2023 Edition

Abstract Code Manual

MISSOURI CANCER REGISTRY AND RESEARCH CENTER

University of Missouri – Columbia

2023
Revised

Missouri Cancer Registry and Research Center

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This project was supported in part by a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Missouri Department of Health and Senior Services (DHSS) (#NU58DP007130-02) and a Surveillance Contract between DHSS and the University of Missouri.

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Acknowledgements

The Missouri Cancer Registry and Research Center would like to thank the American College of Surgeons-Commission on Cancer for permission to include some Standards for Oncology Registry Entry (STORE) in this manual. Such sections include the sub-heading "Instructions for Coding" or the term "per STORE".

ABOUT THIS MANUAL

Public Law 102-515 and the Missouri Cancer Registry and Research Center

The primary purpose of the *Abstract Code Manual* is to assist hospital-based cancer registrars in reporting cancer cases to the Missouri Cancer Registry and Research Center (MCR-RC). This revision introduces changes in coding structures and requirements for cases diagnosed on or after January 1, 2023, established by the National Program of Cancer Registries (NPCR), the North American Association of Central Cancer Registries (NAACCR) and the Commission on Cancer (CoC). The 2023 updates are fully documented in *Standards for OncologyRegistry Entry* (STORE) and *SEER Program Coding and Staging Manual 2023*.

Since the passage of Public Law 102-515, entitled the *Cancer Registries Amendment Act,* by the 102nd Congress in October 1992, there has been a tremendous effort by all agencies collecting cancer data to unify and standardize data sets. With the establishment of the National Program of Cancer Registries in 1994, all central registries funded by the Centers for Disease Control and Prevention (CDC) through NPCR are required to follow stringent data management procedures; provide training for state personnel and hospital registry staff; publish an annual report; and conduct case-finding and re-abstracting audits at selected facilities.

Although MCR-RC began receiving CDC/NPCR funding in 1995, our index (reference) year is 1996. MCR-RC collects data that: 1) are compliant with required NPCR data elements; 2) meet standard requirements designated by NAACCR for incidence reporting and endorsed by CDC; and 3) assist in determining data quality. MCR-RC also uses the data to provide useful feedback to submitting facilities that can be used for quality assurance activities and administrative purposes.

Data is submitted annually to NAACCR for Registry Certification and publication in *Cancer in North America (CINA)*. Registries whose data meet established criteria, including criteria for timeliness, accuracy and completeness, are recognized annually as NAACCR Certified Registries. MCR-RC data has been certified since 2001 (for 1998 data) and has received 'gold' status since 2003 (for 2000 data).

In 1999, the Department of Health and Senior Services (DHSS) entered into a cooperative agreement with the University of Missouri, Columbia (UMC) allowing UMC to be the recipient of data submitted by reporting facilities. This agreement is carried out under the auspices of the College of Health Sciences of UMC.

Usage of the data is regulated by DHSS policies.

In early 2011, the Missouri Cancer Registry became the Missouri Cancer Registry and Research Center (MCR-RC). The change was made to better reflect our activities in research and data usage.

Changes for 2023

- Explanations added to MCR Abstract Manual entries for **2023**, are shown in **blue** font for your convenience.
- Clarifications were added per updates to the STORE Manual and NPCR reportability requirements.
- New fields are explained.
- Grade section expanded with new information and reference to Grade Manual.
- Citations are updated.

MISSOURI CANCER REPORTING REQUIREMENTS

Role of Reporting Facilities, Missouri Cancer Registry and Research Center, Confidentiality and Audits

Missouri statutes, NPCR and NAACCR requirements, data quality and projected needs of the citizens of this state govern reporting requirements. In 1999, in an effort to establish a true population-based central cancer registry in Missouri, statues governing cancer reportability were expanded to include patients diagnosed and/or treated as hospital outpatients and in non-hospital facilities (e.g., pathology laboratories, ambulatory surgery centers, freestanding treatment centers, physician offices and long-term care facilities). This manual is intended for use in hospital-based registries.

In determining case reportability, MCR-RC follows the rules of the Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute. SEER guidelines are specified in GENERAL INSTRUCTIONS. Data items are based on fields required and/or recommended by NPCR for central registries collecting incidence data. Additional requirements include fields necessary for quality assurance purposes and eleven Missouri-specific fields. A complete list of required data items is posted on the MCR-RC website: https://medicine.missouri.edu/centers-institutes-labs/cancer-registry-research-center/reporting/hospital

Role of Hospitals

The primary source for obtaining epidemiological information is the hospital cancer registry. A registry is responsible for providing a listing of cancer patients and pertinent information regarding their diagnoses. A registry may be small or large, and the extent of information submitted varies, depending on hospital size and the reporting methods for each facility. Some hospitals have had their own registries for years in accordance with the American College of Surgeons-Commission on Cancer (ACoS-CoC) requirements, while others have limited registries and collect or provide only the state mandated reporting requirements.

Role of MCR-RC

MCR-RC's role is to gather information from hospitals and other sources to monitor the incidence of cancer in the state for epidemiological research that may be used to develop and evaluate cancer prevention and control activities in Missouri. The data is received electronically from hospitals that have on-site or contract registrars. Facilities without a registrar having an annual caseload of 50 or fewer cases are called low-volume facilities. Information from these facilities is accepted in electronic chart form, and MCR-RC staff complete the abstracts. The data collected is invaluable in targeting risk factors in certain populations, studying the impact of environmental factors, identifying ethnic and social variations, and evaluating the effectiveness of state cancercontrol programs.

The MCR-RC staff is available to answer registry-related questions and to provide workshops, educational presentations, and one-on-one training. Please refer to the MCR-RC website at https://medicine.missouri.edu/centers-institutes-labs/cancer-registry-research-center under Education/Training for complete information.

Confidentiality

Per Missouri statute (192.655, RSMo 1999), the "department of health shall protect the identity of the patient, physician, health care provider, hospital, pathology laboratory, ambulatory surgical center, residential care facilities I or II, intermediate care facilities or skilled nursing facilities, and free-standing cancer clinic or treatment center… and that such identity shall not be revealed except…only upon written consent…" This confidentiality provision is necessary to assure all reporting entities that neither their identity nor the confidential data they submit will be subject to unauthorized release.

In addition, MCR-RC employees are required to sign confidentiality agreements and follow confidentiality procedures set forth in the MCR-RC Policy and Procedure Manual. These regulations include the use of locked cabinets for confidential data, employing secure workstation practices, adhering to procedures for handling requests for data, etc. MCR-RC employees also recognize the importance of compliance with ARRA HITECH provisions.

Note: The Health Insurance Portability and Accountability Act known as HIPAA allows for the reporting of identifiable cancer data to public health entities. Because the MCR-RC falls under the definition of a public health authority, HIPAA allows your facility to continue reporting cancer incidence data in compliance with state statutes (192.650-192.657 RSMo) and regulations (19 CSR 70-21). Written informed consent from each cancer patient reported to public health entities is not required under HIPAA nor is a Business Associate Agreement required; rather, hospitals must simply document that reporting has occurred.

Edits

A Missouri-specific edit set was first developed in 2008. The MCR-RC edit set was updated in accordance with the NAACCR **v23** data and made available to all registry

software vendors. MCR-RC recommends that you run these edits at the time of abstracting. These edits are applied to all files submitted to MCR-RC via Web Plus and errors exceeding a set threshold may be cause for rejection of the file. Questions regarding edits should be directed to MCR-RC Quality Assurance staff at 1-800-392-2829.

Audits

MCR-RC periodically conducts case completeness and data quality audits as required by the NPCR. The intent of the audits is to assist hospitals with casefinding and abstracting issues to ensure complete, high-quality data is submitted to MCR-RC. Each Missouri hospital is audited every five years. All electronic reporting hospitals are subject to case completeness and data quality audits, including some low volume facilities, while only case completeness audits are performed at other low volume hospitals that do not perform abstracting. Standard audits include casefinding and re-abstraction of data for a specific year. Alternatively, audits other than the standard method may also be performed periodically such as case completeness review based on hospital accession register matches with MCR-RC's database, data quality re-coding audits to evaluate data quality and text, and other site specific or tumor specific data quality reviews. After completion of the audits, detailed summary reports are prepared and shared with the hospital registrar and other related hospital staff. **Per NPCR guidelines, the acceptable accuracy rate for all audits is 95 – 100%.**

Standard Casefinding Inpatient/Outpatient hospital disease indices, pathology reports and other pertinent casefinding documents are reviewed and matched to the MCR-RC database. Any non-matched cases are returned to the registrar or hospital contact person for resolution. During routine casefinding, registrars can assist themselves and MCR-RC by maintaining a non-reportable list (patient name, date of birth or social security number, ICD-10-CM code of the non-reportable malignancy, date seen, and reason not reported). Another method is to note the reason a case is non-reportable on the registrar's casefinding source, such as the Medical Records Disease Index (MRDI). The listing or notations will help registrars avoid duplication of efforts related to casefinding and identification of non-reportable cases in the auditprocess.

Standard Abstraction The re-abstracting audit consists of review and re-abstraction of specific MCR-RC required fields from the original hospital record with comparison to the original abstracted data. During resolution, registrars are given the opportunity to provide any additional information not available to the auditor that may justify the original coding. Discrepancies are discussed with the hospital registrar. Abstracting and coding guidelines are reviewed and reinforced. Further training may be recommended and, if warranted, MCR-RC can provide assistance to individual registrars through conferencing and/or site visits.

NPCR Audits Case Completeness and data quality audits are periodically conducted by NPCR on the Missouri Cancer Registry and Research Center. While a few hospitals may be requested to provide the data, the audits are conducted on MCR-RC, not on the individual facilities.

Chapter 1

GENERAL INSTRUCTIONS

Basic Reporting Rules for State Reporting

Important Items for Reporting

- All reportable cancer cases diagnosed and/or treated in your facility after August 28, 1984, must be abstracted and reported to the MCR-RC.
- Completed cases should be submitted to the MCR-RC within six months of date of initial contact for that facility.
- Electronic reporting is required for all facilities with an annual caseload greater than **50** cases. MCR-RC no longer accepts paper abstracts. MCR-RC will provide free software (**Web Plus**) to facilities with an annual **caseload over 50.** Please contact us at 1-800-392-2829 to inquire about **Web Plus**.
- Occasionally hospitals require special data reports from the central registry. Requests for studies, reports or information may be submitted to MCR-RC staff by calling 1-800-392-2829
- Solid tumors are abstracted according to reportability, and coding instructions set forth in the following manuals:

Date Case Diagnosed	Manual	URL
1/1/2007-12/31/2017	Multiple Primary and Histology Coding Rules	https://seer.cancer.gov/tools/mphrules/
1/1/2018 - forward	Solid Tumor Rules Coding Manual	https://seer.cancer.gov/tools/solidtumor/

□ ICD-O-3 coding must be used for site and histology of cases diagnosed on or after January 1, 2001. **As of April 2019, the International Association of Cancer Registries (IARC) and the WHO ICD-O committee finalized ICD-O-3.2. Beginning with cases diagnosed January 1, 2021, ICD-O-3.2 is the preferred morphology coding reference manual. It is to be used jointly with the 2023 ICD-O-3.2 Histology and Behavior Code Update tables, Hematopoietic and Lymphoid Neoplasm Database, and Solid Tumor (MP/H) Rules. The 2023 ICD-O-3 histology code and behavior update includes comprehensive tables listing all changes made after the 2018 update and is effective for cases diagnosed January 1, 2023, and forward.**

Changing Information

It is possible that after a cancer case has been abstracted and submitted to MCR-RC, additional information was added to the patient's chart, which may lead to significant changes in specific data items submitted on the initial abstract. Justification/explanation should accompany the change.

> **Example:** The patient is originally diagnosed with an unknown primary cancer and after further investigation it is determined that the cancer is a primary of the lung. It is correct to electronically submit a *Change of Information* form *(COI)* to MCR-RC and change the primary site code.

Hint: Changing the primary site will require review of site-specific fields (e.g., surgery codes, staging, laterality, etc.) to identify additional coding changes needed.

Note: COI forms can be found on the MCR-RC website.

Please note that all COI's must be reported electronically via WebPlus. Use the non-NAACCR format as you do for transmittal forms. For assistance or to discuss a changed case directly, please contact MCR staff at 1-800-392-2829.

Data Transmissions

Security of Data Transmissions — Electronic data are to be transmitted using the Web Plus upload. Instructions for the use of Web Plus can be found on the MCR-RC website. If your facility has other required methods of data transmission, please contact MCR-RC staff. The **MCR-RC requires that all data be submitted via a secure electronic method. Diskettes and CDs are no longer accepted**.

Protected Health Information (PHI) and other confidential data **MUST NOT** be included in e-mails to MCR-RC. Do not include information either in the text of the e-mail or as an attachment. If this happens, MCR-RC staff will alert the registrar, so that the information can be permanently deleted from all e-mail.

Confidential information on individual cases may be uploaded using Web Plus non-NAACCR layout function, or it may be transmitted via fax. Faxes to 573-884-9655 are received via a secure fax to mail system.

Data Transmission Procedures — A completed transmittal form must accompany each data submission. **In addition, a completed transmittal form should be sent to MCR-RC even if no data is submitted for the designated reporting period.** Required schedules for data submissions are as follows:

Annual caseload >500	**Monthly**
Annual caseload 300-500	**Monthly or quarterly**
Annual caseload <300	**Quarterly**

Proper Mailing Procedures

Do NOT mail paper patient records to MCR. Instead, use secure electronic means such as fax (573) 884-9655 or Secure TransmIT. Non-confidential mail may be sent to the university address below.

Missouri Cancer Registry and Research Center
University of Missouri
1095 Hospital Drive PS7
Columbia, MO 65211

Chapter 2

DETERMINING REPORTABILITY

Casefinding Techniques

Reportable Cases may be identified from a variety of sources. The hospital pathology laboratory can provide cases diagnosed by histology, cytology, hematology, bone marrow or autopsy. Other resources include daily discharges and daily coding logs, disease indices, inpatient and outpatient surgery logs, radiotherapy consults, treatment reports and logs, and oncology clinic treatment reports and logs. *Never rely solely on the pathology department to provide reportable cases.* Doing so could exclude cases for which the hospital has no diagnostic tissue reports. Cases diagnosed elsewhere but treated at your facility and those diagnosed radio-graphically or clinically only, without tissue confirmation would be missed during casefinding unless additional resources are employed. It is essential to include review of the Medical Record Disease Index (usually provided by Health Information Management) and other tracking tools such as medical and radiation oncology clinic logs to ensure that all reportable cases are identified. You should form an alliance with staff from the aforementioned departments to establish and develop a systematic method to routinely receive necessary information from them.

Reportable List for Casefinding

A link to the SEER table listing reportable diagnoses for casefinding is posted on the MCR-RC website (https://medicine.missouri.edu/centers-institutes-labs/cancer-registry-research-center/reporting/hospital) Diagnoses are listed by ICD-10-CM codes which can be used by facilities to identify which cases to include on their MRDI casefinding lists. The list is updated annually to ensure that any newapplicable codes are added.

Cases That Must Be Reported

- Refer to the "SEER Casefinding list" noted above when conducting casefinding activities. Depending on how casefinding is conducted, not all codes will be used by all facilities.
- Malignancies with a behavior code (fifth digit of the morphology code) of 2 or 3 in ICD-O-2 (cases diagnosed **prior** to January 1, 2001) or ICD-O-3 (cases diagnosed **on or after** January 1, 2001) or the Hematopoietic Database Appendix D, except as otherwise noted in this manual
- Beginning with cases diagnosed **on or after** January 1, 2004, non-malignant primary intracranial and central nervous system tumors are required to be reported. See below for applicable site codes

Topography Codes for Intracranial and Central Nervous System Tumors

Codes	Description
C70.0 – C70.9	Meninges
C71.0 – C71.9	Brain
C72.0 **– C72.2**	Spinal cord
C72.3—C72.5	Cranial nerves
C72.8-C72.9	Overlapping brain and CNS;CNS,NOS
C75.1	Pituitary gland
C75.2	Craniopharyngeal duct
C75.3	Pineal gland

- Beginning with cases diagnosed **on or after** January 1, 2002, the following squamous intraepithelial neoplasia, grade III (8077/2) is reportable (NPCR requirement)
  - AIN III (C21.1)
  - VIN III (C51.*)
  - VAIN III (C52.*)
- **Analytic cases**. Patients whose initial diagnosis was made at your facility and/or any part of the first course of treatment was delivered or prescribed at your facility. (Class of Case 00, 10, 11, 12, 13, 14, 20, 21,22)
- Patients diagnosed at a staff physician's office and receiving any or their entire first course of treatment in your facility (Class of Case 12)
- **Nonanalytic cases.** Patients diagnosed elsewhere who had all first course treatment elsewhere who were seen at your facility for diagnosis of recurrent disease or for treatment of relapsed, persistent or progressive disease; cases diagnosed prior to the facility's Reference Date and diagnosis or treatment was given by the reporting facility; diagnosis was established by autopsy at reporting facility and was unsuspected prior to death (Class of Case 32, 35, 37 and 38).Record all available information regarding the original diagnosis and treatment
- Malignant tumors of the skin such as adnexal carcinoma/adenocarcinoma (8390/3-8420/3), lymphoma, melanoma, sarcoma, and Merkel cell carcinoma **must be reported**. Any carcinoma arising in a hemorrhoid is reportable, since hemorrhoids arise in mucosa, not in the skin.
- Early or evolving melanoma in-situ, or any other early or evolving melanoma, is reportable.
- Pilocytic/juvenile astrocytoma (9421) will continue to be collected as a /3 even though the behavior code changed to /1 in the ICD-O-3
- As of 01/01/2021, all GIST tumors are reportable and classified as 8936/3 in ICD-O-3.2
- Nearly all thymomas are reportable as of 01/01/2021. The behavior code is /3 in ICD-O-3.2. The exceptions are microscopic thymoma or thymoma benign (8580/0), micronodular thymoma with lymphoid stroma (8580/1), and ectopic hamartomatous thymoma (8570/0)
- Carcinoid tumors of the appendix (C18.1) must be coded 8240/3 effective in 2015.

- Squamous intraepithelial neoplasia, grade III (SINIII) (8077/2), except Cervix and Skin, is REPORTABLE
- **Lobular carcinoma in situ (LCIS) of breast is REPORTABLE for NPCR and SEER. Follow MCR state requirements.**
- Mature teratoma of the testes in adults is malignant and REPORTABLE as 9080/3 but continues to be non-reportable in prepubescent children (9080/0). The following provides additional guidance:
  - Adult is defined as post puberty.
  - Pubescence can take place over several years.
  - Do not rely solely on age to indicate pre or post puberty status. Review all information (physical history, etc.) for documentation of pubertal status. When testicular teratomas occur in adult males, pubescent status is likely to be stated in the medical record because it is an important factor of the diagnosis.
  - Do not report if unknown whether patient is pre or post pubescence. When testicular teratoma occurs in a male and there is no mention of pubescence, it is likely that the patient is a child, or pre-pubescent, and the tumor is benign.
- Low-grade appendiceal mucinous neoplasm (LAMN) (8480/2) behavior changed to 2 effective with 2022 cases. It is now REPORTABLE.
- High-grade appendiceal mucinous neoplasm (HAMN) (8480/3) behavior changed to 3 effective with 2022 cases. It is now REPORTABLE.
- Intestinal-type adenoma high grade (8144/2) (C16-C17.9) is REPORTABLE for stomach and small intestines ONLY beginning 1/1/22.
- Serrated dysplasia, high grade (8213/2) (C16-C17.9) is REPORTABLE for stomach and small intestines ONLY beginning 1/1/22.
- Intraductal oncocytic papillary neoplasm, NOS (8455/2) (C25.0-C25.4, C25.7-C25.7) is a new code and REPORTABLE.
- Intraductal oncocytic papillary neoplasm, with associated invasive carcinoma (8455/3) (C25.0-C25.4, C25.7-C25.7) is a new coded and REPORTABLE.
- Adenocarcinoma, HPV-associated (8483/3) (C53.0-C53.1, C53.8-C53.9) is a new code and REPORTABLE.
- Adenocarcinoma, HPV-independent, NOS (8484/3) (C53.0-C53.1, C53.8-C53.9) is a new code and REPORTABLE.
- Myxoid pleomorphic liposarcoma (8859/3) is a new code.
- Gastroblastoma (8976/3) (C16.0-C16.9) is a new code.
- Mesonephric-like adenocarcinoma (9111/3) is a new code for ovary/corpus uterus.
- Round cell sarcoma with EWSR1-non-ETS fusions (9366/3) is new code.
- CIC-rearranged sarcoma (9367/3) is a new code.
- Sarcoma with BCPR genetic alterations (9368/3) is a new code.
- Papillary neoplasm, pancreatobiliary type with high grade intraepithelial neoplasia (8163/2) (C24.1) is now REPORTABLE.
- **Squamous cell carcinoma, HPV-associated (8085/3) (C51.9, C52.9, C53.X) is now REPORTABLE. Valid for C60._ and C63.2 beginning 1/1/2024.**
- **Squamous cell carcinoma, HPV-independent (8086) (C51.9, C52.9, C53.X) is now REPORTABLE. Valid for C60._ and C63.2 beginning 1/1/2024.**
- **Adenocarcinoma, HPV-independent, gastric type (8432) is now REPORTABLE.**
- **Adenocarcinoma, HPV-independent, clear cell type is now REPORTBALE.**
- **Adenocarcinoma, HPV-independent, mesonephric type (9110) (C53.X, C56.9) is now REPORTABLE.**

- **Pleomorphic lobular carcinoma in situ is a new code for in situ tumors only 2023 (8519/2)**
- **Cholangiocarcinoma is coded to 8140 adenocarcinoma if pathology report states adenocarcinoma regardless of what physician states.**

Site/Histology Validation lists can be found at https://seer.cancer.gov/icd-o-3/
ICD-O-3.2 Implementation Guidelines can be found at https://www.naaccr.org/icdo3/

Cases Not Required to Be Reported

- Skin cancers (site = C44. _ and histology **= 8000-8005, 8010-8046, 8050-8084, 8090-8110** as ofJanuary 1, 2001
- Patients who have a history of cancer, but diagnosis or treatment were not performed at yourfacility. (Class of case 33)
- Patients who receive transient care to avoid interruption of therapy started elsewhere. (Class of case 31)
- Patients seen only in consultation to confirm a diagnosis. (Class of case 30)
- Pathology cases that are consultative readings of slides submitted from outside facilities. (Class of case 43)
- Class of Case 40, 41, 42, 49 or99
- Colorectal tumors with the following morphologic description: Serrated dysplasia, high grade; Adenomatous polyp, high grade dysplasia: Tubular adenoma, high grade; Villous adenoma, high grade; Tubulovillous adenoma, high are NOT reportable.
- Microscopic thymoma benign (8580/0), micronodular thymoma with lymphoid stroma (8580/1) and ectopic hamartomatous thymoma (8587/0) are NOT reportable.
- Patients with **adenocarcinoma in situ** and **carcinoma in situ of the cervix**, cervical intraepithelial neoplasia (CIN) or prostatic intraepithelial neoplasia (PIN)
- Patients with a pre-cancerous condition or benign tumor (other than CNS sites stated above)
- Patients admitted to a hospice unit or home health care service.
- Patients above who are not reportable for your facility, but who die at your facility with active cancer, although not required may be reported to MCR. Cases not reported at the time of death may appear later on a Death Certificate Only listing (list of patients who died at your facility with cancer but not listed in the MCR database), which requires additional follow- back by MCR and research by the registrar. A minimal abstract prepared with documentation of any available information regarding date of diagnosis, primary site, histology, or treatment is very useful.

Note: Your cancer committee may decide to require additional benign or borderline cases. Please do not submit these reportable-by-agreement cases to MCR.

Ambiguous Terms

Reportable cases and extent of disease are usually based on unequivocal statements made by recognized medical practitioners that the patient has a reportable diagnosis or extent of disease. However, physicians sometimes use vague or ambiguous terms to describe a tumor when its behavior is uncertain. In instances where pathology or cytology findings cannot definitively confirm a cancer diagnosis or when imaging studies show inconclusive results, physicians may state the diagnosis or extent of disease in ambiguous terms. Various registry manuals apply ambiguous term rules differently for different purposes. MCR has added a listing below to assist

you in understanding the four differences.

1. Ambiguous Terms for **Reportability**

Reportability of such a diagnosis depends on the verbiage used. For a cancer case to be reportable, the ambiguous term must always include a reference to the reportable diagnosis being described, e.g., favors **carcinoma** or suspicious for **malignancy**. When the diagnosis is stated in only ambiguous terms throughout the patient record, use the tables below to determine whether a particular case should be reported.

Note: Synonyms of these terms do not constitute diagnosis.

Ambiguous terms that ARE diagnostic for REPORTABILITY	
Apparent(ly)	Most likely
Appears (to)	Neoplasm or Tumor (2004+ brain/CNS)
Comparable with	Presumed
Compatible with	Probable
Consistent with	Suspect (ed)
Favors	Suspicious (for)
Malignant appearing	Typical of

Exception: If cytology is reported only using an ambiguous term (such as suspicious), do not interpret it as a diagnosis of cancer. Abstract the case only if a positive biopsy or a physician's clinical impression of cancer supports the cytology findings.

Example: Discharge summary and X-ray results report "CT of the chest *compatible with* carcinoma of left lung." Although there may be no further work-up or treatment, the case is radiographically diagnosed and **is reportable**.

Example: The only documentation says "likely" carcinoma. Because it does not say "most likely," it **is not reportable.**

Ambiguous Terms that ARE NOT diagnostic for REPORTABILITY	
Cannot be ruled out	Questionable
Equivocal	Rule out
Possible	Suggests
Potentially malignant	Worrisome

Example: Barium enema (BE) reveals a sigmoid mass suspicious for neoplasm. Colonoscopy reveals a sigmoid mass, "possible malignant neoplasm." The patient is referred for biopsy and colon resection at another facility revealing carcinoma. The case is **NOT reportable** for your facility because mass and neoplasm are not associated with a reportable malignant term, whereas if it had been stated "suspicious sigmoid mass, probable malignant neoplasm," it would be reportable.

2. Ambiguous Terms for **Solid Tumor Rules**

Do **not** code histology or subtypes/variants described by the following ambiguous terms

unless a case is accessioned (reportable) based on ambiguous terminology and no other histology information is available/documented**.**

Ambiguous Terms NOT used for Solid Tumor Rules unless a case is accessioned (reportable) based on this ambiguous terminology alone
Apparent (ly)
Appears (to)
Comparable with
Compatible with
Consistent with
Favors
Malignant appearing
Most likely
Presumed
Probable
Suspect (ed)
Suspicious (for)
Typical of

3. Ambiguous Terms for Tumor Spread – **Summary Stage 2018**

Ambiguous terminology is sometimes used in the medical record to describe tumor spread. For SEER Summary Stage assignment, the registrar should first follow-up with the physician to obtain clarification on his/her definition of the terms used. When the physician is not available, check the medical record for any other clearer statements of tumor spread, including how the tumor was treated. As a **last resort** use the list below (unless specific chapters in the SEER Summary Stage **2018** manual direct otherwise)

Ambiguous Terms USED for Summary Stage 2018 involvement
Adherent
Apparent(ly)
Appears (to)
Comparable with
Compatible with
Consistent with
Contiguous/continuous with
Encroaching upon
Extension to, into, onto, out ontoFeatures of
Fixation to a structure other than primary
Fixed to another structure
Impending perforation of
Impinging upon

Impose/imposing on
Incipient invasion
Induration
Infringe/infringing Intruding
Into Intrude Most likely
Onto Overstep Presumed Probable Protruding into
Suspect(ed)
Suspicious (for)
To
Up to

Ambiguous Terms NOT used for 2018 Summary Stage involvement
Abuts
Approaching
Approximates
Attached
Cannot be excluded/ruled out
Efface/effacing/effacement
Encased/encasing
Encompass(ed)
Entrapped
Equivocal
Extension to without invasion of/involvement of
Kiss/kissing
Matted (except for lymph nodes)
Possible
Questionable
Reaching
Rule Out
Suggests
Very close to
Worrisome

Examples: When a lung cancer encases the esophagus, the esophagus is not staged as involved (per table) but if a head and neck cancer encases the internal carotid artery, the chapter rules apply and there is distant involvement.

