1996, the follow up information should be updated.
3. Cases of in situ cancer of the cervix diagnosed on or after 1/1/1996 are not reportable; follow up is not required.

**SECTION VIII
ADMINISTRATIVE CODES**

Each calendar year the SEER participants submit records to NCI for all persons/cancers diagnosed since the participant started reporting. Many of these records have been updated with information received by the participant since the prior data submission. NCI edits the information to ensure correctness and comparability of reporting. Some of these edits identify conditions that require additional review. To eliminate the need to review the same cases each submission, the Administrative Codes section contains a set of indicators used to show that the information on a record has already been reviewed.

SITE/TYPE INTERFIELD REVIEW

Item Length: 1
NAACCR Item #: 2030
NAACCR Name: Over-Ride Site/Type

Site/Type Interfield Review (Interfield Edit 25) (SEER #1)

Codes

blank	Not reviewed
1	Reviewed: The coding of an unusual combination of primary site and histologic type has been reviewed.

HISTOLOGY/BEHAVIOR INTERFIELD REVIEW

Item Length: 1
NAACCR Item #: 2040
NAACCR Name: Over-Ride Histology

Histology/Behavior Interfield Review (Field Item Edit Morph) (SEER #2)

Codes

- | | |
|-------|---|
| blank | Not reviewed |
| 1 | Reviewed: The behavior code of the histology is designated as “benign” or “uncertain” in ICD-O-2 or ICD-O-3, and the pathologist states the primary to be “ <i>in situ</i> ” or “malignant” (flag for a “Morphology Type & Behavior” edit). |
| 2 | Reviewed: The behavior is in situ, but the tumor is not microscopically confirmed (flag for a “Diagnostic Confirmation, Behavior Code” edit). |
| 3 | Reviewed: Both conditions 1 and 2 above apply. |

AGE/SITE/HISTOLOGY INTERFIELD REVIEW

Item Length: 1

NAACCR Item #: 1990

NAACCR Name: Over-Ride Age/Site/Morph

Age/Site/Histology Interfield Review (Interfield Edit 15) (SEER #3)

Codes

blank Not reviewed

1 Reviewed: An unusual occurrence of a particular site/histology combination for a given age group has been reviewed.

SEQUENCE NUMBER/DIAGNOSTIC CONFIRMATION INTERFIELD REVIEW

Item Length: 1

NAACCR Item #: 2000

NAACCR Name: Over-ride SeqNo/DxConf

Sequence Number/Diagnostic Confirmation Interfield Review (Interfield Edit 23) (SEER #4)

Codes

blank Not reviewed

1 Reviewed: Multiple primaries of special sites in which at least one diagnosis has not been microscopically confirmed have been reviewed.

SITE/HISTOLOGY/LATERALITY/SEQUENCE INTERRECORD REVIEW

Item Length: 1

NAACCR Item #: 2010

NAACCR Name: Over-Ride Site/Lat/SeqNo

**Site/Histology/Laterality/Sequence Number Interrecord Review (Interrecord Edit 09)
(SEER #5)**

Codes

blank Not reviewed

1 Reviewed: Multiple primaries of the same histology (3 digit) in the same primary site group have been reviewed.

SURGERY/DIAGNOSTIC CONFIRMATION INTERFIELD REVIEW

Item Length: 1
NAACCR Item #: 2020
NAACCR Name: Over-Ride Surg/DxConf

Surgery/Diagnostic Confirmation Interfield Review (Interfield Edit 46) (SEER #6)

Codes

blank	Not reviewed
1	Reviewed: A patient who had (cancer-directed) surgery, but the tissue removed was not sufficient for microscopic confirmation.

Type of Reporting Source/Sequence Number Interfield Review

Item Length: 1

NAACCR Item #: 2050

NAACCR Name: Over-Ride Report Source

**Type of Reporting Source/Sequence Number Interfield Review (Interfield Edit 04)
(SEER #7)**

Codes

blank Not reviewed

1 Reviewed: A second or subsequent primary with a reporting source of death certificate only has been reviewed and is indeed an independent primary.