4. Ambiguous Terms per **STORE** 2023

Although MCR does not require TNM staging, the STORE Manual does give guidelines for **last resort** use by registrars **for staging**. For convenience, terms they define have been listed below.

Ambiguous Terms USED for Staging (STORE last resort)	
Adherent	Into
Apparent(ly)	Onto
Compatible with	Out onto
Consistent with	Probable
Encroaching upon	Suspect(ed)
Fixation/fixed	Suspicious (for)
Induration	To

Ambiguous Terms NOT used for Staging (STORE last resort)	
Approaching	Questionable
Equivocal	Suggests
Possible	Very close to

Chapter 3

DETERMINING PRIMARY TUMORS

When potential cases are identified through the casefinding process, it is important to determine whether they represent new reportable primaries, or whether they are actually pointing to cases previously accessioned into the cancer registry database. The *Multiple Primaries and Histology Coding Manual* contains all rules for determining multiple primaries for solid tumors for all cases (except hematopoietic primaries) diagnosed January 1, 2007, through December 31, 2007. For cases 2018 and forward use the Solid Tumor Coding Rules. For cases diagnosed prior to 2007, multiple primaries are determined according to instructions which are included in Appendix A of this manual. For determining multiple primaries of hematopoietic origin diagnosed on or after January 1, 2010, refer to the *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* and the Hematopoietic Database which can be found at https://seer.cancer.gov/tools/heme/

Multiple Primaries for Solid Tumors

The Solid Tumor Manual contains site-specific rules to apply in specific sequence for deciding whether multiple reportable primaries are present. Site-specific rules are subdivided into modules according to whether the case involves single or multiple tumors, or it is unknown whether multiple tumors are present in the primary site. **It is essential** to read the General Instructions and the site-specific Equivalent Terms and Definitions of the Solid Tumor Manual before using the site-specific coding rules. Further instructions for using the rules are listed on the following pages.

A. General Information

1. Use these rules to determine the number of reportable primaries. Do **not** use these rules to determine case reportability, stage, or grade.
2. Read the **General Instructions** and the **site-specific Equivalent Terms and Definitions** before using the multiple primary rules.
3. **Notes** and **examples** are included with some of the rules to **highlight key points** or to add **clarity** to the rules.
4. **Do not use** a physician's statement to decide whether the patient has a recurrence of a previous cancer or a new primary. Use the multiple primary rules as written **unless** a **pathologist compares** the present tumor to the "original" tumor and states that this tumor is a recurrence of cancer from the previous primary.
5. Multiple primary rules do not apply to tumors described as metastases.

B. How to use Solid Tumor Coding Rules (formerly known as Multiple Primary and Histology Rules)

1. Use the Solid Tumor Coding Rules to determine the **number of primaries** to abstract and the histology to code for cases diagnosed 1/1/2018 and forward.
2. The 2018 rules provide new site-specific instructions for:
   - Non-malignant CNS
   - Malignant CNS and peripheral nerves - **New instructions for Pilocytic Astrocytoma – All cases are to be reported with behavior /1 unless high-grade astrocytoma with piloid features or HGAP only**
   - **Breast - Clarification of Rule M10: Abstract a single primary if multiple tumors of carcinoma NST/duct and lobular and applicable H rules for lobular/ductal tumors revised, M5 new tumor if patient has a subsequent tumor after being disease free for greater than 5 years**
   - **Breast - New Note 6: subsequent tumor in chest wall, muscle or skin and no residual breast tissue is a recurrent and not a new primary**
   - Colon
   - Head and neck - **Table 9 redesigned for easier use**
   - Kidney
   - Lung
   - Urinary Sites
   - Use the 2021 Solid Tumor Cutaneous Melanoma rules to determine the number ofprimaries and histology to abstract for cases diagnosed 1/1/2021 forward. **New Rule M8 has been added to assist in coding single melanoma with 2 subtypes.**
3. Use the **Other Sites** rules for solid malignant tumors that occur in primary sites not covered by the site-specific rules. - **Site-Specific histology tables added**
4. Each module (Unknown if Single or Multiple Tumors, Single Tumor, Multiple Tumors) is an independent, complete set of coding rules.

To determine which set of primary site rules to use:

a. When there is no tumor in the primary site, only metastatic lesions are present:

I. Use the primary site documented by a physician and use the multiple primary and histology coding rules for that primary site.

II. If no primary site is documented, code the primary site as unknown and use the general multiple primary and histology coding rules. Use the "Unknown if Single or Multiple Tumors" module to determine multiple primaries.

b. To choose the appropriate module (Unknown if Single or Multiple Tumors, Single Tumor, Multiple Tumors):

I. Use the multiple primary and histology coding rules for the primary site.

II. Determine the number of tumors.

i. Do not count metastatic lesions.

ii. When the tumor is only described as multicentric or multifocal and the number of tumors is not mentioned, use the "Unknown if Single or Multiple Tumors" module.

iii. When there is a tumor or tumors with separate microscopic foci, ignore the separate microscopic foci and use the "Single Tumor" or "Multiple Tumor" modules as appropriate.

iv. When the patient has a single tumor, use the "Single Tumor" module.

v. If there are multiple tumors, use the "Multiple Tumor" module.

III. See the Equivalent Terms and Definitions for Head and Neck for guidance in coding the primary site.

IV. Use the primary site documented by the physician on the medical record.

5. If a **single primary**, prepare **one abstract**.
6. If there are **multiple primaries**, prepare **two or more abstracts**.
7. Rules are in hierarchical order within each module (Unknown if Single or Multiple Tumors, Single Tumor, and Multiple Tumors). Use the first rule that applies and **STOP.**

Multiple Primary Rules for Hematopoietic Cases

Beginning with cases diagnosed January 1, 2010, multiple primaries for hematopoietic cases are determined according to rules set forth in the *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* and the Hematopoietic Database which can be found at https://seer.cancer.gov/tools/heme/

Training modules are also available at this site and are highly recommended. To access the information applicable to a given year, use the diagnosis year drop down list for the chosen histology.

The rules manual is navigated in a 5-step process:

1. Search the database for a provisional site and histology code.
2. Use the Case Reportability Instructions to determine if the case is reportable.
3. If so, go to the Multiple Primary Rules
4. Go to the Primary Site & Histology Rules (for every primary). Consult the database only when the rules specify to do so.
5. Use the Grade of Tumor Rules

For hematopoietic cases diagnosed prior to 2010, use the tables in Appendix A of *FORDS* to decide whether differing hematopoietic histologies represent one or more primaries. Primary site and timing are not applicable for determining whether these malignancies represent one or more primaries.

Chapter 4

FIRST COURSE OF THERAPY

Definitions

Treatment or therapy for cancer is meant to modify, control, remove, or destroy cancer tissue (cancer-directed treatment). Therapy can be used to treat cancer tissue in primary or metastatic site(s), regardless of the patient's response to that treatment. The first course of therapy should include all cancer-directed treatments indicated in the initial treatment plan and delivered to the patient after initial diagnosis of cancer. Multiple modalities of treatment may be included, and therapy may include regimens lasting a year or more. The treatment plan specifies the types of cancer-directed therapies proposed to eliminate or control the patient's disease. Treatment intentions may be found in discharge summaries, consultations, and outpatient records. All cancer-directed therapies (surgery, radiation, chemotherapy, hormone therapy, immunotherapy, or other therapy) documented in the physician's treatment plan and administered are included in the first course of therapy.

All Malignancies Except Leukemias

The first course of treatment includes all therapy planned and administered by the physician(s) during the first diagnosis of cancer. Planned treatment may include multiple modes of therapy and may encompass intervals of a year or more. Treatment given specifically for tumor progression or recurrence, and treatment started when there is failure of the initial course of therapy are considered subsequent treatment.

Leukemias

The first course of treatment includes all therapies planned and administered by the physician(s) during the first diagnosis of leukemia. Record all remission-inducing or remission-maintaining therapy as the first course of treatment. Treatment regimens may include multiple modes of therapy. The administration of these therapies can span a year or more. A patient may relapse after achieving a first remission. All therapy administered after the relapse is secondary or subsequent treatment.

Time Periods for First Course of Treatment (FCT)

The Date of First Course of Treatment is the earliest of *Date of First Surgical Procedure*, *Date Radiation Started*, *Date Systemic Therapy Started*, *Date Other Treatment Started* or the date the decision for no treatment was documented.

- No treatment: No treatment is considered a treatment option and may represent the first course of therapy. Reason for no treatment should be entered in the appropriate treatment field.
- If there is no documented treatment plan and no other treatment guidelines are established, evaluate the therapy and the time it began in relation to the diagnosis date. If the therapy is a part of an established protocol or within accepted guidelines for the disease, consider it the first course of therapy.
- If there is no treatment plan, established protocol, or management guidelines, and consultation with a physician advisor is not possible, use the principle: "initial treatment must begin within one year of the date of initial diagnosis."
- If FCT systemic treatment regimen is changed due to an adverse reaction, follow these guidelines:
  - If the new chemotherapy drug(s) is in the same subcategory as the initial therapy (i.e.: anti -metabolite, alkylating agent, etc.) it is considered continuation of the first course of treatment. Some drugs overlap categories (alkaloid-antimetabolite) and are considered in the same category if either term matches the original sub-category.
  - If the drug(s) is not in the same group, it is no longer the first course of therapy.
  - If the patient fails to respond to treatment and the regimen is changed, it is no longer first course of treatment. Lists of drugs and their classification(s) are available at https://seer.cancer.gov/seertools/seerrx/

Example: Patient A is started on a planned course of Tamoxifen (anti-estrogen). It is effective, but she does not tolerate the drug side effects and is changed to Arimidex (aromatase inhibitor). This starts a new course of therapy because the two hormone drugs are not in the same subcategory.

Example: Patient B is started on Aromasin (aromatase inhibitor). It is effective but she is changed to Arimidex (aromatase inhibitor) for insurance reasons. That is still first course of therapy because both hormone drugs are in the same subcategory.

Example: Physician plans a combination regimen of chemotherapy. Velban is one of the drugs but, after several cycles, it is replaced with Oncovin due to adverse reaction. The treatment continues as first course of therapy because Oncovin and Velban both act as alkaloids. Conversely, if Velban had been replaced with Fludara, it is no longer first course of therapy because Fludara is an anti-metabolite.

Example: Physician plans a regimen of Adriamycin/Cytoxan. The patient does not respond so the treatment is changed to Methotrexate/5FU. Because the initial treatment failed, the new chemotherapy regimen is coded as subsequent treatment.

Rx Summ—Treatment Status

Per STORE, this data item summarizes whether the patient received any treatment or if the tumor was under active surveillance. The item was added to document active surveillance (watchful waiting) and to eliminate searching each treatment modality to determine whether treatment was given. It is used in conjunction with *Date of First Course of Treatment* to document whether treatment was or was not given, it is unknown if treatment was given, or treatment was given on an unknown date.

Instructions for Coding

- **This item may be left blank for cases diagnosed prior to 2010.**
- **Treatment given after a period of active surveillance is considered subsequent treatment, and it is not coded in this item.**
- **Use code 0 when treatment is refused, or the physician decides not to treat for anyreason such as the presence of comorbidities.**
- **Assign code 0 when the patient does not receive any treatment.**
  Scope of Regional Lymph Node Surgery may be coded 0, 1-7, or 9
- **Assign code 1 when the patient receives treatment collected in any of the following data items**
  - **a. Surgery of Primary Site**
  - **b. Surgical Procedure of Other Site**
  - **c. Radiation Treatment Modality, Phase I, II, III**
  - **d. Chemotherapy**
  - **e. Hormone Therapy**
  - **f. Immunotherapy**
  - **g. Hematologic Transplant and Endocrine Procedure**
  - **h. Other Therapy**

Surgical Diagnostic and Staging Procedures (Non Cancer-Directed Surgery)

Surgical diagnostic and staging procedures such as biopsies, thoracentesis, and bypasses do not modify or destroy cancer cells. Surgical procedures that aspirate, biopsy or remove regional lymph nodes to diagnose and/or stage disease are to be entered in *Scope of Regional Lymph Node Surgery,* not in this field.

Chapter 5

INITIAL ABSTRACT

Identification Information

In the chapters that follow, this manual lists both standard field names and **Web Plus** software field names where there are differences. Please be aware that a given standard setter or software may display field names slightly differently.

Reporting Hospital/Facility Number (Reporting Facility)

The number entered in this data field is used by the central registry to identify the facility reporting the case(s). The 10-digit institution ID number assigned by the Cancer Department of the American College of Surgeons (ACoS) **must** be right justified and preceded by zeros if less than 10 characters. For facilities with a 7-digit number (6-digit number preceded by a constant 6), this number would be right justified and preceded by 3 zeros. Some software can be programmed to auto code this field.

NPI—Reporting Facility

NPI numbers are no longer available and are considered protected information.

Accession Number + Sequence Number

The accession number is assigned by the reporting facility and provides a unique identifier for the patient consisting of the year in which the patient was first seen at the reporting facility and the consecutive order in which the tumor was abstracted. This data item protects patient identity and allows cases to be identified on a local, state, and national level.

Instructions for Coding

- The first four digits specify the **year** in which the patient was first diagnosed or treated for cancer at the reporting hospital. The next **five** digits designate the numerical order in which the patient was entered into the registry database.
- The reporting facility assigns **only one** accession number to each patient for life, even if additional primary cancers are diagnosed. Additional primary cancers are represented

by the "sequence number" component of the accession number. The sequence number represents the number of **primary cancers** a patient may have during his lifetime. **'00'** indicates the first and only primary cancer; '**01'** would indicate the first of more than one primary cancer; '**02'** indicates the second of two or more primary cancers; '**03'** denotes the third of three or more cancers; etc.

- A patient's accession number is not reassigned after a case is voided.
- A patient retains the original accession number even when the registry reference year changes. If a new primary is then discovered, the sequence number is updated accordingly.

Sequence Number(s)

This data item indicates the sequence of malignant and nonmalignant neoplasms over the lifetime of the patient.

The **sequence** (first, second, third, etc., primary) for the primary cancer being reported is represented by a **two**-digit number.

Note: Accession number - 202100034-00 signifies that the patient was first diagnosed or treated at the reporting hospital in calendar year 2021 and that this patient is the 34th patient entered into that hospital's registry for the year 2021. The 00 (sequence number) denotes that this cancer is the first and only primary malignant or in situ cancer for this patient.

Note: Patient is diagnosed and treated for breast cancer in 2021. The patient has a documented history of cervical cancer in 2007. The sequence number for the breast cancer is 02.

Note: A patient is first diagnosed at the reporting facility in 2005 with breast cancer. The accession number assigned is 200500032-00. In 2021 the patient is seen at the same facility for treatment of a newly diagnosed colon cancer. The accession number remains 200500032, but the sequence number is coded 02 for the colon cancer. Sequence 00 (the breast cancer) should be changed to 01 (first of more than one primary cancer).

Instructions for Coding

The decision regarding which sequence number to assign a neoplasm depends upon its behavior code at the time of diagnosis. Codes 00-59 and 99 indicate the sequence of neoplasms of *in situ* or malignant behavior (2 or 3) at the time of diagnosis. Codes 60-88 indicate the sequence of non-malignant tumors. Neoplasms which are reportable by agreement, either by MCR or your facility's cancer committee, follow these same guidelines.

- Codes 00-59 and 99 indicate neoplasms of malignant (in situ or invasive) behavior (Behavior equals 2or 3)
- Codes 60-88 indicate neoplasms of non-malignant behavior (Behavior equals 0 or 1)
- Code 00 only if the patient has a single malignant primary. If the patient develops a subsequent invasive or in situ primary tumor, change the code for the first tumor from 00 to 01, and number subsequent tumors sequentially.
- Code 60 only if the patient has a single non-malignant primary. If the patient develops a subsequent non-malignant primary, change the code for the first tumor from 60 to 61, and assign codes to subsequent non-malignant primaries sequentially.

- Sequence numbers are assigned in the order diagnosed. If two or more invasive or in situ neoplasms are diagnosed at the same time, assign the lowest sequence number to the diagnosis with the worst prognosis. If no difference in prognosis is evident, the decision is arbitrary.
- Any tumor in the patient's past that meets the reportable code criteria for MCR must be taken into account when sequencing subsequently accessioned tumors, regardless of where it was diagnosed. If the prior tumor had a behavior code of 2 (in situ) or 3 (malignant), and the current tumor is also behavior code 2 or 3, assign a sequence code in the 02-59 range. An intracranial or central nervous system tumor (diagnosed 01/01/2004 or later) with a behavior code of 0 (benign) or 1 (borderline) is assigned a sequence code in the range of 60-88
- Do not include past non-reportable skin cancers in sequencing. If the patient had a previous non-reportable skin cancer, please document that in a text field.
- Sequence numbers should be reassigned if the facility learns later of an unaccessioned tumor that affects the sequence.

Personal History 1 & 2 (MO Personal Hx 1, 2)

These data items record up to two known primary tumors **other than the current primary being abstracted.** This would include tumors diagnosed prior to, concurrently with or subsequent to the one being reported. Not counting the current tumor, enter the ICDO-3 site code of the earliest **other** primary in the Personal Hx 1 field and the next other primary in the Personal History 2 field. Please document any additional other primaries in the Remarks text. Leave these fields blank when the patient has only one reportable tumor.

Sequence # of Current Abstract	Personal Hx 1/yr 1	Personal Hx 2/yr 2
00	Blank	Blank
01 (1 of 2)	Seq 02	Blank
02 (2 of 2)	Seq 01	Blank
02 (2 of 3 or more)	Seq 01	Seq 03
03 (3 of 3)	Seq 01	Seq 02
03 (3 of 4 or more)	Seq 01	Seq 02

Year 1 & 2 (MO Year 1,2)

Record the 4-digit year of diagnosis of the primary coded in the Personal History 1 field and, if applicable, the year of diagnosis for the Personal History 2 field. Record any additional primaries in the Remarks text field. Year is required when Personal History is required, as above. It is left blank when there is no previous history. If the year is unknown, it maybe coded 9999. The year for the primary site being abstracted is not recorded here.

Example: C619/2005 for Personal History 1, C679/2015 for Personal History 2

Name - Last

Record the patient's last name. Mixed-case, embedded spaces hyphens and apostrophes are allowed.

Name - First

Record the patient's first name. Mixed-case, embedded spaces are allowed. Special characters are not allowed.

Name - Middle

Record the patient's middle name. Middle initial may be used if full middle name is not available. Leave blank if no middle name/initial is given. Mixed case and embedded spaces are allowed, special characters are not.

Name – Birth Surname

This can be used to link reports on a person whose surname might be different on different documents. It is also useful when using a Spanish surname algorithm to categorize ethnicity.

The field should be left blank if the birth surname is not known or not applicable. Since a value in this field may be used by linkage software or other computer algorithms, only legitimate surnames are allowable, and any variation of "unknown" or "not applicable" isnot allowable.

Name - Alias

Many patients use a name different from their given name. If the patient uses an alias for the first name, record only the first name alias. If a patient uses an alias for the last name, record the last name alias. If a patient uses an alias for the first and last name, record both the last name and first name alias. Do not use commas.

Address at Diagnosis - Number and Street

The address at diagnosis can provide information to identify possible cancer clusters for environmental and epidemiological studies and provide essential information for public health activities.

- Record the patient's number and street address at the time the cancer was diagnosed or treated. Mixed case and embedded spaces are allowed. Special characters are limited to periods, slashes, hyphens, and pound signs Standard abbreviations may be used. If no street address is available, record "UNKNOWN." **DO NOT LEAVE BLANK**
- It may be necessary to use "UNKNOWN" if the correct Address at Diagnosis is not

known. (e.g., Class of Case is 30, 31, 32, 43, or 49)

- Do not indicate a temporary residence.
- Use the school address for college students.
- Children in boarding schools (below college level) are considered residents of their parents' home.
- Use the address where a transient or homeless person resided at the time of cancer diagnosis, i.e., shelter or diagnosing facility.

Address at Diagnosis – Supplemental

Record any additional address at diagnosis information such as name of nursing home or apartment complex. **If both a street and a PO Box are known, put the PO Box here.**

Address at Diagnosis – City/Town

Record the city or town of the patient's address at the time of cancer diagnosis. If the city is unknown, record UNKNOWN. **DO NOT LEAVE BLANK.**

State at Diagnosis

Record the U. S. postal service two-letter state abbreviation for the state of residence at cancer diagnosis. Use the two-letter abbreviation for patients whose residence at diagnosis was a Canadian province:

Abbreviations for Canadian province and (territories)

Province/Territory	Code	Province/Territory	Code
Alberta	AB	Nunavut	NU
British Columbia	BC	Ontario	ON
Manitoba	MB	Prince Edward Island	PE
New Brunswick	NB	Quebec	PQ
Newfoundland and Labrador	NL	Saskatchewan	SK
Northwest Territories	NT	Yukon	YT
Nova Scotia	NS	Canada, province unknown	CD

Use the following codes when the state or province is unknown or not applicable:

- US = Resident of United States, NOS (state/commonwealth/territory/possession unk)
- XX = Resident of country other than U.S. (including its territories, commonwealths, or possessions) or Canada and the country is known
- YY = Resident of country other than U.S. (including its territories, commonwealths, or possessions) or Canada and country is unknown
- ZZ = Resident of the U.S., NOS; Canada, NOS; residence unknown

Postal Code at Diagnosis

For U.S. residents record the 5-digit zip code and the 4-digit extension (if known) for the patient's address at diagnosis, left justify the field. For Canadian residents, use the 6-character alphanumeric postal code; left justify the field. Record 888888888 if the patient is a resident of a country other than Canada, United States or U.S. possessions and the postal code is not known. Record 999999999 if the patient is a resident of Canada, United States or U.S. possessions but the postal code is unknown, or residence is unknown. Consult the zip code list at: http://health.mo.gov/data/geocodes/index.php.

County at Diagnosis **Reported**

Code the county of the patient's residence at the time the tumor was diagnosed. For U.S. residents, standard codes are those of the FIPS publication "Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas." If the patient has multiple tumors, the county codes may be different for each tumor. A list of DHSS geocodes for Missouri counties is posted a https://health.mo.gov/data/geocodes/index.php

- Code 998 If known town, city, state, or country of residence but county code not known AND a residence is outside of the state of Missouri. (must meet all criteria)
- Code 999 if county of residence at diagnosis is unknown or for non-US residents.
- Use code 186 for Ste. Genevieve County (per FIPS – 12/15/1979)

Address Current

Patient Address Current— (Number and Street)

City/Town Current

State—Current

Postal Code – Current (Zip Code)

County—Current

These data items provide a current address, otherwise the rules for coding are as above. It may be a different address from *Patient Address at Diagnosis.*

When recording address that are incomplete in the medical record you may find the following references helpful:

https://www.zipinfo.com/search/zipcode.htm

https://data.mo.gov/Geography/Missouri-Zip-Codes-by-County-City/im7g-fucq/data

https://tools.usps.com/go/ZipLookupAction!input.action

Medical Record Number

The medical record number is assigned by the reporting facility and identifies the patient. This field may contain numbers, letters, or a combination of both. If the record number is less than **15** characters, right justify the entry.

- If number is unknown record 9s. If no number, record zeros
- Departments within the hospital not using the hospital record number may be recorded using standard abbreviations:

Radiation Therapy - - - - - - - - - **RT** Out-patient Surgery----------**SU**

Name of Spouse / Parent / Contact Person

Record the name (last and first) of the patient's spouse. If the patient is a minor child, record the name of one parent (last, first). If the patient is not a minor child or has no spouse, a relative, friend, or other contact person may be entered. Leave blank if not given. (This is not a required field.)

Abstracted By

This is a three-character field used to identify the hospital registrar that abstracted the cancer case. **Do not leave blank or use 'XXX' or other indications for Unknown.** In some software this field will fill automatically based on your log-in.

Social Security Number

Record the patient's Social Security Number, if known. Use **9's** if the patient does not have a social security number or if the social security number is not available. *Please double check your entry for accuracy.*

Telephone Number

This field records the current telephone number with area code for the patient, when available.

Code	Definition
(fill spaces)	Number is entered without dashes
0000000000	Patient does not have a telephone
1410065407	Telephone number is unavailable or unknown

MO Alcohol History

Code the patient's current or past use of alcoholic beverages, such as wine or beer, using the following codes:

Code	Definition
0	No history of alcohol usage
1	Current use of alcohol (any use of alcohol including social use)
2	Past history of alcohol usage, no current usage
9	Unknown

MO Tobacco History

Code the patient's current or past usage of tobacco, using the codes:

Code	Definition
0	Never smoked
1	Cigarette smoker, current
2	Cigar/pipe smoker, current (including waterpipe)
3	Snuff, chew, smokeless tobacco, current
4	Combination use, current
5	Previous tobacco usage
9	Unknown

E-cigarettes ***do not*** qualify as tobacco use.

Years of Tobacco Use

Record the number of years the patient has smoked or used tobacco products, using 2 digits. Record actual years of tobacco use. (Pack years can be used only if it is also documented the patient smoked 1 pack per day). The number of years can be estimated based on available information and using 16 years old as the starting age (e.g., if the patient is 76 y.o. and has smoked his entire life, then 60 years would be a conservative estimate). If no information is available, enter 9s and if the patient has never smoked, enter 0s.

Tobacco Use Smoking Status

Code 1 for current smoker

Toxic Exposure

- List, as text, any reported exposure to known carcinogens when documentation is available in the medical record.
- Enter up to 3 types of toxic exposures.
- Leave blank if unknown. For instance, when there is no reference to or documentation of toxic exposure in the medical record.

Marital Status at Diagnosis

Code the patient's marital status at time of initial diagnosis. Marital status may be a different status for each primary a patient may have. This item can also be useful for patient identification. Use the following codes:

Code	Definition
1	Single (never married)
2	Married (includes common law)
3	Separated
4	Divorced
5	Widowed
6	Unmarried or Domestic Partner (same or opposite sex, registered or unregistered, other than common law marriage)
9	Unknown

Sex

Code the patient's sex. Use the following codes:

Code	Definition
1	Male
2	Female
3	Other (intersex, disorders of sexual development/DSD)
4	Transsexual
5	Transsexual, natal male
6	Transsexual, natal female
7	Not Stated

For rarely used codes, please make a note in the physical exam or remarks text section to substantiate the choice.

Race 1 – 5

Race 1 identifies the primary race of the person and is the field used to compare with race data on cases diagnosed prior to January 1, 2000. For multi-racial patients, use Race 2-5 fields to code additional races following the instructions below. The race codes listed below correlate closely to categories used by the U.S. Census Bureau to allow calculation of race specific incidence rates.

- If only one race is reported for the person, enter the appropriate code from the table below and enter 88 in the Race 2 – Race 5 fields.
- "Race" is analyzed with *Spanish/Hispanic Origin*. Both items must be separately recorded
- All tumors for the same patient should have the same race codes.
- If Race 1 is coded 99, Unknown, Race 2 through Race 5 must be coded 99.
- Persons of Mexican, Puerto Rican, or Cuban origin are usually white.
- If a person's race is recorded as a combination of white and any other race, code the appropriate other race in the Race 1 field and code white in the next race field.
- If a person's race is recorded as a combination of Hawaiian and any other race (s), code the person's primary races, Hawaiian and code the other races in Race2, Race3, Race4, and Race5 as appropriate
- Otherwise, code Race 1 to the first stated non-white race (codes 02-98)

- When the race is recorded as "Oriental" or "Asian" and the place of birth is recorded as China, Japan, the Philippines, or another Asian nation, code the race based on birthplace information. For example: If the person's race is recorded as "Asian," and the place of birth is recorded as "Japan," code race as 05
- Do not code "Asian" in a subsequent race field if a specific Asian race has already been coded
- A specific race code (other than blank, 88, or 99) must not occur more than once

Code	Label	Code	Label
01	White	**17**	Pakistani
02	Black	**20**	Micronesian, NOS
03	**American Indian or Alaska Native**	**21**	**Chamorro**
04	Chinese	**22**	Guamanian, NOS
05	Japanese	**25**	Polynesian, NOS
06	Filipino	**26**	Tahitian
07	**Native Hawaiian**	**27**	Samoan
08	Korean	**28**	Tongan
10	Vietnamese	**30**	Melanesian, NOS
11	Laotian	**31**	Fiji Islander
12	Hmong	**32**	**Papua New Guinean**
13	**Cambodian**	**96**	**Other Asian, including Asian, NOS**
14	Thai	**97**	Pacific Islander, NOS
15	**Asian Indian, NOS or Pakistani, NOS**	**98**	**Some other race**
16	Asian Indian	**99**	**Unknown by patient**

Examples:

Code	Reason
01	A patient was born in Mexico of Mexican parentage. Code also Spanish/Hispanic Origin
02	A black female patient
05	A patient has a Japanese father and a Caucasian mother. (Caucasian will be coded in Race 2)

Spanish/Hispanic Origin

This code identifies whether or not the person should be classified as "Hispanic."

Code	Description
0	Non-Spanish; Non-Hispanic
1	Mexican (includes Chicano)
2	Puerto Rican
3	Cuban
4	South or Central American (except Brazil)
5	Other specified Spanish/Hispanic origin (includes European; excludes Dominican Republic)
6	Spanish, NOS; Hispanic, NOS; Latino, NOS; (There is evidence other than surname or maiden name that the person is Hispanic, but he/she cannot be assigned to categories 1-5)
7	**MCR use, reporting registrars need not use surname code**
8	Dominican Republic (for use with patients who were diagnosed with cancer on January 1, 2005 or later)
9	Unknown whether Spanish/Hispanic or not; not stated in patient record

Date of Birth (Birth Date)

Instructions for Coding

- Record the patient's date of birth as indicated in the patient record. For single-digit day or month, record with a lead 0 (for example, September is 09). Use the full four-digit year. *Please doublecheck your entry for accuracy.*
- For *in utero* diagnosis and treatment, record the actual date of birth. It will follow one or both dates for those events.
- **Date of Birth does not allow blanks STORE 2023 page 85**
- **The traditional format for Date of Birth is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date.**

All date data items allow blanks **EXCEPT** for the following:

1. Date of Birth
2. Date of Diagnosis
3. Date of last Contact or Death

Date of Birth Flag – Retired for 2023+ cases

This flag explains why there is no appropriate value in the corresponding date field, *Date of Birth*. As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Instructions for Coding

- Leave this item blank if *Date of Birth* has a full or partial date recorded.
- Code 12 if the *Date of Birth* cannot be determined at all.
- Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.
- See *STORE 2021*: *Section Two Coding Instructions* for additional information.

Birthplace, State and Country

When available, record the patient's place of birth, (state and country separately) using the codes in your software (STORE 2021 Appendix C).

Age at Diagnosis

This field is generally programmed by software vendors to be auto calculated once date of birth and date of initial diagnosis are entered.

Lifetime Occupation

This data item is applicable to patients who are **14** years or older at the time of diagnosisand is reported in text only.

- If available, record the patient's usual (longest held) occupation before diagnosis of this tumor.
- If the patient had several jobs over a lifetime, record the occupation engaged in for the longest period of time.
- If the patient is retired and the lifetime occupation is not known, do not record retired, record "unknown."
- If the patient was a housewife/househusband and also worked outside the home, record the occupation outside the home.
- If the patient was a housewife/househusband and never worked outside of the home, record "homemaker," "housewife," or "househusband" (Industry: "own home")
- If the patient was NOT a student or homemaker, and never worked, record "never worked," or "never employed" (Industry: "none")
- Record "unknown" if no information is available. **DO NOT LEAVE BLANK**

Type of Industry

This data item pertains to patients **14** years or older at the time of diagnosis and is reported in text only.

- If available, record the primary type of business activity performed by the company where the patient was employed for the greatest number of years.
- Distinguish whether the industry is involved in manufacturing, wholesale, retail, or service, etc.
- If the primary activity is unknown, it may be appropriate to record the name of the company and the city or town. The central registry office may use the name of the company and the city or town to determine the type of business activity performed.
- Record "unknown" if no information is available. **DO NOT LEAVEBLANK**

Date of 1st Contact

Record the date of first contact with the reporting facility for diagnosis and/or treatment of this cancer. The date may be the date of an outpatient visit for a biopsy, x-ray, or laboratory test, or the date a pathology specimen was collected at the hospital.

This data item can be used to measure the time between first contact and the date that the case was abstracted. It can also be used to measure the length of time between the first contact and treatment for quality-of-care reports.

Instructions for Coding

- Record the date as completely as possible. Leave any unknown portions of the date blank
- Record the date the patient first had contact with the facility as either an inpatient or outpatient for diagnosis and or first course treatment of a reportable tumor. The date may be the date of an outpatient visit for a biopsy, x-ray, or laboratory test, or the date a pathology specimen was collected at the hospital.

  Example: Patient with a self-detected breast lump **c**omes into your facility for a mammogram on 3/1/2021, and results are suspicious for malignancy. On 3/5/2021 patient returns for excisional biopsy which reveals ductal carcinoma. Date of 1st Contact will be 3/1/2021 (date of mammogram)
- For autopsy-only or death certificate-only cases, use the date ofdeath.
- When a patient is diagnosed in a staff physician's office, the date of first contact is the date the patient was physically first seen at the reporting facility for treatment.
- For analytic cases (Class of Case 00-22), the Date of First Contact is the date the patient became analytic. For non-analytic cases, it is the date the patient first qualified for the Class of Case that causes the case to beabstracted.

Date of First Contact Flag (Date of 1st Contact Flag) – Retired for 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date of First Contact.*

- Leave this item blank if *Date of First Contact* has a full or partial date recorded.
- Code 12 if the *Date of First Contact* cannot be determined at all.
- Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Institution Referred To

Institution Referred From

The hospital referred to/from fields uses a 10-digit FIN to record the institution to or from which the patient was referred for further care. Number must be right justified with leading zeroes (i.e., 0006630999).

Code	Description
0000000000	Patient was not referred by or to another facility
0000999998	Unspecified in-state hospital
0000999994	Unspecified out of state hospital
0000999996	Physician office
0000999995	Non-hospital, NOS
9999999999	It is unknown whether the patient was referred from or to another facility; The patient was referred, but referring facility is unknown

Medicare Beneficiary Number

Record the patient's Medicare Beneficiary Number in this field.

Primary Payer at Diagnosis

Identify the primary payer/insurance carrier at the time of initial diagnosis and/or treatment.

Instructions for Coding

- If the patient is diagnosed at the reporting facility, record the payer at the time of diagnosis.
- If the patient is diagnosed elsewhere or the payer at the time of diagnosis is not known record the payer when the patient is initially admitted for treatment
- Record the type of insurance reported on the patient's admission page.
- Codes 21 and 65–68 are to be used for patients diagnosed on or after January 1, 2006
- If more than one payer or insurance carrier is listed on the patient's admission page, record the first one.
- If the patient's payer or insurance carrier changes, do not change the initially recorded code.

Code	Label	Description
01	Not insured	Patient has no insurance and is declared a charity write-off
02	Not insured, self-pay	Patient has no insurance and is declared responsible for charges
10	Insurance, NOS	Type of insurance unknown or other than the types listed in codes 20, 21,31, 35, 60-68
20	Private insurance: Managed Care, HMO, or PPO	An organized system of prepaid care for a group of enrollees usually within a defined geographic area. Generally formed as one of four types: a group model, an independent physician association (IPA), a network, or a staff model. "Gate-keeper model" is another term for describing this type of insurance
21	Private insurance: Fee-for-Service	An insurance plan that does not have a negotiated fee structure with the participating hospital. Type of insurance plan not coded as 20
31	Medicaid	State government administered insurance for persons who are uninsured, below the poverty level, or covered under entitlement programs. Medicaid other than described in code 35
35	Medicaid administered through a Managed Care plan	Patient is enrolled in **Medicaid** through a Managed Care program (for example, HMO or PPO). The Managed Care plan pays for all incurred costs
60	Medicare without supplement, Medicare, NOS	Federal government funded insurance for persons who are 62 years of age or older or are chronically disabled (Social Security insurance eligible). Not Described in codes 61, 62, or 63
61	Medicare with supplement, NOS	Patient has Medicare and another type of unspecified insurance to pay costs not covered by Medicare
62	Medicare administered through a Managed Care plan	Patient is enrolled in **Medicare** through a Managed Care plan (for example, HMO or PPO). The Managed Care plan pays for all incurred costs
63	Medicare with private supplement	Patient has Medicare and private insurance to pay costs not covered by Medicare
64	Medicare with Medicaid eligibility	Federal government Medicare insurance with State Medicaid administered supplement
65	TRICARE	Department of Defense program providing supplementary civilian-sector hospital and medical services beyond a military treatment facility to military dependents, retirees, and their dependents. Formerly CHAMPUS (Civilian Health and Medical Program of the Uniformed Services)
66	Military	Military personnel or their dependents who are treated at a military facility
67	Veterans Affairs	Veterans who are treated in Veterans Affairs facilities
68	Indian/Public Health Service	Patient who receives care at an Indian Health Service facility or at another facility, and the medical costs are reimbursed by the Indian Health Service. Patient receives care at a Public Health Service facility or at another facility, and medical costs are reimbursed by the Public Health Service
99	Insurance status unknown	It is unknown from the patient's medical record whether or not the patient is insured

Class of Case

This data element is designed to separate the reporting registry's cancer cases into *analytic* and *nonanalytic* categories. MCR requires facilities to report both analytic and non-analytic cases with Class of Case codes 00, 10,11,12,13, 14, 20, 21, 22, 32, 35, 37, and 38.

Instructions for Coding

- Code the *Class of Case* that most precisely describes the patient's relationship to the facility.
- Code 00 applies only when it is known the patient went elsewhere for treatment. If it is not known that the patient actually went somewhere else, code *Class of Case* 10
- It is possible that information for coding *Class of Case* will change during the patient's first course of care. If that occurs during the abstracting process, change the code accordingly as new information becomes available in the patient record or from other facilities.
- Document *Institution Referred To* for patients coded 00, 13 to establish that the patient went elsewhere for treatment. Document Institution Referred from for patients coded 20-22 to establish that patient came from elsewhere.
- A staff physician (codes 10-12, 41) is a physician who is not employed by the reporting facility, but who has routine practice privileges there.
- Physicians who are not employed by the hospital but are under contract with it or have routine admitting privileges there are described in codes 10-12 and 41 as physicians with admitting privileges. Treatment provided in the office of a physician with admitting privileges is provided "elsewhere". That is because care given in a physician's office is not within the hospital's realm of responsibility.
- If the hospital purchases a physician practice, it will be necessary to determine whether the practice is now legally considered part of the hospital (their activity is coded as the hospitals) or not. If the practice is not legally part of the hospital, it will be necessary to determine whether the physicians involved are staff physicians or not, as with any other physician.
- "In-transit care" is care given to a patient who is temporarily away from the patient's usual practitioner for continuity of care. They are Class of Case 31 (not reportable to MCR). Monitoring of **oral** medication started elsewhere is also Class of Case 31 (not reportable to MCR). If the patient begins first course radiation or chemotherapy **infusion** elsewhere and continues at the reporting facility, the case is not in-transit; the case is analytic (Class of Case 21) and reportable to MCR.

Analytic Classes of Case

Initial diagnosis at reporting facility or staff physician's office

Code	MCR status	Definition
00	Reportable	Initial diagnosis at the reporting facility AND all treatment or a decision not to treat was done elsewhere
10	Reportable	Initial diagnosis at the reporting facility or in an office of a physician with admitting privileges AND part or all of first course treatment or a decision not to treat was at the reporting facility, NOS
11	Reportable	Initial diagnosis in an office of a physician with admitting privileges AND part of first course treatment was done at the reporting facility
12	Reportable	Initial diagnosis in an office of a physician with admitting privileges AND all first course treatment or a decision not to treat was done at the reporting facility
13	Reportable	Initial diagnosis at the reporting facility AND part of first course treatment was done at the reporting facility; part of first course treatment was done elsewhere
14	Reportable	Initial diagnosis at the reporting facility AND all first course treatment or a decision not to treat was done at the reporting facility

Initial diagnosis elsewhere

Code	MCR status	Definition
20	Reportable	Initial diagnosis elsewhere AND all or part of first course treatment was done at the reporting facility, NOS
21	Reportable	Initial diagnosis elsewhere AND part of first course treatment was done at the reporting facility; part of first course treatment was done elsewhere
22	Reportable	Initial diagnosis elsewhere AND all first course treatment or a decision not to treat was done at the reporting facility

Nonanalytic Classes of Case

Patient appears in person at reporting facility

Code	MCR status	Definition
30	Not reportable	Initial diagnosis and all first course treatment elsewhere AND reporting facility participated in diagnostic workup (for example, consult only, treatment plan only, staging workup after initial diagnosis elsewhere)
31	Not reportable	Initial diagnosis and all first course treatment elsewhere AND reporting facility provided transient (temporary) care or hospital provided care that facilitated treatment elsewhere (for example, stent placement)
32	Reportable	Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility for diagnosis or treatment of any subsequent disease recurrence or persistence (active disease)
33	Not reportable	Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease history only (disease not active)
34	Not reportable	Type of case not required by MCR to be accessioned (for example, a benign colon tumor) AND initial diagnosis AND part or all of first course treatment by reporting facility
35	Reportable	Case diagnosed before program's Reference Date AND initial diagnosis AND all or part offirst course treatment by reporting facility
36	Not reportable	Type of case not required by MCR to be accessioned (for example, a benign colon tumor) AND initial diagnosis elsewhere AND all or part of first course treatment by reporting facility
37	Reportable	Case diagnosed before program's Reference Date AND initial diagnosis elsewhere AND allor part of first course treatment by facility
38	Reportable	Initial diagnosis established by autopsy at the reporting facility, cancer not suspected prior to death

Patient does not appear in person at reporting facility (could be reportable by agreement for your facility)

Code	MCR status	Definition
40	Not reportable	Diagnosis AND all first course treatment given at the same staff physician's office
41	Not reportable	Diagnosis and all first course treatment given in two or more different offices of physicians with admitting privileges
42	Not reportable (unless contracted to do so)	Non-staff physician or non-CoC accredited clinic or other facility, not part of reporting facility, accessioned by reporting facility for diagnosis and/or treatment by that entity (for example, hospital abstracts cases from an independent radiation facility)
43	Not reportable	Pathology or other lab specimens only
49	By MCR request	Death certificate only (registry will receive notice from MCR if needed for a case)
99	Not reportable	Nonanalytic case of unknown relationship to facility

Examples of Classes of Case:

Code	MCR status	Case Description
00	Reportable	During an Emergency Department visit for seizure, CT showed a high-grade brain lesion, probable glioblastoma. Patient was transferred to a local cancer hospital for further work-up and treatment
10	Reportable	Patient underwent TRUSP with biopsies in his physician's office, and the pathology showed Gleason 3-3 adenocarcinoma. He was admitted to the reporting facility for DiVinci prostatectomy
31	Not Reportable	Patient receiving 5 day a week XRT at an outside facility was seen at the reporting facility for two of her scheduled treatments due to equipment failure at the referring hospital. She completed her treatments at the original facility after repairs were made

Type of Reporting Source

Code the source of information used to abstract the majority of information on the tumor being reported. This data item is used by the central registry to assist in the measurement of case reporting from all facilities.

Code	Definition
1	Hospital inpatient, managed health plans with comprehensive, unified medical records (incl. VA)
2	Radiation Treatment Centers or Medical Oncology Centers (hospital-affiliated or independent)
3	Laboratory only (hospital-affiliated or independent)
4	Physician office/private medical practitioner (LMD)
5	Nursing/convalescent home; hospice
6	Autopsy only
7	Death certificate only (used by MCR)
8	Other hospital outpatient units and surgery centers equipped with general anesthesia

COC Accredited Flag

CoC-accredited facilities are required to collect certain data items including TNM staging. It is burdensome for central registries to maintain a list of accredited facilities, and the list changes frequently. The flag is a means of incorporating the accredited status into abstracts at the time of abstraction by someone who has knowledge of the status. Your software may be set up to auto-code this field.

Chapter 6

TEXT FIELDS

MCR frequently receives abstracts from multiple facilities that must be consolidated into one case. Thus, abstracts must contain corroborating text in order for MCR to assure that what is entered into the MCR database is the most accurate information for each case reported. The operative concept here is "corroborating." That is, text must provide the rationale for selecting the codes assigned to primary site, histology, extent of disease and treatment fields. It's not necessary to strive for great literary expression. Brief, meaningful comments are all it takes to tell us what we need to know.

Text is also evaluated in some data quality audits to ensure coding accuracy and completeness. Missing or inadequate text to support the coded fields results in unnecessary errors affecting final statistical results of an audit.

Please try to use standard abbreviations. A good resource is: https://www.naaccr.org/data-standards-data-dictionary/

One way to improve your text is to fill in the text fields first as you abstract, then code fields from that information. While it may feel awkward at first, it will show you how important accurate text is to MCR. These required text fields are considered in our QA and auditing processes, so good text entries may save you questions later.

Tips:

- Enter relevant information only. **Any information copied and pasted from another document should be edited to be pertinent and succinct.**
- Include only information that the registry is authorized to collect (Think HIPAA)
- If information is unavailable, state so in the text.
- **Using all upper case (CAPS) is NOT necessary.**
- **Text fields expanded from 400 to 1,000 characters.**

Text – Dx Procedure - Physical Exam (Text–DX Proc– PE)

Enter findings from the physical exams which are pertinent to the primary being reported. Key findings to record include:

- The size and location of any obvious lesions or palpable masses
- The size and location of any palpable lymphadenopathy or the absence of palpable lymph nodes
- For lymphomas, the presence of any 'B' symptoms (weight loss, fever, night sweats)
- For prostate, DRE results
- For melanomas, the diameter of the primary lesion, if no primary skin lesion is found, state this.
- State age, race and sex. If the patient's first name is not typical for the sex, please make a note that sex has been verified correct.

- **Example 1:** 61 yo WM, DRE – ca not suspected; no LAD
- **Example 2:** 35 yo BF, 1 cm mass UOQ rt breast; no palp axillary LAD
- **Example 3:** 54 yo bilat cervical nodes; axillary nodes on left; no groin LAD, night sweats
- **Example 4:** [for unknown primary] 25 yo WM, PE-WNL

Text – Dx Procedure - X-rays/Scans (Text – DX Proc – X-ray/scan)

State the date and results of imaging studies used to diagnose and/or stage the primary. Just listing the tests without describing the findings is not at all useful. Key findings to record include:

- Name of the exam, including the body parts being imaged and the date and place the test was done.
- Size and/or location of any positive findings that support the values coded for primary site, summary stage, surgery to primary or other sites.
- When no positive findings are found, state so
- Telling where the test was done may support class of case.
  - **Example 1:** 3/17/21 brain MRI here – 2 cm probable meningioma R temporal lobe
  - **Example 2:** 1/20/21 CT Boone: 3 cm RUL lesion; pleural effusion; mediastinal LAD; multi liver mets
  - **Example 3:** 2/1/21 CT Barnes – multi liver mets; PET showed uptake in liver only; no primary found
  - **Example 4:** 2/15/21 mamm locally – lg irregular mass outer left breast susp for malignancy; 2/22/21 here - bone scan neg

Text – Dx Procedure – Scopes (Text – DX Proc – Scopes)

State any findings (including negative findings) that support values coded for primary site, summary stage, surgery to primary or other sites. Key elements to record include:

- Name of exam and date it was done.
- Location and nature of tumor involvement
- Note whether a biopsy was taken during the procedure and what the results showed.
  - **Example 1:** 3/9/21 colonoscopy showed obstructing lesion in proximal sigmoid. bx pos
  - **Example 2:** 2/11/21 endo showed ulcerating mass in upper esophagus. bx pos

Text - Lab Tests (Text – Dx Proc – Lab Tests)

Record only the findings relevant to confirming the diagnosis or summary stage. For sites where lab tests don't have particular bearing on diagnosis or stage, enter n/a. Types of cases where lab results are pertinent are listed below.

- Colon/rectum (CEA)
- Liver (AFP)
- Skin melanoma (LDH)
- Mycosis fungoides (Peripheral Blood Involvement)
- Breast (ERA/PRA/HER2 FISH)
- Ovary (CA-125)
- **Cervix & Anus (p16)**
- Prostate (PSA)
- Testis (AFP/ hCG/LDH)
- Hematopoietic (When no bone marrow exam is done) - (Heme profile/peripheral blood smear)

Rx Text - Surgery (Rx Text – Surgery)

State the surgery date and the specific name of the procedure(s) reflected in the coded values in the surgery fields. It is also helpful to include the name of the facility where the procedure was done.

- **Example 1:** [Lung - Code 33] 3/21/21 - RLL lobectomy w/medias LN dissec @ St John's
- **Example 2:** [Ovary - Code 57] 1/22/21 TAH-BSO w/omentectomy @ Mayo Clinic
- **Example 3:** [Bladder – Code 22] 3/22/21 TURB w/fulguration @ Skaggs

Text- OP (Text – Dx Procedure – OP)

This field is used to record details about findings from the operative procedure(s) and may include the following:

- Information from the operative report describing extent of disease and/or the extent of the surgery. Describe any findings that reflect date of diagnosis, the coded values for summary stage and treatment codes.
  - **Example 1:** 2/15/21 at colon resection, wedge excision of liver met was performed.
  - **Example 2:** 1/27/21 omental mass and tumor studding debulked with 3 cm residual disease on diaphragm.
- Sequence of surgical events that explains unusual circumstances.
  - **Example:** 12/10/20 core needle bx; MRM planned but was delayed due to acute pancreatitis. MRM done 3/22/21

Text - Dx Procedure – Pathology (Text – DX Proc – Path)

Describe the pathology findings from all procedures that serve to confirm the diagnosis date, histology, summary stage, surgery primary site, surgery other site and scope of regional lymph node surgery. When available, the following should be included:

- Type of specimen (i.e., biopsy or resection) and anatomical source of tissue
- Histologic type stated in the final diagnosis from the pathology report.
- Tumor size and extent
- Number of regional lymph nodes examined and number of positive nodes.
- Status of non-primary tissue submitted, i.e., involved/not involved.
- Status of final surgical margins
- Any comments by the pathologist that clarifies the final diagnosis.
  - Example 1: RUL lobectomy – 3.2 cm MD sq cell ca; pleura not involved; 1/6 mediastinal nodes pos. margins free
  - Example 2: left lobectomy - .7 cm follicular ca ext thru thyroid capsule; 2/26/21 completion thyroidectomy - .5 cm rt lobe papillary ca; no node exam; margins free
  - Example 3: rt cervical node excision – follicular b-cell lymphoma; bone marrow pos
  - Example 4: sigmoid w/3.5 cm mucinous adenoca exts into pericolonic fat; 2/18 nodes pos. liver bx neg
  - Example 5: per pathologist, tumor is identical to that seen in the original resection specimen

Text - Staging

State the findings that are the basis for each value coded in the MCR required stage fields. It is only necessary to address the criteria met for the code assigned, e.g., if a lung primary has both supraclavicular (N3) and hilar (N1) nodes involved, mention only the N3 nodes in the text. This text box should be used to justify SSDI (Site-specific Data Item) field codes also. The SEER Summary Stage 2018 can be documented in this text field.

- Example 1: 2.3 cm, confined to breast tissue; 0/3 SLN involved; SEER Summary Stage 1 - Localized
- Example 2: Malig pleural effusion, mediastinal LN pos, liver mets on CT; SEER Summary Stage - Distant
- Example 3: Liver bx revealed metastatic poorly diff adenocarcinoma of unknown primary. No info on primary site; nodes clinically neg; no other dist mets; SEER Summary Stage 9 – Unknown
- Example 4: 3.5 cm lobular carcinoma in UOQ left breast; margins neg; 03/15 axillary nodes pos. SEER Summary Stage 3 – Regional to lymph nodes

Text - Remarks

This field can be used to describe information coded but not described elsewhere in the text, for example as smoking and alcohol use, personal cancer history and family cancer history. Coding problems, unavailable information, unusual circumstances regarding treatment timing and the like can be discussed here. This field can also be used for overflow text from other fields.

- **Example 1:** Pt seen in ER 3/1/21 and CT chest dx'd multiple bilat lung nodules, probable malignancy. Pt expired in ER; no other info available.
- **Example 2:** Pt Hx of mantle RT for Hodgkin's; 20 yrs tob use, quit 1988
- **Example 3:** Outside path says sigmoid, outside op note states descending colon so site was coded C18.8

Text - Place of Diagnosis

Record the facility where the initial diagnosis was made, if known, or state if unknown.

Rx Text - Radiation (Beam) and Rx Text -Radiation Other

State the treatment dates, modality, dose, volumes (sites) treated and place RT was given. If treatment was planned but it is unknown whether it was given, state this in the text. If no RT was given, state the reason.

- **Example 1:** [Prostate] 12/14/20 Pd-103 seed implant @ StJohn's
- **Example 2:** 3/2 – 3/12/21 3000 cGy to brain mets @ St John's
- **Example 3:** RT not recommended

RX Text - Chemo, RX Text - Hormone, RX Text - BRM, and RX Text - Other

State the treatment date, agents given, and place treatment was given.

- **Example 1:** CHOP x 4 plus Rituxan started 3/8/21; Rx @ Skaggs
- **Example 2:** Pt declined recommended Arimidex

Primary Site Title (Text – Primary Site Title)

Describe in text the exact site as coded in the Primary Site field. Include laterality if applicable.

- **Example:** Site code is C16.9 *description* = stomach, NOS
- **Example:** Site code is C71.1 and laterality code is 2. *Description* = left frontal lobe, brain

Histology Title (Text – Histology Title)

Describe the specific histology type as coded in the histologic type field. Include grade, if applicable.

- **Example:** Patient diagnosed with adenocarcinoma, poorly differentiated - Code: 8140/33 description = "adenocarcinoma, poorly differentiated"

Sample Text Entries

Here is what the text section of your finished abstract should look like:

- Text—DX Proc-PE: 83 yo white male w/2-week hx R supraclavicular node
- Text—DX Proc—X-ray/Scan: 2/8/21 CT chest – 5 cm malignant appearing R hilar mass; 3 cm supraclavicular node; liver, adrenals WNL
- Text—DX Proc—Scopes: 2/10/21 bronch bx: mass originating in RUL bronchus extending into R MSB
- Text—DX Proc—Lab Tests: n/a
- Text—DX Proc—Op: 2/10/21 local excision of supraclavicular node only; patient not otherwise a surgical candidate
- Text—DX Proc-Path: endobronch bx – PD sq cell ca; LN exc pos for mets sq cell
- Text—Staging: hilar tumor extn into MSB; positive N3 node; no distant mets
- RX Text—Surgery: supraclavicular node excision only
- RX Text—Radiation (Beam): 6300 total cGy to thorax; 2/22/21 – 3/19/21 at St. Paul's
- RX Text—Radiation Other: none
- RX Text—Chemo: refused
- RX Text—Hormone: none
- RX Text—BRM: none
- RX Text—Other: none
- RX Text—Remarks: smoker x 60 yrs; pt has had CLL since 2013 – no Rx
- Text—Place of Diagnosis: St Paul's

Chapter 7

CANCER IDENTIFICATION

(for cases diagnosed before 2018, see also Appendix A)

Primary Site

The primary site is defined as the organ or site in which the cancer originated or began. A *metastatic* site indicates that the primary (originating) tumor has spread from the original site to other areas in the body. Cancer registries **code only the primary site** in this field, using the ICD-O-3 manual and supplemental updated tables to determine the correct site code. Indications of metastatic sites are used in the registry for identifying the extent of the patient's disease and for staging purposes. Coding the primary site properly is very important, as many other field codes stem from it.