SEQUENCE NUMBER/ILL-DEFINED SITE INTERFIELD REVIEW

Item Length: 1
NAACCR Item #: 2060
NAACCR Name: Over-Ride Ill-define Site

Sequence Number/Ill-defined Site Interfield Review (Interfield Edit 22) (SEER #8)

Codes

blank	Not reviewed
1	Reviewed: A second or subsequent primary reported with an ill-defined primary site (C76.0-C76.8, C80.9) has been reviewed and is an independent primary.

**LEUKEMIA OR LYMPHOMA/DIAGNOSTIC CONFIRMATION INTERFIELD
REVIEW**

Item Length: 1

NAACCR Item #: 2070

NAACCR Name: Over-Ride Leuk, Lymphoma

Lymphoma/Diagnostic Confirmation Interfield Review (Interfield Edit 48) (SEER #9)

Codes

blank Not reviewed

1 Reviewed: A patient was diagnosed with leukemia or lymphoma and the diagnosis was not microscopically confirmed.

OVER-RIDE FLAG FOR SITE/BEHAVIOR (IF39)

Item Length: 1

NAACCR Item #: 2071

NAACCR Name: Over-Ride Site/Behavior

Over-ride Flag for Site/Behavior (IF39) (SEER #11)

Codes

blank Not reviewed

1 Reviewed: A patient has an in situ cancer of a nonspecific site and no further information about the primary site is available.

The IF39 edit does not allow in situ cases of nonspecific sites, such as gastrointestinal tract, NOS; uterus, NOS; female genital tract, NOS; male genital organs, NOS; and others. This over-ride indicates that the conflict has been reviewed.

This was a new over-ride flag in the third edition of the code manual, but the flag may be applied to cases from any year.

OVER-RIDE FLAG FOR SITE/EOD/DIAGNOSIS DATE (IF40)

Item Length: 1

NAACCR Item #: 2072

NAACCR Name: Over-Ride Site/EOD/DX Dt

Over-ride Flag for Site/EOD/Diagnosis Date (IF40) (SEER #13)

Codes

blank Not reviewed

1 Reviewed: A patient had “localized” disease with a non-specific site and no further information about the primary site is available.

The IF40 edit does not allow “localized” disease with non-specific sites, such as mouth, NOS; colon, NOS (except histology 8220); bone, NOS; female genital system, NOS; male genital organs, NOS; and others. This over-ride indicates that the conflict has been reviewed.

This was a new over-ride flag in the third edition of the code manual, but the flag may be applied to cases from any year.

OVER-RIDE FLAG FOR SITE/LATERALITY/EOD (IF41)

Item Length: 1
NAACCR Item #: 2073
NAACCR Name: Over-Ride Site/Lat/EOD

Over-ride Flag for Site/Laterality/EOD (IF41) (SEER #12)

Codes

blank	Not reviewed
1	Reviewed: A patient had laterality coded non-specifically and EOD coded specifically.

The IF41 edit for paired organs does not allow EOD to be specified as in situ, localized, or regional by direct extension if laterality is coded as “bilateral, side unknown” or “laterality unknown.” This over-ride indicates that the conflict has been reviewed.

This was a new over-ride flag in the third edition of the code manual, but the flag may be applied to cases from any year.

OVER-RIDE FLAG FOR SITE/LATERALITY/MORPHOLOGY (IF42)

Item Length: 1

NAACCR Item #: 2074

NAACCR Name: Over-Ride Site/Lat/Morph

Over-ride Flag for Site/Laterality/Morphology (IF42) (SEER #13)

Codes

blank Not reviewed

1 Reviewed: A patient had behavior code of “in situ” and laterality is not stated as right: origin of primary; left: origin of primary; or only one side involved, right or left origin not specified.

The IF42 edit does not allow behavior code of “in situ” with non-specific laterality codes. This over-ride indicates that the conflict has been reviewed.

This was a new over-ride flag in the third edition of the code manual, but the flag may be applied to cases from any year.