- Follow the Instructions for Coding in the current SEER Solid Tumor Rules to assign primary site codes for solid tumors.
- Primary site codes for lymphomas, leukemias and other hematopoietic neoplasms diagnosed **January 1, 2010, and after** are assigned according to instructions specified in the *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual.* This manual may be downloaded from the SEER website at https://seer.cancer.gov/tools/heme/ To determine primary site codes for cases diagnosed prior to 2010, follow instructions for coding in ICD-O-3, pages 20-40 and SEER's *Abstracting and Coding Guide for the Hematopoietic Diseases* (the "red book")

Resources/Steps to Use for Coding Primary Site for Solid Tumors

1. ICD-O-3 Manual
   - Alpha index
   - Topography-Numerical
2. Solid Tumor Coding Rules
3. Program Manuals
   - STORE Manual
   - Missouri Cancer Registry Manual
4. SEER SINQ answers
5. Ask a SEER Registrar

It is important to identify the exact location of the primary tumor whenever possible, and to enter the most specific ICD-O-3 topography code listed into Primary Site field. The registrar should use all documents available in the medical record to determine the most specific site code, including pathology reports, scans, x-rays, MRIs, etc. The following points are helpful to consider when coding this field:

- Enter the specific subsite code whenever applicable.

  Example: A patient is diagnosed with breast cancer. The path report reads *a malignant neoplasm of the right breast, upper outer quadrant*. It is correct to code **C50.4**, rather than breast, NOS - **C50.9**

- When a primary lesion occupies contiguous overlapping subsites within an organ and the exact point of origin cannot be determined, use .8 to code the subsite.

  Example: Patient is diagnosed with colon cancer. The surgeon states that intraluminal tumor involved the colon from the cecum to the mid-ascending colon. Code **C18.8** - rather than coding the site to either the cecum or ascending colon.

  Note: For skin cancers overlapping sites in the head and neck ONLY: Assign the primary site code for the site where the epicenter is; do not use code C44.8.

- When the primary tumor is multifocal throughout an organ, or when there is no information identifying the subsite from which the primary tumor arose, use the code .9 to indicate the site, NOS.

  Example: The pathology from a mastectomy specimen shows diffuse, multifocal ductal carcinoma throughout the breast. Code C50.9

  Example: A patient with small cell lung cancer originally diagnosed and treated at an unknown facility is admitted for brain radiation for newly identified metastases. The only information available is a note stating, "Patient with 3-year history of SCLC here for XRT to brain mets." Code C34.9

- When multiple tumors arising in different subsites of the same anatomic site are reported as a single primary and point of origin cannot be determined, code the last digit of the primary site to 9.

  Example: Patient has an infiltrating duct tumor in the UOQ (C50.4) of the R breast, and another infiltrating duct tumor in the LIQ (C50.3) of the same breast. Code the primary site as C50.9.

- When the primary site is documented as an "unknown primary," use code C80.9
- Kaposi's Sarcoma is coded to the site in which it originates. Code to skin NOS **(C44.9)** if the disease arises simultaneously in the skin and another site, AND the primary site is not identified.

Primary Site Coding—Lymphomas

- Rules for determining topography codes for lymphomas diagnosed in 2010 and after are specified in *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual*

- For cases diagnosed prior to 2010, use the guidelines found in Appendix A to determine the primary site codes for lymphomas.

Resources/Steps to Use for Coding Primary Site for Hematopoietic and Lymphoid Primaries

1. Hematopoietic and Lymphoid Neoplasm Coding Manual/Database
2. SEER SINQ answers
3. Ask a SEER Registrar
4. ICD-O-3 Manual

Histologic Type

The data item Histologic Type describes the microscopic composition of cells and/ or tissue for a specific primary site. The tumor type or histology is a basis for staging and determination of treatment options. It affects the prognosis and course of the disease. Histology code is recorded in two fields: Histology (92-00) ICD-O-2 for cases diagnosed prior to 2001 and Histologic Type ICD-O-3, used for all cases.

Record histology using the 4-digit morphology codes found in the appropriate reference as shown in the table on the following page.

Resources/Steps to Use for Coding Histology for Solid Tumors

1. Solid Tumor Coding Rules https://seer.cancer.gov/tools/solidtumor/

2. ICD-O-3.2 & Updates https://seer.cancer.gov/icd-o-3/

3. SEER SINQ answers

4 Ask a SEER Registrar

Instructions for Coding

- ICD-O-3 identifies the morphology codes with an "M" preceding the code number. Do not record the "M."
- Review all pathology reports related to the case.
- Code the **final** pathologic diagnosis for solid tumors
- The codes for cancer, NOS (8000) and carcinoma, NOS (8010) are **not** interchangeable. If the physician says that the patient has carcinoma, then code carcinoma, NOS (8010)
- Refer to Appendix A of this manual for cases diagnosed prior to January 1, 2007

See Chapter 3 of this manual for an introduction to these topics.

Malignant Solid Tumors 2018	
Diagnosed January 1, 2018 & forward	#1 Solid Tumor Coding Rules #2 ICD-O-3.2 and updates
Diagnosed January 1, 2007 - 2017	#1 *Multiple Primaries and Histology Coding Manual* #2 ICD-O-3
Diagnosed January 1, 2001 - December 31, 2006	ICD-O-3
Diagnosed prior to 2001	ICD-O-2 (enter into historic ICD-O-2 field) **AND** ICD-O-3 (enter into ICD-O-3 histologic type field)
Benign/borderline Intracranial and Other CNS Tumors 2018	
Diagnosed January 1, 2018, and forward	Solid Tumor Coding Rules
Diagnosed January 1, 2007 - 2017	#1 *Multiple Primaries and Histology Coding Manual* #2 ICD-O-3
Diagnosed January 1, 2004 - December 31, 2006	ICD-O-3
Diagnosed prior to 2004	Not reportable
Lymphomas, Leukemias and other Hematopoietic Malignancies	
Diagnosed January 1, 2010, and forward	*Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual and the Hematopoietic Database*
Diagnosed January 1, 2001 – December 31, 2009	ICD-O-3
Diagnosed prior to 2001	ICD-O-2 (enter into historic ICD-O-2 field) **AND** ICD-O-3 (enter into ICD-O-3 histologic type field)

ICD-O-3 Conversion Flag

This code specifies how the conversion of morphology codes from ICD-O-2 to ICD-O-3 was accomplished. This information is used for some data analysis and for further item conversions. New versions of the codes used for recording histology and behavior reflect advances in medical and pathologic knowledge, and converted codes have a slightly different distribution and meaning than codes entered directly. Cancer registries record case histories over many years, so not all cases will originally be assigned according to the same code version.

Instructions for Coding

- Code 0 is used for newly abstracted cases and may be auto coded by the software provider.

Behavior Code

The behavior code occupies the fifth digit of the ICD-O morphology code and records the behavior of the tumor being reported. It is used by pathologists to describe whether tissue samples are benign (0), borderline (1), in situ (2), invasive (3), or metastatic (6). The cancer registry collects only **primary** sites. If the pathology report describes the cancer as metastatic, the registrar should be alerted that the primary site is not described on that report and must take steps to identify the primary site. In this situation, the behavior code is recorded **3** by the registry. Behavior codes 6 and 9 are not used by the hospital registry. Behavior code is recorded in two fields: Behavior (92-00) ICD-O-2 for cases diagnosed prior to 2001 and Behavior Code ICD-O-3 used for all cases.

Code	Label	Definition
0	Benign	Benign
1	Borderline	Uncertain whether benign or malignant Borderline malignancy Low malignant potential Uncertain malignant potential
2	In situ and/or carcinoma in situ	Adenocarcinoma in an adenomatous polyp with no invasion of stalk Clark level 1 for melanoma (limited to epithelium) Comedocarcinoma, noninfiltrating (C50._)
3	Invasive	Invasive or microinvasive, no matter how limited

Example: Pathology report of breast biopsy reads: "ductal carcinoma in situ (8500/2) with areas of focal invasion (8500/3). This case should be coded to the invasive behavior **8500/3.**

Example: Pathology report of bladder biopsies reads: "Papillary urothelial carcinoma, non-invasive (8130/2 and Papillary transitional cell (8130/3) with invasion of the lamina propria." This case should be coded to the invasive behavior.

Colon and rectal sites with high grade or severe dysplasia are reportable as behavior code 2 cases only if the pathologist states they are equivalent to carcinoma in situ and the reporting facility's registry has a documented policy to this effect. Abstract text MUST document pathology as in situ carcinoma.

The following terms are synonymous with **behavior code 2** (in-situ) cancers:

- Adenocarcinoma in an adenomatous polyp with no invasion of stalk
- Bowen's disease (not reportable for C44._)
- Clark's level 1 for melanoma (limited to epithelium)
- Comedocarcinoma, non-infiltrating (C50._)
- Confined to epithelium
- Hutchinson melanotic freckle, NOS (C44._)
- Intracystic, non-infiltrating (carcinoma)
- Intraductal (carcinoma)
- Intraepidermal, NOS (carcinoma)
- Intraepithelial, NOS (carcinoma)
- Involvement up to but not including the basement membrane
- Lentigo maligna (C44._)
- Lobular neoplasia (C50._)
- Lobular, nonfiltrating (C50._) (carcinoma)
- Noninfiltrating (carcinoma)
- Noninvasive (carcinoma only)
- No stromal invasion or involvement
- Papillary, noninfiltrating or intraductal (carcinoma)
- Pre-cancerous melanosis (C44._)
- Queyrat's erythoplasia (C60._)

Grade Fields

Grade is a measure of the aggressiveness of the tumor. Grade and cell type are important prognostic indicators for many cancers.

The AJCC 8th Edition has specific grade tables listed for many chapters, some but not all of which follow the definitions of the historical standard grade data item Grade/ Differentiation [440] as used in cancer registries, which has been discontinued for 2018**. New data items have been defined for collection of Grade: Clinical, Pathological and Post Therapy [3843, 1068, 3844 and 3845, respectively].** New grade values and definitions differ based on the schema and use schema-specific grade tables. Each schema-specific grade table includes the standard (generic) grade definition for those cases where the schema-specific grading system is not available in the pathology report or other medical documentation.

Abstractors will need to consult the **Grade Coding Instructions and Tables 3.0 2022,** which provides detailed information and coding instructions on the new grade data items and site/schema-specific grade tables https://www.naaccr.org/wp-content/uploads/2022/10/Grade-Coding-Instructions-and-Tables-v3.pdf?v=1676474933

Grade coding conventions vary according to site and are provided in hierarchical order. The AJCC 8th Edition Chapter-specific grading systems (codes 1-5, L, H, M, S) take priority over the generic grade definitions (codes A-E, 8, 9). For those cases that are not eligible for AJCC staging, if the recommended grading system is not documented, the generic grade definitions would apply. Please read the section of the Grade Manual that explains coding guidelines for genericgrade categories.

Resources/Steps to Use for Coding Grade

1. Review Site-specific Coding Notes in Grade Coding Manual or abstracting software
2. Review Grade Coding Manual (general rules)
   - Introduction to **2018** Changes in Grade Coding-Item Specific Data Dictionary/Coding Guidelines.
   - Table Specific guidelines
     - Use the grade tables to determine which tables applies.
3. Review/submit question to CAnswer Forum
   - SSDI/Grade forum

Grade Clinical

This data item records the grade of a solid primary tumor before any treatment (surgical resection or initiation of any treatment including neoadjuvant). Grades from some surgical procedures like transurethral resection if the bladder (TURB) and endoscopic biopsies are included as clinical because the procedures are not considered treatment.

Clinical grade is recorded for cases where a histological (microscopic) exam is done on available tissue and grade is stated. This includes FNA, biopsy, needle core biopsy, etc.

Note 1: Clinical grade must not be blank.

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

Note 3: If there are multiple tumors with different grades abstracted as one primary, code the highest grade.

Note 4: Code 9 (unknown) when:

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

Note 5: If there is only one grade available and it cannot be determined if it is clinical or pathological, assume it is a clinical grade and code appropriately per clinical grade categories for that site, and then code unknown (9) for pathological grade, and blank for **Grade Post Therapy Clin (yc) and Grade Post Therapy Path (yp).**

Important: See the individual site-specific Grade Clinical tables in the grade manual for additional notes.

Grade Post Therapy Clinical (yc)

This data item records the grade of a solid primary tumor that has been microscopically sampled following neoadjuvant therapy or primary systemic/radiation therapy. If AJCC staging is being assigned, the tumor must have met the neoadjuvant therapy or primary systemic/radiation therapy requirements in the AJCC manual or according to national treatment guidelines.

Record the highest grade documented from the microscopically sampled specimen of the primary site following neoadjuvant therapy or primary systemic/radiation therapy.

For cases diagnosed January 1, 2021, and later, this data item, along with Grade Clinical, Grade Pathological, and Grade Post Therapy Path (yp), replaces NAACCR Data Item Grade [440] as well as SSF's for cancer sites with alternative grading systems (e.g., breast [Bloom-Richardson], prostate [Gleason]).

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

Note 1: Leave grade post therapy clinical (yc) blank when:

- No neoadjuvant therapy
- Clinical or pathological case only
- Neoadjuvant therapy completed; no microscopic exam is done prior to surgery/resection of primary tumor.
- There is only one grade available, and it cannot be determined if it is clinical, pathological, or post therapy.

Note 2: Assign the highest grade from the microscopically sampled specimen ofthe Primary site following neoadjuvant therapy or primary systemic/radiation therapy.

Note 3: In cases where there are multiple tumors abstracted as one primary with different grades, code the highest grade.

Note 4: Code 9 when:

- Microscopic exam is done after neoadjuvant therapy and grade from the primary site is not documented.
- Microscopic exam is done after neoadjuvant therapy and there is no residual cancer.
- Grade check "not applicable" on CAP protocol (if available) and no othergrade information is available.

***Important**: See the individual site-specific Grade Post Therapy Clinical tables in the grade manual for additional notes.*

Grade Pathological

This data item records the grade of a solid primary tumor that has been resected and for which no neoadjuvant therapy was administered. This may include the grade from the clinical workup, as all information from diagnosis (clinical staging) through the surgical resection is used for pathological staging. Record the highest grade documented from any microscopic specimen of the primary site whether from the clinical workup or the surgical resection.

Note 1: Grade Pathological must not be blank.

Note 2: There is a preferred grading system for this schema. If the Grade Clinical given uses the preferred grading system and the Grade Pathological does not use the preferred grading system, do not record the Grade Clinical in the Grade Path field.

Example: Biopsy of primary site shows a moderately differentiated adenocarcinoma. The surgical resection states a high-grade adenocarcinoma.

- Grade Clinical would be coded as G2 (code 2) since Moderately differentiated(G2) is the preferred grading system.
- Grade Pathological would be coded as 9 since the preferred grading systemwas not used and the Generic Grade Categories do not apply to this grade table.

Note 3: Assign the highest grade from the primary tumor.

Note 4: If there are multiple tumors with different grades abstracted as one primary, code the highest grade.

Note 5: Use the grade from the clinical work up from the primary tumor in different scenarios based on behavior or surgical resection.

- Behavior
  - Tumor behavior for the clinical and pathological diagnoses are the same AND the clinical grade is the highest grade.
  - Tumor behavior for clinical diagnosis is invasive, and the tumor behavior for the pathological diagnosis is in situ.
- Surgical Resection
  - Surgical resection is done of the primary tumor and there is not grade documented from the surgical resection.
  - Surgical resection is done of the primary tumor and there is no residual cancer.
  - Surgical resection of the primary tumor has not been done, but there is positive microscopic confirmation of distant metastases during the clinic time frame.

Note 6: Code 9 (unknown) when:

- Grade from primary site is not documented.
- No resection of the primary site (see exception in Note 5, Surgical resection,last bullet)
- Neo-adjuvant therapy is followed by a resection (see Grade Post TherapyPath (yp)
- Grade checked "not applicable" on CAP Protocol (if available) and noother grade information is available.
- Clinical case only (see clinical grade)
- There is only one grade available, and it cannot be determined if it is clinical or pathological.

Important: See the individual site-specific Grade Pathological tables in the grade manual for additional notes.

Grade Post Therapy Pathological (yp)

This data item records the grade of a solid primary tumor that has been resected following neoadjuvant therapy. If staging is assigned, the tumor must have met the surgical resection requirements in AJCC. Record the highest grade documented from the surgical treatment resection specimen of the primary site following neoadjuvant therapy.

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

Note 1: Leave grade post therapy path (yp) blank when:

- No neoadjuvant therapy
- Clinical or pathological case only
- Neoadjuvant therapy complete; surgical resection not done.
- There is only one grade available, and it cannot be determined if it is clinical, pathological or post therapy path.

Note 2: There is a preferred grading system for this schema. If the post therapy clinical grade given uses the preferred grading system and the post therapy pathological grade does not use the preferred grading system, do not record the Grade Post Therapy Clin (yc) in the Grade Post Therapy Path (yp) field.

Example: Neoadjuvant therapy is completed. Biopsy of primary site shows a moderately differentiated adenocarcinoma. The surgical resection shows a high-gradeadenocarcinoma

- Grade Clinical Post Therapy (yc) would be coded as G2 (code 2) since Moderately Differentiated is the preferred grading system.
- Grade Path Post Therapy (yp) would be coded as 9 since the preferred grading system was not used and the Generic Grade categories do not apply to this grade table.

Note 3: Assign the highest grade from the resected primary tumor assessed after the completion of neoadjuvant therapy.

Note 4: If there are multiple tumors abstracted as one primary with different grades, code the highest grade.

Note 5: Use the grade from the post therapy clinical work up from the primary tumor in different scenarios based on behavior or surgical resection.

- Behavior
  - Tumor behavior for the post therapy clinical and the post therapy pathological diagnoses are the same AND the post therapy clinicalgrade is the highest grade.
  - Tumor behavior for post therapy clinical diagnosis is invasive, and thetumor behavior for the post therapy pathological diagnosis is in situ.
- Surgical Resection
  - Surgical resection is done of the primary tumor after neoadjuvant therapy is completed and there is no grade documented from the surgical resection.
  - Surgical resection is done of the primary tumor after neoadjuvant therapy is completed and there is no residual cancer.
  - Surgical resection of the primary tumor after neoadjuvant therapy is completed, but there is positive microscopic confirmation of distant metastases during the post therapy clinical time frame.

Note 6: Code 9 (unknown) when:

- Surgical resection is done after neoadjuvant therapy and grade from the primary site is not documented.
- Surgical resection is done after neoadjuvant therapy and there is no residualcancer.
- Grade checked "not applicable" on CAP Protocol (if available) and no othergrade information is available.

***Important**: See the individual site-specific Grade Post Therapy Pathological tables in the grade manual for additional notes.*

Derived Summary Grade 2018

This new data item will be applied to cases 2018+. This is not a conversion but deriving new data based on information already in the cancer registry system. Once a new case is entered, the Derived Summary Grade [Item#1975] will be derived from Grade Clinical and Grade Pathological.

Date of Diagnosis

Record the month, day, and year this cancer was originally diagnosed by a medical practitioner. This date should reflect the **first clinical** onset of disease and may not be histologically confirmed. This date should not be changed, even if the disease is histologically confirmed later.

> **Example:** Patient has a diagnostic ultrasound on February 1, 2021, that is highly suspicious for malignancy. On February 5, 2021, a biopsy is performed, and results show invasive ductal carcinoma. CCYY = 2021, MM = 02, DD = 01

- Backdating - If a non-diagnostic workup was performed on a patient but at a later date malignancy is confirmed and the physician specifically states that in retrospect the patient had cancer earlier, backdate the date of diagnosis to reflect the earlier date. This also includes pathology that may not have been diagnostic but upon further review of the specimen it is now thought to have been malignant. Refer to the list of "Ambiguous Terms" in Chapter 2 for terminology that constitutes a diagnosis of cancer.
- **Date of Diagnosis does not allow blanks STORE 2023 page 128**
  - **If the year of diagnosis cannot be identified, it must be approximated. In that instance, the month and date are unknown.**
  - **Blanks are not allowed.**
- If the cancer was first diagnosed at autopsy, (class of case 38), the date of diagnosis is the date of death.
- The date of the first cancer-directed treatment may be used for the date of diagnosis, if confirmation of disease occurs after therapy has begun, or if no other information is available.
- If only the time of year, (spring, summer, fall, or winter) is documented, use April, July, October, and either December (if end of year) or January (if beginning of year) respectively.

Estimating Date of Diagnosis

Date of Diagnosis is always required. If year of diagnosis is not known, it should be approximated for **all** cases as follows (and noted in a text field as estimated):

1) If you know there was treatment before the patient arrived at the hospital, try to determine whether that was "this year" or "last year", based on the current time of year and whether that treatment was likely days, weeks, or months ago.

Example: The patient was admitted for initial chemotherapy on January 2 after recovering from surgery. Enter the preceding year as the diagnosis date.

Code "a couple of years" to two years earlier

2) Code "a few years" to three years earlier

3) Code "several" to four years earlier

4) Use whatever information is available to calculate the year of diagnosis (i.e., "Patient was diagnosed 10 years ago…")

6) If **no information** about the date of diagnosis is available:

Analytic Cases

a. Use the date of admission as the date of diagnosis.

b. In the absence of an admission date, code the date of first treatment as the date of diagnosis

Non-analytic Cases

When **no information** is available to approximate a year of diagnosis for **non-analytic** cases, **approximate it to the best of your ability**. Please note in a text field that no information was available.

Date of Diagnosis Flag –Retired with 2023+ Cases

This flag explains why no appropriate value is in the field, Date of Diagnosis.

12	A proper value is applicable but not known. (e.g., date of diagnosis is unknown)
Blank	A valid date value is provided in item Date of Diagnosis

Diagnostic Confirmation

This item records the best method of diagnostic confirmation of the cancer being reported at any time during the course of disease. It is an indicator of the precision of diagnosis and marks whether or not the coded histologic type was microscopically confirmed.

Instructions for Coding Solid Tumors (all tumors *except* M9590-9992)

- 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. This data item must be changed to the lower code (higher priority) if a more definitive method confirms the diagnosis *at any time during* the course of the disease.

  Example: Patient is diagnosed on 2/10/2021, by CT scan with probable lung cancer with no further workup. Diagnostic confirmation is coded to radiology (7). Later in March of 2021, the patient undergoes a bronchoscopy in which biopsies confirm squamous cell carcinoma. The diagnostic confirmation code is changed to reflect the positive histology (1)

- Assign code 1 when the microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, autopsy, or D&C or from aspiration or biopsy of bone marrow specimens.
- Assign code 2 when the microscopic diagnosis is based on cytologic examination of *cells* such as sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears, or from paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid.
- Code 5 when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer.
- Code 6 when the diagnosis is based only on the surgeon's operative report from a surgical exploration or endoscopy or from gross autopsy findings in the absence of tissue or cytological findings.
- Assign code 8 when the case was diagnosed by any clinical method not mentioned in a preceding code.

Codes for Solid Tumors

Code	Label	Definition
1	Positive histology	Histologic confirmation (tissue microscopically examined)
2	Positive cytology	Cytologic confirmation (no tissue microscopically examined; fluid cells microscopically examined)
4	Positive microscopic confirmation, method not specified	Microscopic confirmation is all that is known. It is unknown if the cells were from histology or cytology
5	Positive laboratory test/marker study	A clinical diagnosis of cancer is based on laboratory tests/marker studies which are clinically diagnostic for cancer. Examples include alpha-fetoprotein for liver cancer. Elevated PSA is not diagnostic of cancer. If the physician uses the PSA as a basis for diagnosing prostate cancer with no other workup, record as code 5
6	Direct visualization without microscopic confirmation	The tumor was visualized during a surgical or endoscopic procedure only with no tissue resected for microscopic examination
7	Radiography and other imaging techniques without microscopic confirmation	The malignancy was reported by the physician from an imaging technique report only
8	Clinical diagnosis only, other than 5, 6 or 7	The malignancy was reported by the physician in the medical record
9	Unknown whether or not microscopically confirmed	A statement of malignancy was reported in the medical record, but there is no statement of how the cancer was diagnosed (usually nonanalytic)

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

- There is no priority hierarchy for coding *Diagnostic Confirmation* for hematopoietic and lymphoid tumors. Most commonly, the specific histologic type is diagnosed by immunophenotyping or genetic testing. See the *Hematopoietic Database (DB)* for information on the definitive diagnostic confirmation for specific types of tumors.
- Use code 1 when **ONLY** the tissue, bone marrow, or blood was used to diagnose the specific histology. Do **not** use code 1 if the provisional diagnosis was based on tissue, bone marrow, or blood **and** the immunophenotyping or genetic testing on that same tissue, bone marrow or blood identified the specific disease (see code 3)
- For leukemia only, code 1 when the diagnosis is based only on the complete blood count (CBC), white blood count (WBC) or peripheral blood smear. Do not use code 1 if the diagnosis was based on immunophenotyping or genetic testing using tissue, bone marrow, or blood.
- Use code 2 when the microscopic diagnosis is based on cytologic examination of *cells* (rather than tissue) including but not limited to spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears, or from paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid. These methods are rarely used for hematopoietic or lymphoid tumors.
- Assign code 3 when there is a histology positive for cancer AND positive immunophenotyping and/or positive genetic testing results. Do not use code 3 for neoplasms diagnosed prior to January 1,2010
- Assign code 5 when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer, but no positive histologic confirmation.
- Assign code 6 when the diagnosis is based only on the surgeon's report from a surgical exploration or endoscopy or from gross autopsy findings without tissue or cytological findings.
- Assign code 8 when the case was diagnosed by any clinical method not mentioned in a preceding code. A number of hematopoietic and lymphoid neoplasms are diagnosed by tests of exclusion where the tests for the disease are equivocal, and the physician makes a clinical diagnosis based on the information from the equivocal tests and the patient's clinical presentation.

Codes for Hematopoietic and Lymphoid Neoplasms

Code	Label	Definition
1	Positive histology	Histologic confirmation (tissue microscopically examined)
2	Positive cytology	Cytologic confirmation (no tissue microscopically examined; fluid cells microscopically examined)
3	Positive histology PLUS Positive immunophenotyping AND/OR Positive genetic studies	Histology is positive for cancer, and there are also positive immunophenotyping and/or genetic test results. For example, bone marrow examination is positive for acute myeloid leukemia (9861/3). Genetic testing shows AML with inv(16)(p13.1q22) (9871/3)
4	Positive microscopic confirmation, method not specified	Microscopic confirmation is all that is known. It is unknown if the cells were from histology or cytology
5	Positive laboratory test/marker study	A clinical diagnosis of cancer is based on laboratory tests/marker studies which are clinically diagnostic for cancer
6	Direct visualization without microscopic confirmation	The tumor was visualized during a surgical or endoscopic procedure only with no tissue resected for microscopic examination
7	Radiography and other imaging techniques without microscopic confirmation	The malignancy was reported by the physician from an imaging technique report only
8	Clinical diagnosis only, other than 5, 6 or 7	The malignancy was reported by the physician in the medical record
9	Unknown whether or not microscopically confirmed	A statement of malignancy was reported in the medical record, but there is no statement of how the cancer was diagnosed (usually nonanalytic)

Laterality

Laterality identifies the side of a paired organ or the side of the body on which the reportable tumor originated. This applies to the primary site only. Laterality supplements staging and extent of disease information and defines the number of primaries involved. This item is required for the sites listed below but can be used for sites not listed in the table.

Instructions for Coding

- Code laterality for all paired sites
- Do not code metastatic sites as bilateral involvement.
- Where the right and left sides of paired sites are contiguous (come into contact) and the lesion is at the point of contact of the right and left sides, use code 5, midline. Most paired sites cannot develop midline tumors (such as the breast) because the right and left organs do not touch. Skin of the trunk is an example of a site where midline coding is possible. Note that "midline of the right breast" is coded 1, (right; "midline" in this usage indicates the primary site is C50.8 (overlapping sites).
- Non-paired sites may be coded right or left, if appropriate. Otherwise, code non-paired sites 0.
- If both lungs have nodules or tumors and the lung of origin is not known, assign code 4.

Laterality Codes

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

Paired Organ Sites

ICD-O-3	Site	ICD-O-3	Site
C07.9	Parotid gland	C47.1	Peripheral nerves and autonomic nervous system of upper limb and shoulder
C08.0	Submandibular gland	C47.2	Peripheral nerves and autonomic nervous system of lower limb and shoulder
C08.1	Sublingual gland	C49.1	Connective, subcutaneous and other soft tissues of upper limb and shoulder
C09.0	Tonsillar fossa	C49.2	Connective, subcutaneous and other soft tissues of lower limb and hip
C09.1	Tonsillar pillar	C50.0-C50.9	Breast
C09.8	Overlapping lesion of tonsil	C56.9	Ovary
C09.9	Tonsil, NOS	C57.9	Fallopian tube
C30.0	Nasal cavity (excluding nasal cartilage and nasal septum)	C62.0-C62.9	Testis
C30.1	Middle ear	C63.0	Epididymis
C31.0	Maxillary sinus	C63.1	Spermatic cord
C31.2	Frontal sinus	C64.9	Kidney, NOS
C34.0	Main bronchus (excluding carina)	C65.9	Renal pelvis
C34.1-C34.9	Lung	C66.9	Ureter
C38.4	Pleura	C69.0-C69.9	Eye and lacrimal gland
C40.0	Long bones of upper limb and scapula	C70.0	Cerebral meninges. NOS*
C40.1	Short bones of upper limb	C71.0	Cerebrum*
C40.2	Long bones of lower limb	C71.1	Frontal lobe*
C40.3	Short bones of lower limb	C71.2	Temporal lobe*
C41.3	Rib and clavicle (excluding sternum)	C71.3	Parietal lobe*
C41.4	Pelvic bones (excluding sacrum, coccyx and symphysis pubis)	C71.4	Occipital lobe*
C44.1	Skin of eyelid	C72.2	Olfactory nerve*
C44.2	Skin of external ear	C72.3	Optic nerve*
C44.3	Skin of other/unspecified parts of face	C72.4	Acoustic nerve*
C44.5	Skin of trunk	C72.5	Cranial nerve*
C44.6	Skin of upper limb and shoulder	C74.0-C74.9	Adrenal gland
C44.7	Skin of lower limb and hip	C75.4	Carotid body

Chapter 8

STAGING SCHEMES

MCR's requirements for staging of cases has changed through the years according to NPCR requirements. In **2023** we will require the fields as stated on our website in the document MCR Required Data Elements **2023** **https://medicine.missouri.edu/centers-institutes-labs/cancer-registry-research-center/reporting/hospital**

In the recent past, we had required staging from all facility types as follows:

Staging System	Diagnosis years
SEER Summary Stage 2000	2001-2017
SEER Summary Stage 2018	2018-2019
SEER Summary Stage 2021	2021-forward
Collaborative Stage	2004-2015
CS Site Specific Factors	2004-2017
Site Specific Data Items	2019 and forward
AJCC 7th Edition Cancer Staging Manual	2015 (CoC accredited facilities only) 2016-2017 all facilities
AJCC 8th Edition Cancer Staging Manual	2019 forward (CoC accredited facilities only)

AJCC release three Version 9 protocols are effective with January 1, 2023, and forward cases. They include the Anus, Appendix and Brain and Spinal Cord. Medulloblastoma (09724) is a new schema added for 2023 cases. Additional histologies for behavior /3 are added for Brain, CNS other and Intracranial Gland.

Appendices to this manual discuss the use of previous systems.
Current fields are as follows:

SEER Summary Stage 2018

Summary Stage is the most basic way of categorizing how far a cancer has spread from its point of origin and provides central registries with the most consistent stage data for cancer surveillance over time. The **2018** version of Summary Stage applies to every site and/or histology combination, including lymphoma and leukemias. SEER Summary Stage **2018** is required for cases diagnosed **2018** and forward. The manual is accessed at: https://seer.cancer.gov/tools/ssm/

The General Coding Instructions provide important introductory material and are followed by site-specific chapters.

Steps/Resources to Use for Coding Summary Stage 2018

1. Review site-specific Coding Notes in SEER Summary Stage **2018** Manual or abstracting

software

2. Review General Instructions for using the Summary Stage **2018** ManualCheck SEER Inquiry Systems answers
3. Submit questions to Ask a SEER Registrar

A new Summary Stage 2018 chapter for Medulloblastoma is added for January 1, 2023, and forward cases.

Site Specific Data Items (SSDIs)

Site Specific Data Items (SSDI) are similar to the Site-Specific Factors (SSF) that were collected with Collaborative Stage. These data items are specific to certain site/histology combinations. The manual and schema look up lists are found at https://apps.naaccr.org/ssdi/list/

Please consult the manual for suggestions on how to use it. Careful review of the introduction will provide helpful information including timing rules and lab values. Information about the SSDI's has been organized using primary site groupings and presented in the order used in the AJCC Manuals.

Resources/Steps to Code SSDI

1. Review site -specific Coding Notes in
   - Abstracting Software
   - NAACCR Site Specific Data Items (SSDI) Manual
2. Review SSDI Manual
   - General Instructions
   - Review instructions for similar SSDI's (if applicable)
3. Review/submit question to CAnswer Forum

An important new concept introduced in 2018 is the use of a AJCC ID and Schema ID to define the applicable SSDIs and grade tables for a particular tumor, based on primary site, histology, and in some cases, additional information in the form of 1-2 schema discriminators. The appropriate AJCC and Schema ID will be calculated by registry software and will not have to be assigned by the registrar. Each SSDI has a data item name and can be collected for as many sites/chapters/schemas as needed.

MCR requires the following SSDIs for 2021 cases:

SSDI	Schemas
Brain Molecular Markers	**Brain, CNS other**
Estrogen Receptor Summary	Breast
Progesterone Receptor Summary	Breast
HER2 Overall Summary	Breast
Microsatellite Instability (MSI)	Colon & Rectum
Fibrosis Score	Liver
Breslow Tumor Thickness	Melanoma
LDH Lab Value	Melanoma, Plasma Cell Myeloma & Plasma Cell Disorders
PSA (Prostatic Specific Antigen) Lab Value	Prostate
Gleason Patterns Clinical	Prostate
Gleason Patterns Pathological	Prostate
Gleason Tertiary Pattern	Prostate

Gleason Score Clinical	Prostate
Gleason Score Pathological	Prostate
Esophagus and EGJ Tumor Epicenter	Esophagus
LN Status Pelvic	Cervix, Vulva, Vagina
LN Status Para-aortic	Cervix, Vulva, Vagina
LN Status Femoral-Inguinal	Cervix, Vulva, Vagina
P16	**Cervix, Anus, Vulva-2024 cases**
Histologic Subtype	**Appendix**
Clinical Margin Width	**Melanoma Skin**
SEER Site Specific Factor 1 – HPV status 2 digits	**Lip, Ant Tongue, Floor of mouth, Hard Palate, Buccal mucosa, mouth other, hypopharynx, Oropharynx**

New notes were added to SSDIs that instructs the abstractor to leave the SSDI blank for cases diagnosed between 2018 & 2020. New SSDIs are also identified by the statement "This SSDI is effective for diagnosis year 2021 and forward."

GYN Schema
Note 1: There must be a statement about FIGO stage from the managing physician in order to code this data item. DO NOT code FIGO based on path report or T, N, M.

Melanoma
Note 2: Record the lab value of the highest serum LDH test results documented before or after surgical resection of the primary tumor with or without regional lymph node dissection. LDH must be taken prior to systemic treatment or surgery to metastatic site. The lab value may be records in a lab report, history and physical or clinical statement in the path report.

Lymphovascular Invasion

This data item indicates the presence or absence of tumor cells in lymphatic channels (not lymph nodes) or blood vessels within the primary tumor as noted microscopically by the pathologist. Lymph-vascular Invasion (LVI) is an indicator of prognosis.

Instructions for Coding
See the most recent version of the STORE Manual for lengthy and important coding instructions.

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

Tumor Size Summary

Description
This data item records the most accurate measurement of a solid primary tumor, usually measured on the surgical resection specimen.

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

Codes: (See the most recent version of the STORE manual for important coding instructions.)

Code	Definition
00	No mass/tumor found
01	1mm or described as less than 1 mm
002-988	Exact size in millimeters (2mm-988mm)
989	989 millimeters or larger
990	Microscopic focus or foci only and no size of focus is given
998	SITE-SPECIFIC CODES Alternate descriptions of tumor size for specific sites: Familial/multiple polyposis: Rectosigmoid and rectum (C19.9, C20.9) Colon (C18.0, C18.2-C18.9) If no size is documented: Circumferential: Esophagus (C15.0-C15.5, C15.8-C15.9) Diffuse; widespread: 3/4s or more; linitis plastica: Stomach and Esophagus GE Junction (C16.0-C16.6, C16.8-C16.9) Diffuse, entire lung or NOS: Lung and main stem bronchus (C34.0-C34.3, C34.8-C34.9) Diffuse: Breast (C50.0-C50.6, C50.8-C50.9)
999	Unknown; size not stated; Not documented in patient record; Size of tumor cannot be assessed; Not applicable

Regional Nodes Positive

Record the exact number of regional lymph nodes (as defined by AJCC Cancer Staging Manual) examined by the pathologist and found to contain metastases. In 2016, use of CS was discontinued, however this data item continues to be required.

Regional Lymph Node Positive Codes
Refer to the STORE Manual for additional coding instructions.

Code	Description
00	All nodes examined are negative
01 – 89	1 to 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

Regional Nodes Examined

Record the total number of regional lymph nodes (as defined by AJCC Cancer Staging Manual) that were removed and examined by the pathologist. Refer to the STORE Manual for complete directions. In 2016, use of CS was discontinued, however this data item continues to be required.

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

Regional Lymph Nodes Examined Codes

Code	Description
00	No nodes were examined
01 – 89	1 to 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 or core biopsy 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

Surgical Diagnostic and Staging Procedure (RX Summ-DX/Stg Proc)

Identifies the positive surgical procedure(s) performed in an effort to diagnose and/or stage disease. This data item is used to track the use of surgical procedure resources that are not considered treatment.

Instructions for Coding:

- Record the type of procedure performed as part of the initial diagnosis and workup, whether this is done at your institution or another facility,
- Only record positive procedures. For benign and borderline reportable tumors, report biopsies positive for those conditions. For malignant tumors, report procedures if they were positive for malignancy,
- If both an incisional biopsy of the primary site and an incisional biopsy of a metastatic site are done, use code 02 (Incisional biopsy of primary site)
- If a lymph node is biopsied or removed to diagnose or stage *lymphoma*, and that node is NOT the only node involved with lymphoma, use code 02. If there is only a single lymph node involved with lymphoma, use the data item *Surgical Procedure of Primary Site* to code these procedures,
- Do not code surgical procedures which aspirate, biopsy, or remove *regional lymph nodes* in an effort to diagnose and/or stage disease in this data item. Use the data item *Scope of Regional Lymph Node Surgery* to code these procedures. Do not record the date of surgical procedures which aspirate, biopsy, or remove regional lymph nodes in the data item *Date of Surgical Diagnostic and Staging*

Procedure. See instructions for *Scope of Regional Lymph Node Surgery*

- Code brushings, washings and cell aspiration, as positive cytologic diagnostic confirmation in the data item *Diagnostic Confirmation*. These are not considered surgical procedures and should not be coded in this item,
- Do not code excisional biopsies with clear or microscopic margins in this data item. Use the data item *Surgical Procedure of Primary Site* to code these procedures,
- If a needle biopsy precedes an excisional biopsy or more extensive surgery and upon the excisional biopsy or more extensive surgery no tumor remains, do not consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure data item. The excisional biopsy or more extensive surgery should be recorded in the Surgical Procedure of the Primary Site data item,
- Do not code palliative surgical procedures in this data item. Use the data item *Palliative Procedure* to code these procedures

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

Date of Surgical, Diagnostic and Staging Procedure (Rx Date—Dx/Stg/Proc)

This data item records the date on which the surgical diagnostic and/or staging procedure was performed and is used to track the use of surgical procedure resources that are not considered treatment.

Coding Instructions:

- Record the date on which the surgical diagnostic and/or staging procedure described in *Surgical Diagnostic and Staging Procedure* was performed at this or any facility,
- Record the date as completely as possible. Leave any unknown portions of the date blank,
- **Example:** The patient came to your facility for chemotherapy in March of 2021 after having had exploratory lap with biopsy in February of 2021, exact day unknown. CCYY = 2021, MM = 02, DD = blank
- If information for this item is entirely unknown or not applicable, leave the field blank

Rx Date – Dx/Stg Proc Flag – Retired for 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date of Surgical Diagnostic and Staging Procedure*. Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Code	Definition
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any treatment was given)
11	No proper value is applicable in this context (for example, autopsy only)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (for example, treatment was given but date is unknown)
(blank)	A valid date value is provided in item

Chapter 9

TUMOR-DIRECTED TREATMENT

Record all cancer-directed therapy information available whether administered at the reporting hospital or at another facility. If the patient receives part of the first course of therapy at the reporting hospital and is transferred to another facility to continue treatment, also record the treatment given at the other hospital, if it is known. Documenting all treatments in the given Rx Summ fields provides a complete "picture" of the patient's cancer experience and is meaningful in calculating survival statistics and assessing treatment success. Subsequent courses of treatment should only be mentioned in text fields. For non-analytic cases (class 32), treatment given at your facility will only be recorded in text fields.

Date of 1st Course of Treatment (Date of 1st Crs Rx-CoC)

Record the earliest date on which treatment for the reported cancer began, including active surveillance only, or the date the decision was made not to treat (watchful waiting or refusal by patient).

Instructions for Coding

- Record the date as completely as possible. Leave any unknown portions of the date blank
  Example: The patient came to your facility for chemotherapy in March of 2021 after having had surgery in February of 2021, exact day unknown. CCYY = 2021, MM = 02, DD = blank
  Example: When the diagnosis date is 2/1/21, it is known that treatment was given, and date of death or last contact is in 2021, then the date of first course treatment can at least be entered as 2021
- Leave this item blank if the cancer was diagnosed at autopsy and not suspected prior to that.
- If the patient expired before planned treatment could begin, enter the date of death.

Date of 1st Course RX Flag – Retired for 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date of First Course of Treatment*. As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Coding Instructions

- Leave this item blank if *Date of First Course of Treatment* has a full or partial date recorded.
- Code 12 if the *Date of First Course of Treatment* cannot be determined at all, but the patient did receive first course treatment, if a decision not to treat was made but date is 'totally unknown', or if a decision for active surveillance was made but date is totally unknown.
- Code 10 if it is unknown whether any treatment was administered.
- Code 11 if the initial diagnosis was at autopsy.
- Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Code	Definition
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any diagnostic or staging procedure performed)
11	No proper value is applicable in this context (for example, no diagnostic or staging procedure performed, autopsy only case)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (for example, diagnostic or staging procedure performed but date is unknown)
(blank)	A valid date value is provided in item *Date of First Course of Treatment.*

Rx Summ – Treatment Status

This data item summarizes whether the patient received any treatment, including watchful waiting. This item was added to document active surveillance and eliminate searching each treatment modality in order to determine whether any treatment was given. It is used in conjunction with *Date of First Course of Treatment* to document whether treatment was or was not given, whether it is unknown if treatment was given, or whether treatment was given on an unknown date.

Instructions for Coding

- This item may be left blank for cases diagnosed prior to 2010.
- Treatment given after a period of active surveillance is considered subsequent treatment and it not coded in this item.
- Use code 0 when treatment is refused or the physician decides not to treat for any reason, including comorbidities.
- **Use code 1 when the patient receives treatment collected from Surgery Primary Site, Surgical Procedure of Other Site, Radiation Treatment Modality, Chemotherapy, Hormone Therapy, Immunotherapy, Hematologic Transplant and Endocrine Procedures or Other Therapy.**

Code	Definition
0	No treatment given
1	Treatment given
2	Active surveillance (watchful waiting)
9	Unknown if treatment was given

Examples:

Code	Reason
0	An elderly patient with pancreatic cancer requested no treatment
0	Patient is expected to receive radiation, but it has not occurred yet (*Reason for No Radiation* [NAACCR Item #1430] = 8)
2	Treatment plan for a lymphoma patient is active surveillance

Surgery of Primary Site (RX Summ—Surg Prim Site) Changing to *RX Summ—Surg Prim Site 2023* for 2023+ Cases

(RX Summ—Surg Prim Site) should be left blank for cases diagnosed January 1, 2023, for forward.

This data item records the surgical procedure(s) performed to the primary site and can be used to compare the efficacy of treatment options.

Instructions for Coding

- Site-specific surgical codes for this data item are found in Appendix A.
  - All surgery codes begin with the letter A except for skin.
  - Skin surgery codes begin with the letter B to indicate a significant change in coding.
- For diagnosis year 2023 and forward, this data item must be completed.
- For diagnosis years 2003 – 2022, this data item should be left blank.
  - Complete data item Surgical Procedure of Primary Site at this Facility [NAACCR #670] utilizing the STORE manual that is applicable for the date of diagnosis.
- If registry software allows only one procedure to be collected, document the most invasive surgical procedure for the primary site.
- If registry software allows multiple procedures to be recorded, this item refers to the most invasive surgical procedure for the primary site.
- For codes A000 through A790, the response positions are hierarchical. Last-listed responses take precedence over responses written above.
- Use codes A800 and A900 only if more precise information about the surgery is not available.
- Code A980 for any case coded to primary site C420, C421, C423, C424, C760-C768, C809
- Excisional biopsies (those that remove the entire tumor and/or leave only microscopic margins) are to be coded in this item.
- If a needle biopsy precedes an excisional biopsy or more extensive surgery, and upon the excisional biopsy or more extensive surgery the surgical margins are clear (i.e., no tumor remains), DO NOT consider the needle biopsy to be an excisional biopsy. The needle biopsy should be recorded as such in the Surgical Diagnostic and Staging Procedure [1350] and the excisional biopsy or more extensive surgery in the RX Summ-Surg 2023 [1291].
- Surgery to remove regional tissue or organs is coded in this item only if the

tissue/organs are removed in continuity with the primary site.

- If a previous surgical procedure to remove a portion of the primary site is followed by surgery to remove the remainder of the primary site, then code the total or final results. Do not rely on registry software to perform this task for you.
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item Palliative Care at This Facility [3280].
- For cases diagnosed prior to January 1, 2023, this data item should be blank.
- For any site other than C420, C421, C423, C424, C760-768, C809, this data item can be blank.
- Clinical Margin Width [3961] collected in the Site-Specific Data Item following SEER coding rules and instructions.
- For melanoma skin surgical codes ONLY:
    - The priority order for sources used to assign surgery codes:
        - Operative report, statement from a physician, description of the surgical procedure on a pathology report, results of the pathology report. Code based on the description of the procedure. •
        - Do not code base on margin status documented in the pathology report

Surgical Procedure of Primary Site—General Codes are completely different STORE 2023 page 216

Code	Label	Definition
A000	None	No surgical procedure of primary site. Diagnosed at autopsy.
A100–A190	Site-specific codes; tumor destruction	Tumor destruction, no pathologic specimen produced. Refer to Appendix A for the correct site-specific code for the procedure.
A200–A800	Site-specific codes; resection	Refer to Appendix A for the correct site-specific code for the procedure.
A900	Surgery, NOS	A surgical procedure to primary site was done, but no information on the type of surgical procedure is provided.
A980	Site-specific codes; special	Special code. Refer to Appendix A for the correct site-specific code for the procedure. Code A980 for the following sites/schema unless the case is death certificate only: Any case coded to primary site C420, C421, C423, C424, C760-C768, C809 When Surgery of Primary Site is coded A980 1. Code Surgical Margins of the Primary Site (#1320) to 9 2. Code Reason for No Surgery of Primary Site (#1340) to 1
A990	Unknown	Patient record does not state whether a surgical procedure of the primary site was performed, and no information is available. Death certificate only.

New Surgery Code Format and Melanoma Surgery Codes 2023+ Diagnosis

The code format is different as all codes start with an alpha character and end with zero. There was little or no changes to code definitions for most sites. All 2023 site specific surgery codes begin with a letter A except for skin which starts with a letter B to indicate a significant change in coding.

Instructions for Coding

- **For diagnosis years 2003-2022, leave this data item blank.**
- **Melanoma surgery codes begin with B to indicate a major change. Assume procedure is "Excisional" and code using surgery codes unless procedure is a needle or core biopsy.**
- **Margins are not a factor in melanoma surgery code assignment.**
- **Do not code melanoma margin status based on the pathology report.**

Codes and Definitions

Code	Label
B000	None, no surgery of primary site; autopsy only
B100	Local tumor destruction, NOS
B110	Photodynamic therapy (PDT)
B120	Electrocautery; fulguration (includes use of hot forceps)
B130	Cryosurgey
B140	Laser
B200	Local tumor excision, NOS; Excisional biopsy, NOS
B220	Shave Biopsy, NOS
B230	Punch Biopsy, NOS
B240	Elliptical Biopsy (aka Fusiform)
B300	Mohs Surgery, NOS
B310	Mohs surgery performed on same day (all Mohs procedures performed)
B320	Mohs surgery performed on different days (slow or each Mohs performed on different day)
B500	Biopsy (NOS) of primary tumor followed by wide excision of lesion; Wide Excision
B510	Incisional Biopsy followed by wide excision
B520	Shave Biopsy followed by wide excision
B530	Punch Biopsy followed by wide excision
B540	Elliptical Biopsy (aka Fusiform) followed by wide excision

Note: An incisional biopsy would be a needle core biopsy of the primary tumor and coded as a Diagnostic Staging Procedure (Store 2023, page 370)

RX Hosp-Surg Breast and RX Summ-Surg Breast

These data items are required for breast cases diagnosed in 2022 and 2023 [Item#10104 and 10105]. These data items support Synoptic Operative Reports and can be used to compare the efficacy of treatment options.

Instructions for Coding

- Review the operative report/procedure note to code the appropriate surgical code.
- Code the surgical resection code for Breast primaries performed at any facility with a diagnosis date of 1/1/2022-12/31/2023.
- Code the most definitive surgical procedure for the primary site at any facility.
- Reconstruction performed immediately after surgical resection at any facility (codes B200-B900) should be coded in the Rx Hosp-Recon Breast site specific data item [item#10106]
- Code B200 to B760 in the order of hierarchy, the response positions are hierarchical. Last-listed responses take precedence over responses written previously.
- Use codes B800 and B900 only if more precise information about the surgery performed is not available.
- Excisional biopsies are to be coded using code 210 if the ENTIRE tumor is removed and/or only microscopic margins remain.
- Surgery to remove regional tissue or organs is coded in this item if only removed in continuity with the primary site.
- If contralateral breast reveals a second primary, each breast is abstracted separately.
- Leave this data item blank for breast cases diagnosed in any year prior to 2022 and in coding all other sites.

Codes and Code Definitions

Code	Label
B000	None: no surgery of primary site; autopsy only
B200	Partial Mastectomy; less than total mastectomy, Lumpectomy, segmental mastectomy, quadrantectomy, tylectomy, with or without nipple resection
B210	Excisional breast biopsy – Diagnostic excision, no pre-operative biopsy proven diagnosis of cancer

Note: An excisional biopsy can occur then the nodule was previously not expected to be cancer.

Example: Use code B210 when a surgeon removed the mass, and it comes back cancer and there is no biopsy done prior to mass being removed.

B215	Excisional breast biopsy, for atypia

Note: An excisional breast biopsy removed the entire tumor and/or only microscopic positive margins remain. This surgery code was added to collect code when atypic tissue is excised and found to the reportable. Approximately 10-15% of excised atypia are found to be cancer and reportable.

B240	Re-excision of margins from primary tumor site for gross or microscopic residual disease when less than total mastectomy is performed.

Note: A central lumpectomy removed the nipple areolar complex, a lumpectomy does not. Central lumpectomy, central portion lumpectomy, central portion excision and central partial mastectomy are all interchangeable terms.

Example: Use code B290 when the nipple areolar complex needs to be removed in cases of Paget's disease or cancer directly involving the nipple areolar complex.

B300	Skin-sparing mastectomy

B310	WITHOUT removal of uninvolved contralateral breast
B320	WITH removal of uninvolved contralateral breast

Note: A skin sparing mastectomy removed all breast tissue and the nipple areolar complex and preserves native breast skin. It is performed with and without sentinel node biopsy or ALND.

B400	Nipple-sparing mastectomy
B410	WITHOUT removal of uninvolved contralateral breast
B420	WITH removal of uninvolved contralateral breast

Note: A nipple sparing mastectomy removed all breast tissue but preserves the nipple areolar complex and breast skin and is performed with immediate reconstruction. It can be performed with or without sentinel node biopsy or ALND.

B500	Areolar-sparing mastectomy
B510	WITHOUT removal of uninvolved contralateral breast

Note: An areolar sparing mastectomy removes all breast tissue and the nipple but preserves the areola and breast skin. It is performed with immediate reconstruction and can be performed with or without Sentinel node biopsy or ALND.

B600	Total Simple Mastectomy
B610	WITHOUT removal of uninvolved contralateral breast
B620	WITH removal of uninvolved contralateral breast

Note: A total (simple) mastectomy removes all breast tissue, the nipple areolar complex and breast skin. It is not performed with reconstruction. It can be performed with or without sentinel node biopsy or ALND.

B700	Radical mastectomy, NOS
B710	WITHOUT removal of uninvolved contralateral breast
B720	WITH removal of uninvolved contralateral breast

Note: A radical mastectomy removed all breast issue, nipple areolar complex breast skin and pectoralis muscle. It is not performed with reconstruction. It is performed with level I-III ALND.

B760	Bilateral mastectomy for a single tumor involving both breasts as for bilateral inflammatory carcinoma
B800	Mastectomy, NOS (including extended radical mastectomy)
B900	Surgery, NOS
B990	Unknown if surgery was performed; death certificate only

RX Hosp-Recon Breast and Rx Summ-Recon Breast

These data items are required for breast cases diagnosed in 2022 and 2023 only. These data items support Synoptic Operative Reports and allow for more descriptive reconstruction codes **[Items#671 and 1291].**

Instructions for Coding

- Review the operative report or procedure note to code the appropriate surgical code.

- Code the surgical resection code for breast primaries performed at this facility with diagnosis date between 1/1/2022-12/31/2023.
- Code only the ipsilateral breast reconstruction.
- **Immediate reconstruction is defined as reconstruction performed on the same day as the operative procedure code in Data items RX Hosp-Surg 2023 [Item#671].**
- **Immediate reconstruction is defined as reconstruction performed during the same operative session as the operative procedures coded in Data Rx Summ-Surg 2023 [Item#1291] and/or Rx Hosp – Surg 2023 [Item#671].**
- One surgeon can perform the surgical resection, and another can perform the reconstruction on the *same* day. An immediate reconstruction code should be assigned if the reconstruction performed on the *same* day.
- **If reconstruction was started but not completed assign code A000.**
- **Use code A300 when patient has reconstruction performed with parenchymal flap or adjacent tissue transfer.**
- Reconstruction performed on a *different* day than the breast primary is not collected or coded.
- Information for codes A600-A900 may be found in the Breast Plastic Reconstructive operative report.
- Oncoplastic surgery is rebuilding the breast tissue after breast cancer resection and is a way to reconstruct and reshape the breast after lumpectomy or mastectomy.
- Oncoplastic surgery, breast tissue rearrangement, mastopexy, batwing mastopexy, crescent mastopexy, donut mastopexy, mammaplasty, and breast reduction are interchangeable terms.
- Direct implant placement is found in the operative report. The surgeon places an implant and *does not* state tissue expander placement.
- Leave this data item blank if primary site is not breast or breast primary not diagnosed in 2022.

Code	Label
A000	No reconstruction

Note 1: Code A000 when no immediate reconstruction was performed.

A100	Tissue expander placement

Note 2: Code A100 when tissue expanders were placed without implant or tissue placement.

A200	Direct implant placement

Note 3: Code A200 when a permanent implant is placed immediately following resection.

A300	Oncoplastic tissue rearrangement (not formal mastopexy or reduction)
A400	Oncoplastic reduction and/or mastopexy

Note 4: Code A400 when patient has a breast conserving resection and a breast reduction/lift.

A500	Oncoplastic reconstruction with regional tissue flaps

Note 5: Code A500 when patent has breast conserving resection and reconstruction performed with skin flaps.

A600	Mastectomy reconstruction with autologous tissue, source not specified
A610	WITH abdominal tissue
A620	WITH thigh tissue
A630	WITH gluteal tissue

A640	WITH back tissue

Note 6: Code A600 when patient's autologous tissue source is unknown or not specified.

A900	Reconstruction performed; method unknown

Note 7: Code A900 when reconstruction is done, but the type of reconstruction is unknown.

A970	Implant based reconstruction, NOS
A980	Autologous tissue-based reconstruction, NOS
A990	Unknown if reconstruction performed

Note 8: Code A990 when it is unknown if immediate reconstruction was performed.

Macroscopic Evaluation of the Mesorectum

This data item records whether a Total Mesorectal Excision (TME) was performed and the macroscopic evaluation of the completeness of the excision. Collect on all cases regardless of date of diagnosis. Numerous studies have demonstrated that total mesorectal excision (TME) improves local recurrence rates and corresponding survival up to 20%. Macroscopic pathologic assessment of the completeness of the mesorectum, scored as complete, partially complete or incomplete accurately predicts both local recurrence and distant metastasis.

Instructions for Coding

- The American Society of Colon and Rectal Surgeons states that total mesorectal excision is used for curative resection of tumors of the middle and lower thirds of the rectum, either as part of low anterior or abdomino-perineal resection. A tumor specific mesorectal excision should be used for tumors in the upper third of the rectum with the mesorectum divided ideally no less than 5 cm below the lower margin of the tumor. Path evaluation of the resected specimen has been shown to be a sensitive method of assessing the quality of rectal surgery.
- Information for this item from the pathology report.
- Leave this field blank if primary site is other than C20.9
- Neoadjuvant therapy does not alter coding of this data item.
- Code 00 if patient did not have Total Mesorectal Excision.
- Codes 10,20 and 30 must be based on the pathology report.
- If the pathologist does not indicate incomplete, nearly complete, or complete for the TME specimen, assign code 40.

Code	Label
00	Patient did not receive TME
10	Incomplete TME
20	Nearly Complete
30	Complete TME
40	TME performed not specified on path report as incomplete, Nearly complete, or complete TME performed by path report not available Physician statement that TME performed, no mention of incomplete, nearly complete, or complete status
99	UNKNOWN if TME performed
Blank	Site not rectum (C20.9)

Site-Specific Surgery codes for Colon, Rectosigmoid, Rectum and Anus

The following surgery codes have been removed from the Colon (C18.0-C18.90, Rectosigmoid (C19.9, Rectum (C20.9) and Anus (C21.0-C21.8) as they are obsolete treatments for these primary sites:

- 11 and 21 Photodynamic therapy (PDT)
- 13 and 23 Cryosurgery
- 14 and 24 Laser Ablation
- 25 Laser Excision

The word WEDGE was removed from the Rectum and Rectosigmoid surgical code 30. MILES PROCEDURE was removed from the Rectum and Anus surgical codes 50 and 60. The word TOTAL MESORECTAL EXCISION (TME) was removed from the Rectum surgical code 30.

Site-Specific Surgery Codes for 2024+

Do not reassign codes previously coded for diagnosis years 2022 and prior for data items #670 and 1290.

For diagnosis years 2003-2022, Surgical Procedure of Primary Site at this facility [Item#] and Surgical Procedure [Item#1290] should be coded according to the STORE manual based on year of diagnosis.

All 2024 site specific surgery codes begin with the letter A except for the primary sites listed below which start with the letter B which indicates a significant change in coding. The year following the primary site is the year of the change was implemented for that specific primary site.

- **C44.0-C44.9 Skin (2023)**
- **C18.0-C18.9 Colon (2024)**
- **C25.0-C25.9 Pancreas (2024)**
- **C34.0-C34.9 Lung (2024)**
- **C75.9 Thyroid (2024)**
- **C50.0C50.9 Breast (2024)**

Date of First Surgical Procedure (Rx Date-Surgery)

This data item records the earliest date on which any first course surgical procedure was performed and can be used to sequence multiple treatment modalities and to evaluate the time intervals between treatments.

Instructions for Coding

- Record the date of the first surgical procedure of the types coded as Surgical Procedure of

Primary Site, Scope of Regional Lymph Node Surgery **(excluding code 1**) or Surgical Procedure/Other Site performed **at this or any facility**

- A needle biopsy is **not** considered to be an excision and therefore **not** a primary breast surgery. The date it was performed is **not** entered as the *Date of First Surgical Procedure*. It is now only entered in *Date of Surgical, Diagnostic and Staging Procedure*
- If a biopsy of the primary site (excluding needle biopsy) is the initial surgical procedure and leaves only microscopic residual tumor, code the date of the biopsy in this field

Example:
An excisional biopsy of a right forearm lesion done on 4/15/18 showed a Clark II melanoma extending to the deep margin. Re-excision on 4/22/18 did not show any residual tumor. Code the *Date of First Surgical Procedure* as 4/15/18

Rx Date – Surgery Flag – Retired with 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date of First Surgical Procedure*. Registrars should enter this data item directly (when appropriate) even ifthe traditional form of date entry is used in the software.

Rx Date-Surgery Flag codes

Code	Definition
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any surgery performed)
11	No proper value is applicable in this context (for example, no surgery performed)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, surgery was performed but the date is unknown)
(blank)	A valid date value is provided in item

Date of Most Definitive Surgery (RX Date – MstDefn Srg)

This field records the date of the most definitive surgical procedure of the primary site performed as part of first course of treatment. Record the date on which the surgery described by Surgical Procedure of Primary Site was performed at this or any facility.

RX Hosp—Surg Prim Site 2023 will replace RX Hosp—Surg Prim Site 03-2022 beginning with cases diagnosed January 1, 2023, and forward. RX Summ—Hosp Surg Prim Site 03-2022 should be left blank after the date above.

RX Date – Most Definitive Surgery Flag (RX Date – Mst Defn Srg Flag) – Retired for 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field Date of Most Definitive Surgery.

Rx Date– Most Definitive Surgery Flag codes

Code	Definition
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any surgery performed)
11	No proper value is applicable in this context (for example, no surgery performed)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, surgery was performed but the date is unknown)
(blank)	A valid date value is provided in item

Reason for No Surgery of Primary Site (Reason for No Surgery)

This field records the reason that no surgery was performed on the primary site. This data item provides information related to the quality of care and describes why primary site surgery was not performed.

Instructions for Coding

- If *Surgical Procedure of Primary Site* is coded 00, then record the reason based on documentation in the patient record.
- Code 1 if the treatment plan offered multiple alternative treatment options and the patient selected treatment that did not include surgery of the primary site, or if the option of "no treatment" was accepted by the patient.
- Code 1 if *Surgical Procedure of Primary Site* is coded 98.
- **Code 1 if primary site is coded to sites C42.0, C42.1, C42.3, C42.4, C76.0-C76.8, C80.9**
- Code 7 if the patient refused recommended surgical treatment, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 8 if it is known that a physician recommended primary site surgery, but no further documentation is available yet to determine whether surgery was performed.
- Cases coded 8 can be followed and updated to a more definitive code as appropriate.
- Code 9 if the treatment plan offered multiple choices, but it is unknown which treatment, if any was provided.

Reason No Surgery Codes

Code	Definition
0	Surgery of the primary site was performed
1	Surgery of the primary site was not performed because it was not part of the planned first course treatment. Diagnosed at autopsy
2	Surgery of the primary site was not recommended/performed because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned surgery etc.)
5	Surgery of the primary site was not performed because the patient died prior to planned or recommended surgery
6	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was not performed as part of the first course of therapy. No reason was noted in patient record
7	Surgery of the primary site was not performed; it was recommended by the patient's physician, but this treatment was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in patient record

8	Surgery of the primary site was recommended, but it is unknown if it was performed. Further follow-up is recommended
9	It is unknown whether surgery of the primary site was recommended or performed. Death certificate onl

Examples:

Code	Reason
2	A patient with a primary tumor of the liver is not recommended for surgery due to advanced cirrhosis
8	A patient is referred to another facility for recommended surgical resection of a gastric carcinoma, but further information from the facility to which the patient was referred is not available

Surgical Margins of the Primary Site (RX Summ – Surgical Margins)

This data item records the final status of the surgical margins after resection of the primary tumor. It serves as a quality measure for pathology reports, is used for staging, and may be a prognostic factor in recurrence.

Instructions for Coding

- Record the margin status as it appears in the pathology report
- Codes 0–3 are hierarchical; if two codes describe the margin status, use the numerically higher code
- Code 7 if the pathology report indicates the margins could not be determined. If no surgery of the primary site was performed, code 8
- Code 9 if the pathology report makes no mention of margins or no tissue was sent to pathology **or any case coded to primary site C420, C421, C423, C424, C760-C768, C770-C779, C809**

Code	Label	Definition
0	No residual tumor	All margins are grossly and microscopically negative
1	Residual tumor, NOS	Involvement is indicated, but not otherwise specified
2	Microscopic residual tumor	Cannot be seen by the naked eye
3	Macroscopic residual tumor	Gross tumor of the primary site which is visible to the naked eye
7	Margins not evaluable	Cannot be assessed (indeterminate)
8	No primary site surgery	No surgical procedure of the primary site. Diagnosed at autopsy
9	Unknown or not applicable	It is unknown whether a surgical procedure to the primary site was performed; death certificate-only; for lymphomas with a lymph node primary site; an unknown or ill-defined primary; or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease

Example:

Code	Reason
3	**C18-Colon** The pathology report from a colon resection describes the proximal margin as grossly involved with tumor (code 3) and the distal margin as microscopically involved (code 2). Code macroscopic involvement (code 3)

Systemic/Surgery Sequence (RX Summ-System/Sur Seq)

Record the sequence of systemic therapy (Chemotherapy, Hormone, BRM and Transplant/Endocrine) and surgical procedures given as part of the first course of treatment. Use the following codes in addition to valid dates. **For the purpose of coding the data item systemic therapy sequence with Surgery, "Surgery" is defined as a Surgical Procedure of Primary Site (codes 10-90) or Scope of Regional Lymph Node Surgery (codes 2-7)or Surgical Procedure of Other Site (codes 1-5).**

Code	Definition
0	No systemic therapy and/or surgical procedures
2	Systemic therapy before surgery
3	Systemic therapy after surgery
4	Systemic therapy both before and after surgery (at least 1 course before and at least one after surgery)
5	Intraoperative systemic therapy
6	Intraoperative systemic therapy with other therapy administered before and/or after surgery
7	Systemic therapy both before and after surgery (administered between two separate surgical procedures)
9	Sequence unknown (both systemic therapy and surgery treatment given)

Note: If multiple first course treatment episodes were given such that both codes 4 and 7 seem to apply, use the code that defines the first sequence that applies.

Scope of Regional Lymph Node Surgery (Rx Summ—Scope Reg LN Surg)

This field identifies the removal, biopsy, or aspiration of regional lymph node(s) at the time of surgery of the primary site or during a separate surgical event. This data item can be used to compare and evaluate the extent of surgical treatment.

Instructions for Coding

- The scope of regional lymph node surgery is collected for each surgical event even if surgery of the primary site was not performed.
- Record surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose or stage disease in this data item. Record the date of this surgical procedure in data item *Date of First Course of Treatment* and/or *Date of First Surgical Procedure* as appropriate.
- Codes 0–7 are hierarchical. If only one procedure can be recorded, code the procedure that is numerically higher and records the cumulative effect of all procedures.
- For intracranial and central nervous system primaries (C70.0–C70.9, C71.0–C71.9, C72.0–C72.9, C75.1–C75.3), code 9
- For lymphomas (M-9590-9726, 9728-9732, 9734-9740, 9750-9762, 9811-9831, 9940, 9948 and 9971) with a lymph node primary site (C77.0–C77.9), code 9
- For an unknown or ill-defined primary site (C76.0–C76.8, C80.9) or for hematopoietic, reticuloendothelial, immunoproliferative, myeloproliferative disease or **Plasmacytoma bone** (C42.0, C42.1, C42.3, C42.4 or M-9727, **9731**, 9733, 9741-9742, 9764-9809, 9832, 9840-9931, 9945-9946, 9950-9967, and9975-9992), code 9
- **For Plasmacytoma, bone 9731/3, code 9.**

- Do not code *distant* lymph nodes removed during surgery to the primary site for this data item. Distant nodes are coded in the data field *Surgical Procedure/Other Site*
- Refer to the current *AJCC Cancer Staging Manual* for site-specific identification of regional lymph nodes
- If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care*

Code	MCR status*
0	None
1	Biopsy or aspiration of regional lymph node, NOS
2	Sentinel lymph node biopsy
3	Number of regional nodes removed unknown or not stated; regional lymph nodes removed, NOS
4	1–3 regional lymph nodes removed
5	4 or more regional lymph nodes removed
6	Sentinel node biopsy and code 3, 4, or 5 at same time, or timing not stated
7	Sentinel node biopsy and code 3, 4, or 5 at different times
9	Unknown or not applicable

For specific definitions and examples, see STORE pages 233-244

Note: One important use of registry data is the tracking of treatment patterns over time. In order to compare contemporary treatment with previously published treatment based on former codes, or to data unmodified from pre-1998 definitions, the ability to differentiate surgeries in which four or more regional lymph nodes are removed is desirable. However, it is *very important* to note that the distinction between codes 4 and 5 is made to permit comparison of current surgical procedures with procedures coded in the past when the removal of fewer than 4 lymph nodes was not reflected in surgery codes. *It is not intended to reflect clinical significance* when applied to a particular surgical procedure. It is important to *avoid inferring, by data presentation or other methods, that one category is preferable to another within the intent of these items*.

Examples

Code	Reason
0	There was an attempt at regional lymph node dissection or sentinel lymph node dissection, but no lymph nodes were found in the pathological specimen
1	**(C14.0-Pharynx)** Aspiration of regional lymph node to confirm histology of widely metastatic disease
2	**(C44.5-Skin of Back)** Patient has melanoma of the back. A sentinel lymph node dissection was done with the removal of one lymph node. This node was negative for disease
3	**(C61.9-Prostate**) Bilateral pelvic lymph node dissection for prostate cancer
6	**(C50.3-Breast)** Sentinel lymph node biopsy of right axilla, followed by right axillary lymph node dissection during the same surgical event
9	**(C34.9-Lung)** Patient was admitted for radiation therapy following surgery for lung cancer. There is no documentation on the extent of surgery in patient record

Surgical Procedure/Other Site (RX Summ – Surg Other Reg/Dis)

Records the surgical removal of *distant lymph nodes* or other tissue(s) or organ(s) removed beyond the primary site. The removal of non-primary tissue documents the extent of surgical treatment and is useful in evaluating the extent of metastatic involvement.

Instructions for Coding

- Assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code, including the cumulative effect if there are multiple such surgeries.
- If other tissue or organs are removed during primary site surgery that are not specifically defined by the site-specific *Surgical Procedure of the Primary Site* code, assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code.
- Assign the highest numbered code that describes the surgical resection of *distant lymph node(s)*
- Incidental removal of tissue or organs is not a "Surgical Procedure/Other Site."
- *Surgical Procedure/Other Site* is collected for each surgical event even if surgery of the primary site was not performed.
- Code 1 for any case coded to primary site C42.0, C42.1, C42.3, C42.4, **C76.0-C76.8, C77.0-C77.9, C80.9**

Code	Label	Definition
0	None	No surgical procedure of nonprimary site was performed. Diagnosed at autopsy
1	Nonprimary surgical procedure performed	Nonprimary surgical resection to other site(s), unknown whether the site(s) is regional or distant
2	Nonprimary surgical procedure to other regional sites	Resection of regional site
3	Nonprimary surgical procedure to *distant lymph node(s)*	Resection of *distant lymph node(s)*
4	Nonprimary surgical procedure to distant site	Resection of distant site

5	Combination of codes	Any combination of surgical procedures 2, 3, or 4
9	Unknown	It is unknown whether any surgical procedure of a non-primary site was performed. Death certificate only

Date Radiation Started (RX Date - Radiation)

This field records the date on which radiation therapy began at any facility that is part of the first course of treatment. It is important to be able to sequence the use of multiple treatment modalities and to evaluate the time intervals between the treatments. For some diseases, the sequence of radiation and surgical therapy is important when determining the analytic utility of pathologic staging formation.

Instructions for Coding

- If radiation therapy is the first or only treatment administered to the patient, then the date radiation started should be the same as the date entered into the item *Date of First Course of Treatment*.
- The date when treatment started will typically be found in the radiation oncologist's summary letter for the first course of treatment.
- Record the date as completely as possible. Leave any unknown portions of the date blank.
  Example: The patient came to your facility for chemotherapy in March of 2021 after having had surgery in February of 2021, exact day unknown. CCYY = 2021, MM = 02 DD = blank

Location of Radiation

This data item provides information useful to understanding the referral patterns for radiation therapy services and assessing quality and outcome of radiation by delivery site. Code the first course of treatment. Do not include subsequent treatments in the coding of this data item.

Code	Label
0	No radiation treatment
1	All radiation treatment at this facility
2	Radiation started at reporting facility, continued elsewhere
3	Radiation started elsewhere, continued at this facility
4	All radiation treatment elsewhere

Rx Date – Radiation Flag – Retired with 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date Radiation Started*. Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Codes for Radiation Flag

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any radiation was given)
11	No proper value is applicable in this context (for example, no radiation given)

12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, radiation was given but the date is unknown)
15	Information is not available at this time, but it is expected that it will be available later (for example, radiation therapy is planned as part of the first course of therapy, but had not been started at the time of the most recent follow-up)
(blank)	A valid date value is provided in item *Date Radiation Started*

Phase 1 Radiation Treatment Modality

Historically, the previously named Regional Treatment Modality [1570] utilized codes that were not mutually exclusive. Rather, it included codes describing a mix of modalities, treatment planning techniques, and delivery techniques that are commonly utilized by radiation oncologists. The 2018 implementation of separate phase-specific data items for the recording of radiation modality (Radiation Treatment Modality) and radiation treatment planning techniques (Radiation External Beam Planning Technique) will clarify this information using mutually exclusive categories.

NOTE: Beginning in 2018, MCR collects only one of the new fields: Phase 1 Radiation Treatment Modality.

Instructions for Coding

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

- The first phase may be commonly referred to as an initial plan and a subsequent phase may be referred to as a boost or cone down.
- A new phase begins when there is a clinically meaningful change in target volume, treatment fraction size (i.e., dose given during a session), modality or treatment technique. Any one of these changes will mean that a new radiation plan will be generated in the treatment planning system. Subsequent phases are not collected by MCR.
- For purposes of this data item, photons, x-rays and gamma-rays are equivalent.

- Use code 13 - Radioisotopes, NOS for radioembolization procedures, e.g. intravascular Yttrium-90.
- This data item intentionally does not include reference to various MV energies because this is not a clinically important aspect of technique. A change in MV energy (e.g., 6MV to 12MV) is not clinically relevant and does not represent a change in treatment technique. It is rare for change in MV energy to occur during any phase of radiation therapy.

Note: Do not confuse a radioiodine scan with treatment. Only treatment is recorded in this item.

Code	Label
00	No radiation treatment
01	External beam, NOS
02	External beam, photons
03	External beam, protons
04	External beam, electrons
05	External beam, neutrons
06	External beam, carbon ions
07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, Interstitial, LDR
11	Brachytherapy, Interstitial, HDR
12	Brachytherapy, electronic
13	Radioisotopes, NOS
14	Radioisotopes, Radium-223
15	Radioisotopes, Strontium-89
16	Radioisotopes, Strontium-90
98	Radiation treatment administered, modality unknown
99	Unknown if radiation treatment administered

Reason for No Radiation

This data item records the reason that no regional radiation therapy was administered to the patient. When evaluating the quality of care, it is useful to know the reason various methods of therapy were not used, and whether the failure to provide a given type of therapy was due to the physician's failure to recommend that treatment, or due to the refusal of the patient, a family member, or the patient's guardian.

Instructions for Coding

- If *Regional Treatment Modality* is coded 00, then record the reason based on documentation in patient record.
- Code 1 if the treatment plan offered multiple alternative treatment options and the patient selected treatment that did not include radiation therapy.
- Code 7 if the patient refused recommended radiation therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 8 if it is known that a physician recommended radiation treatment, but no further documentation is available yet to confirm its administration.
- Code 8 to indicate referral to a radiation oncologist was made and the registry can follow to determine whether radiation was administered. If follow-up to the specialist or facility determines the patient was never there and no other documentation can be found, code 1.
- Cases coded 8 should be followed and updated to a more definitive code as appropriate.
- Code 9 if the treatment plan offered multiple alternative treatment options, but it is unknown which treatment, if any, was provided.

Code	Definition
0	Radiation therapy was administered
1	Radiation therapy was not administered because it was not part of the planned first course treatment. Diagnosed at autopsy
2	Radiation therapy was not recommended/administered because it was contraindicated due to other patient risk factors (comorbid conditions, advanced age, progression of tumor prior to planned radiation, etc.)
5	Radiation therapy was not administered because the patient died prior to planned or recommended therapy
6	Radiation therapy was not administered; it was recommended by the patient's physician, but was not administered as part of first course treatment. No reason was noted in patient record
7	Radiation therapy was not administered; it was recommended by the patient's physician, but this treatment was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in patient record
8	Radiation therapy was recommended, but it is unknown whether it was administered
9	It is unknown if radiation therapy was recommended or administered. Death certificate only

Example

Code	Reason
1	A patient with Stage I prostate cancer is offered either surgery or brachytherapy to treat his disease. The patient elects to be surgically treated

Radiation/Surgery Sequence (Rx Summ—Surg/Rad Sequence)

This data item records the sequencing of radiation and surgical procedures given as part of the first course of treatment. The sequence of radiation and surgical procedures cannot always be determined using the date on which each modality was started or performed, so this field can be used to more precisely evaluate the timing of treatment delivery by modality.

Instructions for Coding

- Surgical procedures include *Surgical Procedure of Primary Site (codes 10-90), Scope of Regional Lymph Node Surgery (codes 2-7), Surgical Procedure/Other Site (codes 1-5)*. If all of these procedures are coded 0, or it is not known whether the patient received both surgery and radiation, then this item should be coded 0
- If the patient received both radiation therapy and any one or a combination of the following surgical procedures: *Surgical Procedure of Primary Site, Regional Lymph Node Surgery,* or *Surgical Procedure/Other Site*, then code this item 2–9, as appropriate
- If multiple first course treatment episodes were given such that both codes 4 and 7 seem to apply, use the code that defines the first sequence that applies.

Code	Label	Definition
0	No radiation therapy and/or surgical procedures	No radiation therapy given or unknown if radiation therapy given; and/or no surgery of the primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node (s) or it is unknown whether any surgery given
2	Radiation therapy before surgery	Radiation therapy given before surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
3	Radiation therapy after surgery	Radiation therapy given after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
4	Radiation therapy both before and after surgery	At least two episodes or fractions of radiation therapy are given; at least one before, and at least one after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
5	Intraoperative radiation therapy	Intraoperative therapy given during surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
6	Intraoperative radiation therapy with other radiation administered before or after surgery	Intraoperative radiation therapy given during surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s) with other radiation therapy administered before or after surgery to primary site; scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s)
7	Surgery both before and after radiation	Radiation was administered between two separate surgical procedures to the primary site; regional lymph nodes, surgery to other regional site(s), distant site(s) or distant lymph node(s)
9	Sequence unknown	Administration of radiation therapy and surgery to primary site, scope of regional lymph node surgery, surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed and the sequence of the treatment is not stated in the patient record

Chemotherapy (Rx Summ—Chemo)

This data item allows for the evaluation of the administration of chemo- therapeutic agents as part of the first course of therapy. Chemotherapy consists of a group of anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis. Systemic therapy may involve the administration of one or a combination of agents. If chemotherapy was not administered, then this item also records the reason it was not given. When evaluating the quality of care, it is useful to know whether chemotherapy was given and, if not, the reason it was not.

Instructions for Coding

- Code 00 if chemotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include chemotherapy or if the option of 'no treatment' was accepted by the patient.
- If it is known that chemotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended chemotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended the patient receive chemotherapy, butno further documentation is available yet to confirm its administration.
- Code 88 to indicate referral was made to a medical oncologist. The registry can follow-up to determine whether it was given. If follow-up with the specified specialist or facility indicates the patient was never there, code 00.
- Code 99 if it is not known whether chemotherapy is usually administered for this type and stage of cancer and there is no mention in the patient record whether it was recommended or administered.
- Code chemoembolization as 01, 02, or 03 depending on the number of chemotherapeutic agents involved.
- If chemotherapy was provided as a radiosensitizer or radioprotectant, do not code as chemotherapy because this type of chemotherapy is given at a low dose that does not significantly affect the cancer.
- If the managing physician changes one of the agents in a combination regimen, and the replacement agent belongs to a different group than the original agent, the new regimen represents the start of subsequent therapy, and *only the original agent or regimen is recorded as first course therapy.*
- Refer to the *SEER*Rx Interactive Drug Database* (http://seer.cancer.gov/tools/seerrx/) for a list of chemotherapeutic agents and groups
- If chemotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the chemotherapy administered in the item Palliative Care

Code	Definition
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 patient record
02	Single-agent chemotherapy administered as first course therapy
03	Multi-agent chemotherapy administered as first course therapy
82	Chemotherapy was not recommended/administered because it was contraindicated due to patient risk factors (ie, comorbid conditions, advanced age, progression of tumor prior to administration, etc.)
85	Chemotherapy was not administered because the patient died prior to planned or recommended therapy
86	Chemotherapy was not administered. It was recommended by the patient's physician but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Chemotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Chemotherapy was recommended, but it is unknown if it was administered
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only

Examples

Code	Reason
01	A patient with primary liver cancer is known to have received chemotherapy; however, the name(s) of agent(s) administered is not stated in patient record
02	A patient with Stage III colon cancer is treated with a combination of fluorouracil and levamisole. Code the administration of fluorouracil as single agent chemotherapy, and levamisole as an immunotherapeutic agent
02	A patient with non-Hodgkin lymphoma is treated with fludarabine
03	A patient with early-stage breast cancer receives chemotherapy. The patient chart indicates that a regimen containing doxorubicin is to be administered
86	After surgical resection of an ovarian mass the following physician recommends chemotherapy. The patient record states that chemotherapy was not subsequently administered to the patient, but the reason why chemotherapy was not administered is not given

Date Chemotherapy Started (Rx Date—Chemo)

This field records the date of initiation of chemotherapy that is part of the first course of treatment. Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Instructions for Coding

- Record the first or earliest date on which chemotherapy was administered by any facility. This date corresponds to administration of the agents coded in *Chemotherapy*.
- Record the date as completely as possible. Leave any unknown portions of the date blank.

  Example: The patient came to your facility for surgery in March of 2021 after having had chemotherapy in February of 2021, exact day unknown. CCYY = 2021, MM = 02, DD = blank

Rx Date – Chemo Flag – Retired with 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date Chemotherapy Started*. Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any chemotherapy was given)
11	No proper value is applicable in this context (for example, no chemotherapy given)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, chemotherapy was given but the date is unknown)
15	Information is not available at this time, but it is expected that it will be available later (that is, chemotherapy is planned as part of first course treatment, but had not yet started at the time of the last follow-up)
(Blank)	A valid date is provided in item

Hormone (Hormone/Steroid) Therapy (Rx Summ-Hormone)

This data item records the type of hormone therapy administered as first course treatment, or the reason it was not given. Hormone therapy consists of a group of drugs that may affect the long-term control of a cancer's growth. It is not usually used as a curative measure. When evaluating quality of care, this data item allows for the evaluation of the administration of hormonal agents as part of the first course of therapy. In addition, it is sometimes useful to know the reason hormone therapy was not administered.

Instructions for Coding

- Record prednisone as hormonal therapy when administered in combination with chemotherapy, such as MOPP (mechlorethamine, vincristine, procarbazine, prednisone) or COPP (cyclophosphamide, vincristine, procarbazine, prednisone)
- Do not code prednisone as hormone therapy when it is administered for reasons other than chemotherapeutic treatment.
- Tumor involvement or treatment may destroy hormone-producing tissue. Hormone replacement therapy will be given if the hormone is necessary to maintain normal metabolism and body function. Do not code hormone replacement therapy as part of first course therapy.
- Code 00 if hormone therapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include hormone therapy or if the option of 'no treatment' was accepted by the patient.
- Code 01 for thyroid replacement therapy which inhibits TSH (thyroid-stimulating hormone). TSH is a product of the pituitary gland that can stimulate tumor growth.
- If it is known that hormone therapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

- Code 87 if the patient refused recommended hormone therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended hormone therapy, but no further documentation is available yet to confirm its administration.
- Code 88 to indicate the patient was referred to a medical oncologist. The registry can follow the case for hormone therapy. If follow-up with the specified specialist or facility indicates the patient was never there, code 00.
- Code 99 if it is not known whether hormone therapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.
- Refer to the *SEER*Rx Interactive Drug Database* (http://seer.cancer.gov/tools/seerrx/) for a list of hormonal agents.
- If hormone therapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hormone therapy administered in the item *Palliative Care*

Code	Definition
00	None. Hormone therapy was not part of the planned first course of therapy. Diagnosed at autopsy
01	Hormone therapy administered as first course therapy
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (i.e., comorbid conditions, advanced age, progression of tumor prior to administration, etc.)
85	Hormone therapy was not administered because patient died prior to planned or recommended therapy
86	Hormone therapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Hormone therapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Hormone therapy was recommended, but it is unknown if it was administered
99	It is unknown whether a hormonal agent(s) was recommended or administered because it is not stated in patient record. Death certificate only

Examples

Code	Reason
00	A patient has advanced lung cancer with multiple metastases to the brain. The physician orders Decadron to reduce the edema in the brain and relieve the neurological symptoms. Decadron is not coded as hormonal therapy
00	A patient with breast cancer may be treated with aminoglutethimide (Cytadren, Elipten), which suppresses the production of glucocorticoids and mineralocorticoids. This patient must take glucocorticoid (hydrocortisone) and may also need a mineralocorticoid (Florinef) as a replacement therapy
00	A patient with advanced disease is given prednisone to stimulate the appetite and improve nutritional status. Prednisone is not coded as hormone therapy in this example
01	A patient with metastatic prostate cancer is administered flutamide (an antiestrogen)
87	A patient with metastatic prostate cancer declines the administration of Megace (a progestational agent) and the refusal is noted in the patient record

Date Hormone Therapy Started (RX Date—Hormone)

This field records the date of initiation of hormone therapy that is part of the first course of treatment. Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Instructions for Coding

- Record the first or earliest date on which hormone therapy was administered by any facility. This date corresponds to administration of the agents coded in *Hormone*.
- Record the date as completely as possible. Leave any unknown portions of the date blank.

  Example: The patient came to your facility for prostatectomy in March of 2021 after having begun Lupron in February of 2021, exact day unknown. CCYY = 2021, MM= 02, DD = blank

Rx Date – Hormone Flag – Retired with 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date Hormone Therapy Started*.

Coding Instructions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any hormone therapy was given)
11	No proper value is applicable in this context (for example, no hormone therapy given)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, hormone therapy was given but the date is unknown)
15	Information is not available at this time, but it is expected that it will be available later (that is, hormone therapy is planned as part of first course treatment, but had not yet started at the time of the last follow-up)
(Blank)	A valid date is provided in item

Immunotherapy (BRM) (Rx Summ—BRM)

Records the type of immunotherapy administered as first course treatment, or the reason it was not given. Immunotherapy consists of biological or chemical agents that alter the immune system or change the host's response to tumor cells. This data item allows for the evaluation of immunotherapeutic agents as part of the first course of therapy. In addition, when evaluating the quality of care, it is useful to know the reason immunotherapy was not administered.

Instructions for Coding

- Code 00 if immunotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer.

- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include immunotherapy or if the option of 'no treatment' was accepted by the patient.
- If it is known that immunotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused recommended immunotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended immunotherapy, but no further documentation is available yet to confirm its administration.
- Code 88 to indicate a referral was made to a medical oncologist about immunotherapy. The registry can follow the case to determine whether it was given or why not. If follow -up to the specialist or facility determines the patient was never there, code 00
- Code 99 if it is not known whether immunotherapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.
- Refer to the *SEER*Rx Interactive Drug Database* (http://seer.cancer.gov/tools/seerrx/) for a list of immunotherapeutic agents.
- If immunotherapy was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the immunotherapy administered in the item *Palliative Care*

Code	Definition
00	None, immunotherapy was not part of the planned first course of therapy. Diagnosed at autopsy
01	Immunotherapy administered as first course of therapy
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (i.e., comorbid conditions, advanced age, progression of tumor prior to administration, 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 stated in patient record
87	Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Immunotherapy was recommended, but it is unknown if it was administered
99	It is unknown whether an immunotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only

Examples

Code	Reason
01	A patient with malignant melanoma is treated with interferon
85	Before recommended immunotherapy could be administered, the patient died from cancer

Date Immunotherapy Started (Rx Date—BRM)

This field records the date of initiation of immunotherapy or a biologic response modifier (BRM) that is part of the first course of treatment. Collecting dates for each treatment modality allows the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Instructions for Coding

- Record the first or earliest date on which immunotherapy or a biologic response modifier was administered by any facility.
- Record the date as completely as possible. Leave any unknown portions of the date blank

  Example: The patient came to your facility for cystectomy in March of 2021 after having undergone a series of BCG treatments beginning in January of 2021, exact day unknown. CCYY = 2021, MM = 01 DD = blank

RX Date – BRM Flag – Retired with 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date Immunotherapy Started*. Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Code	Definition
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any immunotherapy was given)
11	No proper value is applicable in this context (for example, no immunotherapy given)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, immunotherapy was given but the date is unknown)
15	Information is not available at this time, but it is expected that it will be available later (that is, immunotherapy is planned as part of first course of treatment, but had not yet started at the time of the last follow-up)
(Blank)	A valid date is provided in item

Hematologic Transplant and Endocrine Procedures (Rx Summ—TransplInt/Endocr)

This data item identifies systemic therapeutic *procedures* administered as part of the first course of treatment, or the reason none of the procedures was performed. Procedures coded in this field include bone marrow transplants, stem cell harvests with rescue (stem cell transplants), and endocrine surgery and/or radiation performed for hormonal effect when cancer originates at another site. Evaluation of this data item allows analysis of patterns of care involving alteration of the immune system or changes to the patient's tumor response that does not involve administration of antineoplastic agents. In addition, when evaluating quality of care, it is useful to know the reason these *procedures* were not performed.

Instructions for Coding

- Bone marrow transplants should be coded as either autologous (bone marrow originally taken from the patient) or allogeneic (bone marrow donated by a person other than the patient). For cases in which the bone marrow transplant was syngeneic (transplanted marrow from an identical twin), the item is coded as allogeneic.
- Stem cell harvests involve the collection of immature blood cells from the patient and the reintroduction by transfusion of the harvested cells following chemotherapy or radiation therapy.
- Endocrine irradiation and/or endocrine surgery are procedures which suppress the naturally occurring hormonal activity of the patient and thus alter or affect the long-term control of the cancer's growth. These procedures must be bilateral to qualify as endocrine surgery or endocrine radiation. If only one gland is intact at the start of treatment, surgery and/or radiation to that remaining gland qualifies as endocrine surgery or endocrine radiation.
- Code 00 if a transplant or endocrine procedure was not administered to the patient, and it is known that these procedures are not usually administered for this type and stage of cancer.
- Code 00 if the treatment plan offered multiple alternative treatment options, and the patient selected treatment that did not include a transplant or endocrine procedure or if the option of 'no treatment' was accepted by the patient.
- If it is known that a transplant or endocrine procedure is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
- Code 87 if the patient refused a recommended transplant or endocrine procedure, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended.
- Code 88 if it is known that a physician recommended a hematologic transplant or endocrine procedure, but no further documentation is available yet to confirm its administration.
- Code 88 to indicate referral to a specialist for hematologic transplant or endocrine procedures. The registry can follow the case. If follow-up to the specified specialist or facility determines the patient was never there, code 00.
- Use code 88 if a bone marrow or stem cell harvest was undertaken, but was not followed by a rescue or re-infusion as part of first course treatment.
- Code 99 if it is not known whether a transplant or endocrine procedure is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered.
- If the hematologic transplant or endocrine procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the hematologic transplant or endocrine procedure provided in the items *Palliative Care*, as appropriate.

Code	Definition
00	No transplant procedure or endocrine therapy was administered as part of first course therapy. Diagnosed at autopsy
10	A bone marrow transplant procedure was administered, but the type was not specified
11	Bone marrow transplant–autologous
12	Bone marrow transplant–allogeneic
20	Stem cell harvest and infusion. Umbilical cord stem cell transplant
30	Endocrine surgery and/or endocrine radiation therapy
40	Combination of endocrine surgery and/or radiation with a transplant procedure. (Combination of codes 30 and 10, 11, 12, or 20)
82	Hematologic transplant and/or endocrine surgery/radiation was not recommended/administered because it was contraindicated due to patient risk factors (i.e., comorbid conditions, advanced age, progression of disease prior to administration, etc.)
85	Hematologic transplant and/or endocrine surgery/radiation was not administered because the patient died prior to planned or recommended therapy
86	Hematologic transplant and/or endocrine surgery/radiation was not administered. It was recommended by the patient's physician but was not administered as part of the first course of therapy. No reason was stated in patient record
87	Hematologic transplant and/or endocrine surgery/radiation was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record
88	Hematologic transplant and/or endocrine surgery/radiation was recommended, but it is unknown if it was administered
99	It is unknown whether hematologic transplant and/or endocrine surgery/radiation was recommended or administered because it is not stated in patient record. Death certificate only

Other Treatment (Rx Summ—Other)

This field identifies other treatment that cannot be defined as surgery, radiation, or systemic therapy according to the defined data items in this manual. Information on other therapy is used to describe and evaluate the quality of care and treatment practices.

Instructions for Coding

- The principal treatment for certain reportable hematopoietic diseases could be supportive care that does not meet the usual definition of treatment that "modifies, controls, removes, or destroys" proliferating cancer tissue. In order to report the hematopoietic cases in which the patient received supportive care, SEER and the Commission on Cancer have agreed to record treatments such as phlebotomy, transfusion, or aspirin as "Other Treatment" (Code 1) for certain **hematopoietic diseases ONLY**. Consult the most recent version of the Hematopoietic Manual and database for instructions to code other treatments for a specific disease.
- Code 1 for embolization using alcohol as an embolizing agent and for embolization to a site other than the liver where the embolizing agent is unknown. Do not code presurgical embolization that is given only to shrink the tumor.
- Code 1 for PUVA(psoralen and long-wave ultraviolet radiation.)
- A complete description of the treatment plan should be recorded in the text field for "Other Treatment" on the abstract.

- If other treatment was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record the other treatment administered in the item *Palliative Care*.
- Code 8 if it is known that a physician recommended treatment coded as Other Treatment, and no further documentation is available yet to confirm its administration.
- Code 8 to indicate referral to a specialist for Other Treatment. The registry can follow. If follow-up with the specialist or facility determines the patient was never there, code 0.

Code	Label	Definition
0	None	All cancer treatment was coded in other treatment fields (surgery, radiation, systemic therapy). Patient received no cancer treatment. Diagnosed at autopsy
1	Other	Cancer treatment that cannot be appropriately assigned to specified treatment data items (surgery, radiation, systemic therapy)
2	Other–Experimental	This code is not defined. It may be used to record participation in institution-based clinical trials
3	Other–Double Blind	A patient is involved in a double-blind clinical trial. Code the treatment actually administered when the double-blind trial code is broken
6	Other–Unproven	Cancer treatments administered by nonmedical personnel
7	Refusal	Other treatment was not administered. It was recommended by the patient's physician, but this treatment (which would have been coded 1, 2, or 3) was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record
8	Recommended; unknown if administered	Other treatment was recommended, but it is unknown whether it was administered
9	Unknown	It is unknown whether other treatment was recommended or administered, and there is no information in the medical record to confirm the recommendation or administration of other treatment. Death certificate only

Date Other Treatment Started (Rx Date—Other)

Records the start dates for other treatments which cannot be coded as surgery, radiation, or systemic therapy according to the defined data items in this manual. Collecting dates for each treatment modality allows for the sequencing of multiple treatments and aids in the evaluation of time intervals from diagnosis to treatment and from treatment to recurrence.

Instructions for Coding

- Record the date on which the care coded as *Other Treatment* was initiated
- If other treatment is the first or only treatment administered to the patient, then the *Date Other Treatment Started* should be the same as the *Date of First Course of Treatment*

Rx Date—Other Flag – Retired with 2023+ Cases

This flag explains why there is no appropriate value in the corresponding date field, *Date Other Treatment Started*. Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any Other Treatment was given)
11	No proper value is applicable in this context (for example, no Other Treatment given)
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, Other Treatment was given but the date is unknown)
15	Other therapy is planned as part of first course of treatment but has not been started
(blank)	A valid date value is provided in item *Date Other Treatment Started*

Chapter 10

OUTCOME INFORMATION

Date of Last Contact or Death (Date of Last Contact)

This field records the date of last contact with the patient or the date of death. This information is used for patient follow-up and outcome studies.

Instructions for Coding

- Record the last date on which the patient was known to be alive or the date of death.
- If a patient has multiple primaries, all records should have the same date of last contact.
- **Date of Last Contact or Death does not allow blanks STORE 2023 page 329**
  The traditional format for Date of Last Contact is MMDDCCYY, with 99 identifying unknown month or day, and 99999999 representing an entirely unknown date.

Date of Last Contact Flag – Retired with 2023+ Cases

This data item explains why there is no appropriate value in the corresponding date field, *Date of Last Contact or Death*.

Instructions for Coding

- Leave this item blank if *Date of Last Contact or Death* has a full or partial date recorded.
- Code 12 if the *Date of Last Contact or Death* cannot be determined.
- Registrars should enter this data item directly (when appropriate) even if the traditional form of date entry is used in the software.

Code	Definition
12	A proper value is applicable but not known. This event occurred, but the date is unknown (that is, the date of last contact is unknown)
(blank)	A valid date value is provided in item *Date of Last Contact or Death*

Vital Status

Record the patient's vital status at the date of the last contact.

If a patient has multiple primaries, all records should have the same vital status code.

0 - Dead
1 - Alive

Cancer Status

Records the presence or absence of clinical evidence of the reported primary at the date the patient was last known to be alive, or at the date of death.

Instructions for Coding

- Cancer status is based on information from the patient's physician or other official source such as a death certificate.
- The patient's cancer status should be changed only if new information is received from the patient's physician or other official source. If information is obtained from the patient, a family member, or other non-physician, then cancer status is not updated.
- Cancer status changes if the patient has a recurrence or relapse.
- If a patient has multiple primaries, each primary could have a different cancer status.

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

Example

Code	Reason
1	Patient with hematopoietic disease who is in remission
1	A patient is seen by the physician on February 2, 2020, with no evidence of this tumor. The patient did not return to the physician. The patient was then called by the registry on March12, 2021. The *Date of Last Contact or Death* is updated, but the cancer status is not
2	A patient with prostate cancer is diagnosed with bone metastasis in April 2020. The registrar finds an obituary documenting the patient's death in a nursing home in June 2020

Underlying Cause of Death (Cause of Death)

Underlying cause of death may be found on the death certificate or in the medical record. If the *Date of Last Contact/Death* is on or after **1/1/2000**, the Cause of Death must be coded in the abstract using the ICD-10-CM. If the death certificate/death information is not available or the field is not applicable use the following codes:

0000 - Patient alive at last contact

7777 - State death certificate or listing not available

7797 - State death certificate or listing available, underlying cause of death not coded

Note: Death certificates from the Missouri Bureau of Vital Statistics are coded using ICD-10-CM. A complete listing of ICD-10-CM codes may also be found on the MCR website at https://medicine.missouri.edu/sites/default/files/MCR/ICD10-twopage-m.pdf.

ICD Revision Number

Enter the ICD-Edition that applies for the date of death:

Code	Definition
0	Patient alive at last contact
1	ICD-10 (date of death on or after 1/1/2000)
9	ICD-9 (date of death before 1/1/2000)

Place of Death, State and Country

Code the appropriate codes for the **state** and country (not county) of death separately according to codes in your software (STORE **2023 Appendix C**).

Follow-up Source

Use the code corresponding to the source from which your date of last contact was obtained, if available.

Information Release Data Items

No Patient Contact Flag and Reporting Facility Restriction Flag are two new central registry data items to capture when patient information is allowed to be released for research or other purposes. This data item is assigned at the patient level.

Citations

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Ruhl J, Ward E, Hofferkamp J, et al. (**October 2022**). *Grade Manual.* NAACCR, Springfield, IL 62704-4194 https://www.naaccr.org/wp-content/uploads/2022/10/Grade-Coding-Instructions-and-Tables-v3.pdf

Appendix A

SUPPLEMENTAL INSTRUCTIONS FOR CASES DIAGNOSED PRIOR TO 2018

Grade or Differentiation

These are coding instructions for cases diagnosed 1/1/2014 and forward.

A. Hematopoietic and Lymphoid Neoplasms

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

Cell Indicator (Codes 5, 6, 7, 8) describes the lineage or phenotype of the cell. Codes 5, 6, 7, and 8 are used only for hematopoietic and lymphoid neoplasms. Code 9 indicates cell type not determined, not stated, or not applicable.

Coding Grade for Hematopoietic and Lymphoid Neoplasms

1. Determine the histology based on the current Hematopoietic and Lymphoid Neoplasm Manual https://seer.cancer.gov/tools/heme/

2. Determine the Cell Indicator by applying the "Grade of Tumor Rules" within the current Hematopoietic and Lymphoid Neoplasm Manual https://seer.cancer.gov/tools/heme/ to code the grade.

Grade codes for hematopoietic and lymphoid neoplasms

Terminology	Grade Code
T-cell; T-precursor	5
B-cell; Pre-B; B-precursor	6
Null cell; Non T-non B	7
NK cell(natural killer cell)	8
Grade unknown, not stated, or not applicable	9

B. Solid tumors

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

Pathologic examination determines the grade, or degree of differentiation, of the tumor. For these 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 (poorly differentiated) or no (undifferentiated) resemblance to the tissue from the organ of origin. These similarities/ differences may be based on pattern (architecture), cytology, nuclear (or nucleolar) features, or a combination of these elements, depending upon the grading system that is used. Some grading systems use only pattern, for example Gleason grading in prostate. Others use only a nuclear grade (usually size, amount of chromatin, degree of irregularity, and mitotic activity). Fuhrman's grade for kidney is based only on nuclear features. Most systems use a combination of pattern and cytologic and nuclear features; for example, Nottingham's for breast combines numbers for pattern, nuclear size and shape, and mitotic activity. The in- formation from this data item is useful for determining prognosis and treatment.

Pathologists describe the tumor grade using three systems or formats:

1. Two levels of similarity; also called a two-grade system
2. Three levels of similarity; also called a three-grade system (code according to "Coding for solid tumors.")

    a. Grade I, well

    b. Grade II, moderately

    c. Grade III, poorly (undifferentiated carcinoma is usually separated from this system, since "poorly" bears some, albeit little, similarity to the host tissue, while "undifferentiated" has none, e.g., Undifferentiated carcinoma).

3. Four levels of similarity; also called a four-grade system. The four-grade system describes the tumor as

    a. Grade I; also called well-differentiated

    b. Grade II; also called moderately differentiated

    c. Grade III; also called poorly differentiated

    d. Grade IV; also called undifferentiated or anaplastic

Breast and prostate grades may convert differently than other sites. These exceptions are noted in "Coding for Solid Tumors," #7-8 below.

Coding for Solid Tumors

1. Systemic treatment and radiation can alter a tumor's grade. Therefore, it is important to code grade based on information prior to neoadjuvant therapy even if grade is unknown.

2. Code the grade from the primary tumor only.

    a. Do NOT code grade based on metastatic tumor or recurrence. In the rare instance that tumor tissue extends contiguously to an adjacent site and tissue from

the primary site is not available, code grade from the contiguous site.

b. If primary site is unknown, code grade to 9.

3. Code the grade shown below (6th digit) for specific histologic terms that imply a grade.

Carcinoma, undifferentiated (8020/34)
Carcinoma, anaplastic (8021/34)
Follicular adenocarcinoma, well differentiated (8331/31)
Thymic carcinoma, well differentiated (8585/31)
Sertoli-Leydig cell tumor, poorly differentiated (8631/33)
Sertoli-Leydig cell tumor, poorly differentiated with heterologous elements (8634/33)
Undifferentiated sarcoma (8805/34)
Liposarcoma, well differentiated (8851/31)
Seminoma, anaplastic (9062/34)
Malignant teratoma, undifferentiated (9082/34)
Malignant teratoma, intermediate type (9083/32)
Intraosseous osteosarcoma, well differentiated (9187/31)
Astrocytoma, anaplastic (9401/34)
Oligodendroglioma, anaplastic (9451/34)
Retinoblastoma, differentiate (9511/31)
Retinoblastoma, undifferentiated (9512/34)

4. In situ and/or combined in situ/invasive components:

a. If a grade is given for an in-situ tumor, code it. Do NOT code grade for dysplasia such as high-grade dysplasia.

b. If there are both in situ and invasive components, code only the grade for the invasive portion even if its grade is unknown.

5. If there is more than one grade, code the highest grade within the applicable system. Code the highest grade even if it is only a focus. Code grade in the following priority order using the first applicable system:

a. special grade systems for the sites listed in Coding for Solid Tumors #6

b. differentiation: use Coding for Solid Tumors #7: 2-, 3-, or 4- grade system

c. nuclear grade: use Coding for Solid Tumors #7: 2-, 3-, or 4- grade system

d. If it isn't clear whether it is a differentiation or nuclear grade and a 2-, 3-, or 4-grade system was used, code it.

e. Terminology (use Coding for Solid Tumors #8)

6. Use the information from the special grade systems first. If no special grade can be coded, continue with Coding for Solid Tumors #7-9.

Special grade systems for solid tumors

Grade information based on CS Site-specific factors for breast, prostate, heart, me diastinum, peritoneum, retroperitoneum, soft tissue, and kidney parenchyma is used to code grade. See Special Grade System Rules section below for details on how to use this information to code grade. Do not use these tables to code grade for any other groups including WHO (CNS tumors), WHO/ISUP (bladder, renal pelvis), or FIGO (female gynecologic sites) grades

CS Schema	Special grade system
Breast	Nottingham or Bloom-Richardson (BR) Score/Grade
Prostate	Gleason's Score on Needle Core Biopsy/Transurethral Resection of Prostate (TURP) (SSF 8)
Prostate	Gleason's Score on Prostatectomy/Autopsy (SSF 10)
Heart, mediastinum	Grade for Sarcomas
Peritoneum	Grade for Sarcomas (SSF 1)
Retroperitoneum	Grade for Sarcomas (SSF 1)
Soft Tissue	Grade for Sarcomas (SSF 1)
Kidney Parenchyma	Fuhrman Nuclear Grade

7. Use the Two-, Three- or Four-grade system information

a. Two-grade system

Term	Description	Grade Code	Exception for Breast and Prostate Grade Code
1/2, I/II	Low grade	2	1
2/2, II/II	High grade	4	3

In transitional cell carcinoma for bladder, the terminology high grade TCC and low grade TCC are coded in the two-grade system.

b. Three-grade system

Term	Description	Grade Code	Exception for Breast and Prostate Grade Code
1/3	Low grade	2	1
2/3	Intermediate grade	3	2
3/3	High grade	4	3

c. Four-grade system: Any four-grade system including Edmondson and Steiner grade for liver.

Term	Description	Grade Code Exception for Breast and Prostate Grade Code
1/4	Grade I; Well differentiated	1
2/4	Grade II; Moderately differentiated	2
3/4	Grade III; Poorly differentiated	3
4/4	Grade IV; Undifferentiated	4

8. Terminology: use the 'Description' column or the 'Grade' column to code grade. Breast & Prostate use the same grade code with a few noted exceptions.

Description	Grade	Assign Grade Code	Exception for Breast and Prostate Grade Code
Differentiated, NOS	I	1	
Well differentiated	I	1	
Only stated as "Grade I"	I	1	
Fairly well differentiated	II	2	
Intermediate differentiation	II	2	
Low grade	I-II	2	1
Mid differentiated	II	2	
Moderately differentiated	II	2	
Moderately well differentiated	II	2	
Partially differentiated	II	2	
Partially well differentiated	I-II	2	1
Relatively or generally well differentiated	II	2	
Only stated as 'Grade II'	II	2	
Medium grade, intermediate grade	II-III	3	2
Moderately poorly differentiated	III	3	
Moderately undifferentiated	III	3	
Poorly undifferentiated	III	3	
Relatively poorly differentiated	III	3	
Relatively undifferentiated	III	3	
Slightly differentiated	III	3	
Dedifferentiated	III	3	
Only stated as 'Grade III'	III	3	
High grade	III-IV	4	3
Undifferentiated, anaplastic, not differentiated	IV	4	
Only stated s 'Grade IV"	IV	4	
Non-high grade		9	

9. If no description fits or grade is unknown prior to neoadjuvant therapy, code as a 9 (unknown).

C. Special Grade Systems Rules

Breast (site: breast excluding lymphomas)
Use Bloom Richardson (BR) or Nottingham score/grade to code grade. Use the description in the table below to determine grade.

BR could also be referred to as: Bloom-Richardson, modified Bloom-Richardson, BR, BR grading, Scarff-Bloom-Richardson, SBR grading, Elston-Ellis modification of Bloom-Richardson score, Nottingham modification of Bloom-Richardson score, Nottingham modification of Scarff-Bloom-Richardson, Nottingham-Tenovus grade, or Nottingham grade.

Code the tumor grade using the following priority order

a. BR scores 3-9
b. BR grade (low, intermediate, high)

BR score may be expressed as a range, 3-9. The score is based on three morphologic features: degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism/nuclear grade of tumor cells. If a report uses words such as low, intermediate, or high rather than numbers, use the table below to code grade.

If only a grade of 1 through 4 is given with no information on the score and it is unclear if it is a Nottingham or BR Grade, do not use the table below. Continue with the next priority according to "Coding for Solid Tumors" #7 above.

Code the highest score if multiple scores are reported (exclude scores from tests after neoadjuvant therapy began). Examples: different scores may be reported on multiple pathology reports for the same primary cancer; different scores may be reported for multiple tumors assigned to the same primary cancer.

CS Site-Specific Factor 7
Nottingham or Bloom-Richardson (BR) Score/Grade

Description	CS Code	Grade Code
Score of 3	030	1
Score of 4	040	1
Score of 5	050	1
Score of 6	060	2
Score of 7	070	2
Score of 8	080	3
Score of 9	090	3
Low Grade, Bloom-Richardson (BR) grade 1, score not given	110	1
Medium (Intermediate) Grade, BR grade 2, score not given	120	2
High Grade, BR grade 3, score not given	130	3

Kidney Parenchyma (Site: kidney parenchyma excluding lymphomas; CS schema: Kidney Parenchyma): Fuhrman Nuclear Grade

The Fuhrman Nuclear Grade should be used to code grade for kidney parenchyma only. Do not use for kidney renal pelvis. Use the description in the table to determine grade. Fuhrman nuclear grade is a four-grade system based on nuclear diameter and shape, the prominence of nucleoli, and the presence of chromatin clumping in the highest grade.

Description	CS Code	Grade Code
Grade 1	010	1
Grade 2	020	2
Grade 3	030	3
Grade 4	040	4

Soft Tissue (sites excluding lymphomas: soft tissue, heart, mediastinum, peritoneum, and retroperitoneum; for CS users: Soft Tissue, Heart Mediastinum, Peritoneum, Retroperitoneum schemas): Grade for Sarcomas

The Grade for Sarcomas should be used to code grade based on CSv2 SSF 1 as stated below. If your registry does not collect this SSF, use the description in the table to deter- mine grade. If you collect this SSF, the information could be automatically converted into the grade field if it is coded 010-200. The grading system of the French Federation of Cancer Centers Sarcoma Group (FNCLCC) is the preferred system.

Record the grade from any three-grade sarcoma grading system the pathologist uses. For terms such as "well differentiated" or "poorly differentiated," go to Coding for Solid Tumors #8.

In some cases, especially for needle biopsies, grade may be specified only as "low grade" or "high grade." The numeric grade takes precedence over “low grade” or “high grade.”

Description	CS Code	Grade Code
Specified as Grade 1 [of 3]	010	2
Specified as Grade 2 [of 3]	020	3
Specified as Grade 3 [of 3]	030	4
Grade stated as low grade, NOS	100	2
Grade stated as high grade, NOS	200	4

Prostate (site: prostate excluding lymphomas; CS schema: prostate)

Use the highest Gleason score from the biopsy/TURP or prostatectomy/autopsy. Use a known value over an unknown value. Exclude results from tests performed after neoadjuvant therapy began. This information is collected in CSv2 SSF 8 (Gleason score from biopsy/TURP) and SSF 10 (Gleason score from prostatectomy/autopsy) as stated below. Use the table below to determine grade even if your registry does not collect these SSFs. If you collect these SSFs, the information could be converted into the grade field automatically.

Usually prostate cancers are graded using Gleason score or pattern. Gleason grading for prostate primaries is based on a 5-component system (5 histologic patterns). Prostatic cancer generally shows two main histologic patterns. The primary pattern, the pattern occupying greater than 50% of the cancer, is usually indicated by the first number of the Gleason grade, and the secondary pattern is usually indicated by the second number. These two numbers are added together to create a pattern score, ranging from 2 to 10. If there are two numbers, assume that they refer to two patterns (the first number being the primary pat- tern and the second number the secondary pattern), and sum them to obtain the score. If only one number is given on a particular test and it is less than or equal to 5 and not speci- fied as a score, do not use the information because it could refer to either a score or a grade. If only one number is given and it is greater than 5, assume that it is a score and use it. 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 3/10. The Gleason score would be 3.

Historic Perspective

Gleason Score	Description					
	CS Code	Grade Code	AJCC 7th	SEER 2003-2013	ACC 6th	SEER prior 2003
2	002	1	G1	G1	G1	G1
3	003	1	G1	G1	G1	G1
4	004	1	G1	G1	G1	G1
5	005	1	G1	G2	G2	G2
6	006	1	G1	G2	G2	G2
7	007	2	G2	G3	G3	G2
8	008	3	G3	G3	G3	G3
9	009	3	G3	G3	G3	G3
10	010	3	G3	G3	G3	G3

Historical perspective on long term trends in prostate grade: The relationship of Gleason score to grade changed for 1/1/2014+ diagnoses in order to have the grade field in sync with AJCC 7th ed. Analysis of prostate grade before 2014 based solely on the grade field is not recommended. In Collaborative Stage (CS), Gleason score was originally coded in CSv1 in one field (SSF 6) and then it was split into two fields in CSv2 based on the tissue

used for the test: needle biopsy/TURP (SSF 8) and prostatectomy/autopsy (SSF 10). For trends using data back to 2004, if one collected the various CS Gleason scores, one could design a recode to have the same criteria as the data collected 2014+. The original grade field would NOT be changed, but for analyses this recode could be based on the CS SSFs and the original grade code.

Computer algorithm to derive grade for prostate based on SSF 8 and SSF 10: if SSF 8 or SSF 10 has known values for Gleason's, the information could be used to automatically derive the grade field.

SSF 8 Code	SSF 10 Grade Code											
	002	003	004	005	006	007	008	009	010	988	998	999
002	1	1	1	1	1	2	3	3	3	*	1	1
003	1	1	1	1	1	2	3	3	3	*	1	1
004	1	1	1	1	1	2	3	3	3	*	1	1
005	1	1	1	1	1	2	3	3	3	*	1	1
006	1	1	1	1	1	2	3	3	3	*	1	1
007	2	2	2	2	2	2	3	3	3	*	2	2
008	3	3	3	3	3	3	3	3	3	*	3	3
009	3	3	3	3	3	3	3	3	3	*	3	3
010	3	3	3	3	3	3	3	3	3	*	3	3
988	*	*	*	*	*	*	*	*	*	*	*	*
998	1	1	1	1	1	2	3	3	3	*	*	*
999	1	1	1	1	1	2	3	3	3	*	*	*

*Grade can't be automatically calculated based on SSF 8 and SSF 10; Go to Step 7

Collaborative Stage

The Collaborative Stage (CS) data collection system is a set of data items that describe how far a cancer has spread from its primary site at the time of diagnosis and how the extent of disease was evaluated. The data items were selected by a task force convened to address the issue of discrepancies in staging guidelines among the three major staging systems used in the U.S. Cancer registries have traditionally collected most of the data items incorporated into the CS system, the use of which should provide a higher degree of compatibility among staging schemes that will expand data-sharing opportunities. Site-specific Factors (SSFs) are incorporated into the staging algorithms when additional information is necessary to derive the SEER Summary Stage, TNM Stage Group, or where the SSF is considered to be of clinical or prognostic importance. Information formerly coded as Tumor Markers and certain supplemental data required for obtaining the derived AJCC stage are coded in SSF fields. (For more complete details, refer to the introduction of the *Collaborative Stage Data Collection System Coding Instructions*, Part I, Section 1: General Instructions at: https://cancerstaging.org/cstage/schema/Pages/version0205.aspx

The Collaborative Stage Data Collection System Version 02.05 (CSv2) is required for use with cases diagnosed January 1, 2014, to December 31, 2015. It also applies to older cases entered after conversion to NAACCR version 14.

The CS Version 01 series applies to cases diagnosed January 1, 2004, through December 31, 2009 and abstracted before NAACCR version 12 was implemented. Complete directions are in the *Collaborative Stage Manual and Coding Instructions, Version 01.04.01.* Collaborative stage fields are not to be used for cases diagnosed before January 1, 2004, or after Decem- ber 31,2015, except as listed below).

CS Version Original (Formerly CS Version Input Original)

This item indicates the number of the version initially used to code Collaborative Stage (CS) fields. The CS version number is returned as part of the output of the CS algorithm. Over time, the input codes and instructions for CS items may change. This item identifies the correct interpretation of input CS items. This item is auto coded by the software provider.

Codes

CS Version Input Original is a 6-digit code. The first two digits represent the major version number; the second two digits represent minor version changes; and, the last two digits represent even less significant changes, such as corrections of typographical errors that do not affect coding or derivation of results (e.g.,010100).

CS Version Derived (Formerly CS Version Latest)

This data item is auto coded by the software provider for cases diagnosed 2004 through 2015.

Codes

CS Version Derived is a 6-digit code. The first two digits represent the major version number; the second two digits represent minor version changes; and the last two digits represent

even less significant changes, such as corrections of typographical errors that do not affect coding or derivation of results (e.g., 010100).

CS Version Input Current (Formerly CS Version 1st)

This item indicates the version of CS input fields after they have been updated or recoded. This data item is recorded the first time the CS input fields are entered and should be updated each time the CS input fields are modified. Over time, the input codes and instructions for CS items may change. This item identifies the correct interpretation of input CS items. This item is auto coded by the software provider.

Codes

CS Version Input Current is a 6-digit code. The first two digits represent the major version number; the second two digits represent minor version changes; and the last two digits represent even less significant changes, such as corrections of typographical errors that do not affect coding or derivation of results (e.g., 010100).

CS Site-Specific Factors

Identifies additional information needed to generate stage or prognostic factors that have an effect on stage or survival. See Collaborative Stage Manual and Coding Instructions for more information. Refer to MCR Required Data Elements List (http://mcr.umh.edu/ mcr-cancer-reporting-hospital.html) for the particular primary sites and factors that are to be sent to MCR. Note that since 2011 there is an additional tab on the spreadsheet that lists factors which are required "as available." An additional tab in pink has been added for 2016 showing the reduced number of required factors.

AJCC TNM Stage

MCR requires that AJCC TNM staging be assigned for all cases diagnosed in 2016 and forward. AJCC developed its staging system for evaluating trends in the treatment and control of cancer. This staging is used by physicians to estimate prognosis, to plan treatment, to evaluate new types of therapy, to analyze outcome, to design follow-up strategies, and to assess early detection results. The fields below are required and should be coded as documented by the physician. If the managing physician has not recorded this information, registrars will code this item based on the best available information.

See the *AJCC Cancer Staging Manual*, current edition for site-specific categories for the TNM elements and stage groups.

See the *2016 FORDS* manual for specific instructions for coding. https://www.facs.org/~/media/files/quality%20programs/cancer/ncdb/fords%202016.ashx

Beginning in 2016, the prefixes of 'c' and 'p' have been added to existing valid clinical and

pathologic T, N, and M categories respectively. The new categories enable registrars to comply with AJCC clinical and pathologic staging/classification timeframe rules while abstracting. The new categories will be used for cases of all diagnosis years abstracted using NAACCR version 16-compliant (and later) software. Please note that not all possible categories were added in 2016, only those addressing prominent issues. Additional T, N, and M categories will be added and use of existing categories will be expanded with the implementation of the AJCC 8th Edition Manual.

TNM Clin T

Detailed site-specific codes for the clinical tumor (T) as defined by AJCC. It identifies the tumor size and/or extension known prior to the start of any therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*)

88 Not applicable, no code assigned for this case in the current AJCC Staging Manual

This field is left blank if no information at all is available to code this item.

TNM Clin N

Detailed site-specific codes for the clinical nodes (N) as defined by AJCC. It identifies the absence/presence and extent of regional lymph node metastasis of the tumor known prior to the start of any therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual)*

88 Not applicable, no code assigned for this case in the current AJCC Staging Manual

This field is left blank if no information at all is available to code this item.

TNM Clin M

Detailed site-specific codes for the clinical metastases (M) as defined by AJCC. It identifies the absence or presence of distant metastasis of the tumor known prior to the start of any therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*

88 Not applicable, no code assigned for this case in the current AJCC Staging Manual

This field is left blank if no information at all is available to code this item.

TNM Clin Stage Group

Detailed site-specific codes for the clinical stage group as defined by AJCC based on the T, N, and M data items known prior to the start of any therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*)

88	Not applicable, no code assigned for this case in the current AJCC Staging Manual
99	Unknown, unstaged

TNM Clin Descriptor

Identifies the AJCC clinical stage (prefix/suffix) descriptor of the tumor prior to the start of any therapy. AJCC stage descriptors identify special cases that need separate data analysis. The descriptors are adjuncts to and do not change the stage group.

0	None
1	E (Extranodal, lymphomas only)
2	S (Spleen, lymphomas only)
3	M (Multiple primary tumors in a single site)
5	E & S (Extranodal and spleen, lymphomas only)
9	Unknown, not stated in patient record

TNM Path T

Detailed site-specific codes for the pathologic tumor (T) as defined by AJCC. It identifies the tumor size and/or extension following the completion of surgical therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*)

88	Not applicable, no code assigned for this case in the current AJCC Staging Manual

This field is left blank if no information at all is available to code this item.

TNM Path N

Detailed site-specific codes for the pathologic nodes (N) as defined by AJCC. It identifies the absence/presence and extent of regional lymph node metastasis of the tumor following the completion of surgical therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*)

88	Not applicable, no code assigned for this case in the current AJCC Staging Manual

This field is left blank if no information at all is available to code this item.

TNM Path M

Detailed site-specific codes for the pathologic metastases (M) as defined by AJCC. It identifies the absence or presence of distant metastasis of the tumor following the completion of surgical therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*)

88	Not applicable, no code assigned for this case in the current AJCC Staging Manual

This field is left blank if no information at all is available to code this item.

TNM Path Stage Group

Detailed site-specific codes for the pathologic stage group as defined by AJCC based on the T, N, and M items known following the completion of surgical therapy.

Codes (in addition to those published in the *AJCC Cancer Staging Manual*)

88	Not applicable, no code assigned for this case in the current AJCC Staging Manual
99	Unknown, unstaged

TNM Path Descriptor

Identifies the AJCC pathologic stage (prefix/suffix) descriptor known following the completion of surgical therapy. AJCC stage descriptors identify special cases that need separate data analysis. The descriptors are adjuncts to and do not change the stage group.

Codes

0	None
1	E (Extra nodal, lymphomas only)
2	S (Spleen, lymphomas only)
3	M (Multiple primary tumors in a single site)
4	Y (Classification during or after initial multimodality therapy) - pathologic staging only
5	E & S (Extra nodal and spleen, lymphomas only)
6	M & Y (Multiple primary tumors and initial multimodality therapy)
9	Unknown, not stated in patient record

TNM Edition Number

A code that indicates the edition of the AJCC manual used to stage the case. This applies to the manually coded AJCC fields. It does not apply to the Derived AJCC T, N, M and AJCC Stage Group fields [2940, 2960, 2980, and 3000].

Codes

00	Not staged (cases that have AJCC staging scheme and staging was not done)
01	First Edition
02	Second Edition (published 1983)
03	Third Edition (published 1988)
04	Fourth Edition (published 1992), recommended for use for cases diagnosed 1993-1997
05	Fifth Edition (published 1997), recommended for use for cases diagnosed 1998-2002
06	Sixth Edition (published 2002), recommended for use for cases diagnosed 2003-2009
07	Seventh Edition (published 2009), recommended for use with cases diagnosed 2010+
88	Not applicable (cases that do not have an AJCC staging scheme)
99	Edition Unknown

Appendix B

SUPPLEMENTAL INSTRUCTIONS FOR CASES DIAGNOSED PRIOR TO 2010

Primary Site for Solid Tumors Diagnosed Prior to 2007

These rules were replaced by the Multiple Primary and Histology Coding Rules which were implemented for cases diagnosed January 1, 2007, and after. Enter the case into the database as a single or multiple primaries **as documented by the physician**. If physician documentation is unavailable, then use the following guidelines: Primary Site, Laterality, Morphology, and Timing are each considered.

- Use the instructions below under "**Site Differences**" and **"Laterality Differences"** to decide whether the tumor(s) is one site or multiple sites
- Follow the instructions below under "**Morphology Differences**" to decide whether tumors (other than lymphomas or leukemias) represent a single histology or mixed/ multiple histologies
- Follow the instructions below under "**Timing Differences**" to decide if one or more primaries are involved

Site Differences

Primary Site and Laterality are used together to determine whether two lesions are considered one or two tumors based on anatomic location. The ICD-O-2 and ICD-O-3 topography codes each have four characters: the letter C followed by three digits (e.g., C61.9). The fourth character represents a subcategory. In general, the first three characters represent an individual organ and the fourth character is a subsite or a portion of that organ. However, in some instances two or more three-character ICD-O-3 topography codes apply to a single organ. The rules for distinguishing single from multiple sites address (1) whether organs or subsites of organs represent unique tumors, (2) whether a unique organ is represented

by one three-character ICD-O-3 topography code or more, and (3) whether a paired site is involved.

Note: Site organs are represented by a single three-character ICD-O-3 code. A difference in the **third** character of the ICD-O-3 topography code designates a separate site for all primary sites other than those listed below

Subsites that Represent Unique Primaries

A difference in the fourth or final character of the ICD-O-3 topography code designates a separate site for the following site groups **only**, with the exception of NOS (C_ _.9) if there is a specific four-digit site code within the same category.

- Colon (C18.0–C18.9) except polyps involving multiple segments (see "Colon and Rectum Polyps" following)
- Anus/anal canal (C21.0–C21.8)
- Pleura (visceral, parietal, NOS) (C38.4)
- Bone (C40.0–C41.9)
- Melanoma of the skin (C44.0–C44.9)
- Peripheral nerves/autonomic nervous system (C47.0–C47.9)
- Connective tissue (C49.0–C49.9)
- **Non-malignant** meninges (C70.0–C70.9 with Behavior Code /0 or /1)
- **Non-malignant** brain (C71.0–C71.8 with Behavior Code /0 or /1)
- **Non-malignant** spinal cord, cranial nerves, and other parts of central nervous system (C72.0–C72.8 with Behavior Code /0 or /1)

Colon and Rectum Polyps

- Simultaneous lesions and polyps in the same segment of the colon are a single primary. Polyps may be present in more than one segment of the colon. If the diagnosis reads "adenocarcinoma in multiple polyps," it is one primary, Colon, NOS (C18.9)

- Familial polyposis is a genetic disease characterized by polyps that increase in numbers and may cover the mucosal surface of the colon. The benign disease usually develops into adenocarcinoma in adenomatous polyposis coli or adenocarcinoma in multiple adenomatous polyps

- Patients with the histologies "adenocarcinoma in adenomatous polyposis coli" (8220/3) and "adenocarcinoma in multiple adenomatous polyps" (8221/3) have a different disease process than those patients with typical adenocarcinomas of the colon or colon polyps. If multiple segments of the colon, or the colon and rectosigmoid, or the colon, rectosigmoid and rectum are involved with adenocarcinoma in adenomatous polyposis coli or adenocarcinoma in multiple adenomatous polyps, it is a single primary. Code the primary site to Colon, NOS (C18.9)

  Note: Site organs may be represented by more than one three-character ICD -O-3 topography code

Primary Based on Grouped Sites

The following groups of three-character ICD-O-3 topography codes refer to single organs. Lesions within any combination of each group are considered to be the same primary.

- C01 Base of tongue; C02 Other and unspecified parts of tongue
- C05 Palate; C06 Other and unspecified parts of mouth
- C07 Parotid gland; C08 Other and unspecified major salivary glands
- C09 Tonsil; C10 Oropharynx
- C12 Pyriform sinus; C13 Hypopharynx
- C23 Gallbladder; C24 Other and unspecified parts of biliarytract
- C30 Nasal cavity and middle ear; C31 Accessory sinuses
- C33 Trachea; C34 Bronchus and lung
- C37 Thymus; C38.0 Heart; C38.1–3 Mediastinum; C38.8 Overlapping lesion of heart, mediastinum, and pleura
- C51 Vulva; C52 Vagina; C57.7 Other specified female genital organs; C57.8–9 Unspecified female genital organs
- C56 Ovary; C57.0 Fallopian tube; C57.1 Broad ligament; C57.2 Round ligament; C57.3 Parametrium; C57.4 Uterine adnexa
- C60 Penis; C63 Other and unspecified male genital organs
- C64 Kidney; C65 Renal pelvis; C66 Ureter; C68 Other and unspecified urinary organs
- C74 Adrenal gland; C75 Other endocrine glands and related structures

Laterality Differences

- Each side of a paired organ is a **separate** site **unless** a physician determines one side is metastatic from the other

  Exception: The following are always single primaries—
  - Simultaneous bilateral involvement of the ovaries with a single histology
  - Simultaneous bilateral retinoblastomas

  Exception: Disregard laterality for determination of single or multiple primaries for **malignant** (behavior of /2 or /3) tumors of the meninges (C70._), brain (C71._), spinal cord, cranial nerves, and other parts of central nervous system (C72._)

- Both sides of a paired organ may be simultaneously involved with tumors. If the tumors are of the same histology, the patient may have one or two primaries. Consult the managing physician or the registry advisor
- If there are two primaries, complete two abstracts. Code each primary to the appropriate laterality and stage
- If there is one primary, prepare one abstract and code laterality to the side of origin
- If there is a single primary and the side of origin cannot be identified, prepare a single abstract and code laterality as 4 - bilateral involvement, side of origin unknown; stated to be a single primary

Histology Differences

The first four characters are sometimes referred to as the "histology code." Multiple terms may describe a single histology. Refer to the ICD-O-3 histology code to determine whether two or more lesions represent the same tumor histologically.

- If the first three digits of the ICD-O-3 histology codes are identical, then the histology is the **same**
- A single lesion with mixed histologic types is **one** primary
- A difference in the first three digits of the ICD-O-3 histology code indicates a **different** histologic type

  Exception: If one malignancy is stated to be carcinoma, NOS, adenocarcinoma, NOS, or sarcoma, NOS, and the second lesion is a more specific term, such as large cell carcinoma, mucinous adenocarcinoma, or spindle cell sarcoma, consider this to be a **single** histology

  Exception: For lymphatic and hematopoietic disease, use Appendix A in *FORDS* or 'Definitions of Single and Subsequent Primaries for Hematologic Malignancies' which can be found on the MCR Website under Abstracting Resources to determine which histologies represent single or multiple primaries. **NOTE: The 'Definitions of Single and Subsequent Primaries for Hematologic Malignancies' is only a guide. A physician diagnosis supersedes the guide**

  Exception: Consider the following as a **single** histology, even though the first three digits of the ICD-O-3 morphology codes differ. Code its histology according to the rules for mixed histologies.

  Transitional cell or papillary carcinoma (8120–8131) of the bladder (C67._)

  Ductal (8500) and lobular (8520) adenocarcinoma of the breast (C50._)

Use the following for the determination of single or multiple primaries of nonmalignant (behavior /0 or /1) primary intracranial and central nervous system tumors (C70.0, C72.9, C75.1-C75.3).

- Two histologies appearing in the same grouping in the following table are the **same**; code the more specific histology
- Histology in the table and histology not in the table that has the same first three digits are the **same**; code its histology according to the rules for mixed histologies
- Two histologies not appearing in the table but having the same first three digits are the **same**; code its histology according to the rules for mixed histologies
- Multiple lesions with the **same** histology occurring in different sites are **separate** primaries **unless** a physician says they are metastatic
- Multiple lesions with **different** histologies occurring in different sites are **separate** primaries **unless** a physician states otherwise

Timing Differences

Lesions occurring within two months of each other are "simultaneous."

- Two malignancies of the same histology (following the rules under "Histology Differences") which occur in the same site (following the rules under "Site Differences", including those for laterality for paired sites) simultaneously (i.e., within two months of each other), is a **single primary**
- **Exception:** Each occurrence of melanoma of the skin is a new or separate primary unless a physician states otherwise
- Multiple lesions with different histologies in a single site are **separate** primaries, whether they occur simultaneously or at different times
- If two malignancies of the same histology (following the rules under "Histology Differences") and in the same site (following the rules under "Site Differences," including rules for laterality for paired sites) are identified **more** than two months apart, then there are **two** primaries. Complete a separate abstract for each one
- If the tumor was originally diagnosed as in situ and recurs as invasive or metastatic tumor,the "recurrence" must be reported as a new case

Exception: The following are recurrences of the original disease without time limits-

Exception: Non-malignant (behavior = /0 or /1) primary intracranial and central nervous system tumors (C70.0–C72.9, C75.1–C75.3) within a single site (following the rules under "Site Differences", including rules for laterality for paired sites) having the same histology (following the rules under "Histology Differences")

Exception: Bladder primaries with morphology codes 8120–8130

Exception: Invasive adenocarcinoma of the prostate, site code C61.9

Exception: Kaposi sarcoma (9140) of any site

Note: Consider Kaposi sarcoma as one primary site. Refer to "Primary Site" for coding rules

Primary Site for Lymphomas Diagnosed Prior to 2010

Use the following guidelines to determine the topography codes for lymphomas.

- Lymphomas originating in the lymph nodes are coded C77._
- If a lymphoma originates in a single organ, code the primary site to that organ
- **Example:** Patient diagnosed with lymphoma of the ileum. Primary site code would be **ileum** (**C17.2**)

- If disease is prevalent in a single organ and the lymph nodes, but the physician states the cancer originated in the extra-nodal site, code the primary site to the **organ**
- If there is disease in a single organ and nodes, but the physician does not state extra-nodal site, **code to the site of lymph nodes involved**
- When there are multiple lymph node sites involved, **code C77.8**
- If no site is specified, use **code C77.9**, lymph nodes NOS
- If origin of a lymphoma is unknown but is suggested by the histology code in ICD-O-3, code to the suggested site. Example: 9689/3 Splenic marginal zone B-cell lymphoma (**C42.2**)
- If an extra nodal site is suspected but is unknown, code to **C80.9**
- Do not code the site of the biopsy when multiple sites are involved
- When coding a disseminated lymphoma and the originating site is unknown, code to unknown primary site - C80.9
  Example: Malignant pleural effusion positive for malignant lymphoma and no tissue masses identified
- Code C77.9 when a mass is identified as "retroperitoneal," "inguinal," "mediastinal," or "mesentery" and there is no definitive information to indicate tissue(s) involved

ICD-O-3 Rule D provides additional information on coding the primary site for lymphomas.

Histologic Type

Tumors Diagnosed Prior to 2007

- ICD-O-3 identifies the morphology codes with an "M" preceding the code number. Do not record the "M"
- Record histology using the ICD-O-3 codes in the Numeric Lists/Morphology section (ICD-O-3, pp. 69–104) and in the Alphabetic Index (ICD-O-3, pp. 105–218)
- Follow the coding rules outlined on pages 20 through 40 of ICD-O-3
- Review all pathology reports related to the case
- Code the **final** pathologic diagnosis for solid tumors

Exception: If the final diagnosis is "Not Otherwise Specified" (carcinoma, NOS; melanoma, NOS; sarcoma, NOS; lymphoma, NOS; or malignant tumor, NOS), then code the histology from the microscopic description or comment if it identifies a more specific histologic type (higher ICD-O-3 code) such as adenocarcinoma, amelanotic melanoma, spindle cell sarcoma

- The codes for cancer, NOS (8000) and carcinoma, NOS (8010) are **not** interchangeable. If the physician says that the patient has carcinoma, then code carcinoma, NOS (8010)
- Lymphomas may be classified by the Rappaport classification or the Working Formulation. If both systems are used to classify the disease, then the term used to describe the lymphoma may differ. The Working Formulation term should take precedence (ICD-O-3, pp. 13–18)

Examples:

Code	Label	Definition
8140	Adenocarcinoma	Final pathologic diagnosis is carcinoma, NOS (8010) of the prostate. Microscopic diagnosis specifies adenocarcinoma (8140) of the prostate
9680	Diffuse large B-cell lymphoma	Diffuse large B-cell lymphoma, per the WHO Classification of Hematopoietic and Lymphoid Neoplasms

SEER Summary Stage 2000

For cases diagnosed January 1, 2001, through December 31, 2003, use Summary Staging Manual 2000.

Stage	Description
0	In-situ; non-invasive; intraepithelial; non-infiltrating; limited to the epithelium; intraepidermal (skin). Other parts CNS
1	Localized; tumor confined to organ of origin; microinvasion; no evidence of metastasis **(Stage I – lymphoma)**. Localized brain, cerebral meninges, CNS
2	Regional by direct extension; tumor extends directly beyond the primary site into surrounding (regional) organs or tissues
3	Regional to lymph nodes; tumor extends beyond the organ of origin (primary site) into the regional lymph nodes
4	Regional to both **2 & 3**; tumor extends beyond primary site by direct extension into regional lymph nodes AND adjacent tissues
5	Regional, NOS; tumor documented as regional and no other information is available (Stage II—lymphoma) Regional brain, CM, CNS
7	Distant metastasis; widely disseminated; systemic disease; tumor has spread from primary site to remote areas of the body, through the blood stream or lymph system (Stage III or IV –lymphoma). Brain, CM, CNS
9	Unstaged; unknown, unspecified—use for unknown primaries and those cases where adequate staging information is NOT available

Note: Pay particular attention to the site-specific schemes for primaries with subsites and the notes on the last page of many schemes. Do not rely on memory

Note: A comparison of cases diagnosed before January 1, 2001 and cases diagnosed on or after January 1, 2001, may not be possible due to changes in staging guidelines

> **Example:** For lung, a separate tumor nodule in a different lobe is considered **1-Localized** in the SEER Staging Guide, 1986 Reprint, and **7-Distant** in the SEER Summary Staging Manual 2000

SEER Summary Stage 1977

For cases diagnosed prior to January 1, 2001, use the *Summary Staging Guide*, 1986 reprint. Please refer to it for specific coding instructions for ALL sites.